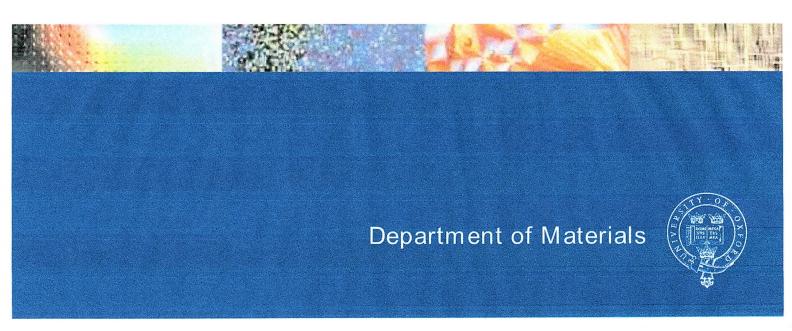


## Materials Graduate Student Handbook 2021-22

Version 1.1 (29/10/21)



# Materials Graduate Student Handbook 2021-22

Version 1.1 (29/10/21)

This handbook applies to postgraduate research students starting a Materials Science research degree programme at the University of Oxford in Academic Year 2021/22:

DPhil in Materials MSc (Research) in Materials DPhil in Materials students following the EPSRC 'Fusion' CDT programme

The information in this handbook may be different to that for students starting in other years.

The information in this handbook is accurate as at 29 October 2021, however it may be necessary for changes to be made in certain circumstances, as explained at <u>www.ox.ac.uk/coursechanges</u>. If such changes are made the Department will publish a new version of this handbook together with a list of the changes and students will be informed.

Version	Action	Date
Version 1.0	Published MT21	20-10-21
Version 1.1	Published MT21 Minor edit to Section 25.3 to provide additional information about suspension of status in order to take up an internship.	29-10-21

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#### CHECKLIST FOR KEY ACTIONS BY DPHIL IN MATERIALS STUDENT (Bold = mandatory)

Action	Period Due Comple (dd/mm	
Enrolment	Annually, MT	<u>"                                    </u>
Submit to GSR and discuss with your supervisor your quarterly GSR report	Quarterly until thesis submis	sion
Discuss with your supervisor your research training needs	As necessary, at least annually, Y1-3	
Discuss with your supervisor your transferable 'career skills' training needs	Annually, MT, Y1-3	
YEAR 1		
Attend Induction	Wk 0, MT	
Attend Safety Lecture	Wk 1, MT	
Complete Risk Assessment and DSE Forms	Wk 1-3, MT	
Submit on-line 'Grad Student' Questionnaire for review by Graduate Studies Office (Fri Wk 4), then upload to 'Materials: PGR Progression' site by Wk 8	Wk 4, MT Wk 8, MT	
Attend Workshop Induction (unless opted out)	MT	
Attend Information Skills Workshop	Wk 2, MT	
Attend IOM <sup>3</sup> Presentation	Wk 7, MT	
Attend Project Management Workshop	Wk 4, MT	
Attend Looking to the Future Workshop	Wk 6, MT	
Attend Junior Demonstrating Training Workshop	Wk 7, MT	
Attend Poster Skills Workshop	Wk 9, MT	
Attend Owning a Successful DPhil Workshop	tbc, MT	
Upload Project Management Form 1 to 'Materials: PGR Progression' site	Wk 0-1, HT	
Attend relevant parts of Presentation Skills Workshop	tbc, HT	
Attend Writing Skills Workshop	tbc, HT	
Attend Managing Your References Workshop	tbc, HT	
Attend and obtain satisfactory assessments on 2 lecture courses	МТ, НТ	
Attend a minimum of 7 colloquia	МТ, НТ	
Informal meeting with Lead Assessor	Wk 2-4, TT	
Submit 'Preparing for Transfer of Status' form to GSR	Wk 7-9, TT	
Upload Literature Review to 'Materials: PGR Progression' site	Wk 8, TT	
Upload Project Management Form 2 to 'Materials: PGR Progression' site	July	
Complete on-line course on Research Integrity Training	Before applying	
Apply for Transfer of Status (form GSO.2.MPLS + appendices)	for Transfer July	
YEAR 2		
Transfer of Status Interview	Wks -3 to +1, MT	
Upload Project Management Form 3A to 'Materials: PGR Progression' site	Wk 0-1, HT	
Present Research Talk to Department	Wk 7, HT	
Upload Project Management Form 3B to 'Materials: PGR Progression' site	July	
YEAR 3		
Upload Project Management Form 3C to 'Materials: PGR Progression' site	Wk 0-1, HT	
Submit Poster for Competition	Mon, Wk 3, HT	
Present Poster to Department	Wk 6, HT	
Submit 'Preparing for Confirmation of Status' form to GSR	Wk 7-9, HT	

Apply for Confirmation of Status (form GSO.14.MPLS + appendices) Confirmation of Status Interview	Wk6 HT to Wk6 TT Wks 0 to 10 TT
Upload Project Management Form 4 (3 y projects) to 'Materials: PGR Progression'	Wk 2, TT
Upload Project Management Form 3D (3.5 y projects) to 'Materials: PGR Progression'	July
Apply for Appointment of Examiners (3 y projects)	July
Submit Thesis via on-line portal (3 y projects)	Sept
DPhil Viva (3 y projects)	Sept to Dec
YEAR 4	
Upload Project Management Form 4 (3.5 y projects) to 'Materials: PGR Progression'	Wk 0-1 MT
Apply for Appointment of Examiners (3.5 y projects)	Jan to Feb
Submit Thesis via on-line portal (3.5 y projects)	March
DPhil Viva (3.5 y projects)	TT

Materials students following one of the EPSRC CDT DPhil programmes have different timings for some of these required elements – details are given in <u>Section 4.7</u> of this Handbook and via <u>Appendix XII</u>.

Materials students following a standard DPhil in Materials programme <u>and</u> who have full funding for <u>forty-</u> <u>eight</u> months, for example EPSRC Industrial CASE studentships and Faraday Institution studentships, follow the same timings as the 3.5-year DPhil except: (i) a PMF**3e** is uploaded in weeks 0-1 of the eleventh term (usually HT of Year 4); (ii) PMF4 is uploaded in weeks 0-1 of the twelfth term (usually TT of Year 4), **not** in weeks 0-1 of MT; (iii) the target date to apply for appointment of examiners is July of Year 4; and (iv) unless there are exceptional circumstances the latest date for thesis submission is the end of the four-year period (usually 30<sup>th</sup> September).

MSc(Research) in Materials students follow the same pattern as years 1 and 2 for DPhil in Materials students, except that in week 5 of Trinity Term in their second year they submit Project Management Form 4. An MSc(Research) in Materials Diary is given in <u>Appendix IX</u>.

Additional timetabled events are listed in the DPhil diary in <u>Section 4</u> of this handbook, where you will read an overview of the Department's DPhil programmes (please see <u>Appendix IX</u> for an overview of the MSc(Res) programme.

It may be helpful to understand that some of the compulsory requirements identified in bold in the checklist above serve more than one purpose, and to be aware of the rationale behind their inclusion and their sequence. For this reason a summary of, and brief rationale for, the compulsory requirements for students following a Materials research degree programme is given in <u>Appendix XI</u>.

Via <u>Appendix XII</u> you will find information about concise, year-by-year, timelines for each Materials Research Programme, showing the key required elements [3.5y DPhil (includes the Fusion 'CDT-lite' variant), 3y DPhil (includes certain CDTs), 4y EPSRC 'Fusion' CDT, 4y DPhil, and 2y MSc (Research)].

#### INDUCTION COURSE PROGRAMME

#### **OXFORD MATERIALS GRADUATE INDUCTION COURSE**

#### 4th – 5th October 2021

#### HUME-ROTHERY LECTURE THEATRE (HRLT)

#### Please note: This in-person event shall be recorded

#### Monday 4<sup>th</sup> October

9.00 - 9.15	Hazel Assender (Joint Head of Department)
	Welcome to the Department of Materials
9.15 – 9.35	Adrian Taylor (Director of Graduate Studies)
	Outline of the Induction Programme
	Overview of the Department's Support Structure for Research Students
9.35 – 9.45	Sergio Lozano-Perez (Practical Courses Organiser)
	Gaining teaching experience
9.45 – 9.55	Anne Miller (Enterprise Programme Manager, MPLS)
	Short talk on Enterprise Training provision
9.55 – 10.05	SHORT BREAK
10.05 - 10.15	Chim Chu (Oxford University Innovation) – Video link
	Intellectual Property and Commercialisation
10.15 - 10.25	Gurinder Punn (Oxford University Innovation) – Video link
	Consultancy Opportunities for Research Students
10.25 - 10.40	Neil Young (EM Facility Manager) – Video link
	Electron Microscopy Facilities: access and training
10.40 - 10.50	Lapo Bogani (Chair of Equality and Diversity Committee) – Video link
	Information about Equality and Diversity – equal opportunities for all
10.50 - 11.00	Jack Aspinall (Chair of JCCG)
	Overview of the Materials Joint Consultative Committee for Graduates (JCCG)
	Explanation of JCCG nomination procedure
11.00 - 11.25	BREAK FOR REFRESHMENTS
11.25 – 12.40	Tours of the Department in small groups
12.40 - 13.40	BREAK
13.40 - 13.55	Ian Bishop (HAF & DSO) COVID-19 Protocols for Safe Working on Site
14.00 - 17.00	Meeting with your Supervisor
	Students to be collected from the Hume-Rothery Lecture Theatre at 2pm

#### **Tuesday 5<sup>th</sup> October**

Adrian Taylor (Director of Graduate Studies)
Introduction to the Materials Research Degrees, including the key milestones
Helena Cotterill (Materials Access & Outreach Manager)
Introduction to Access and Outreach
SHORT BREAK
Ilayda Karadag (Secretary of MatSoc)
Introduction to MatSoc
Jack Aspinall (Chair of JCCG)
Nomination of first-year candidates for the role of JCCG year representative
Election of 3 or 4 first-year representatives
PHOTOGRAPHS AND BREAK FOR REFRESHMENTS
BREAK
IT Services – Introduction to University IT Services (Pamela Stanworth, IT Services)
Introduction to Materials IT and Audio-visual Services (Paul Warren, IT Manager)
SHORT BREAK
Materials Library (James Marrow, Materials Academic Librarian)
Virtual Tour of the University Science Library (Alessandra Vetrugno, Bodleian Subject
Librarian)

The following talks / workshops form part of the Materials Induction Course for new graduate students and you are strongly advised to attend. <u>Those in bold are compulsory</u>. Further details in the <u>Termly Lecture List</u>.

- Tuesday 12<sup>th</sup> October, 10.00 11.00 SAFETY LECTURE (lan Bishop)
- Friday 22<sup>rd</sup> October, 10.00 11.30 INFORMATION SKILLS WORKSHOP (Alessandra Vetrugno)

• Monday 22<sup>nd</sup> November, 12.00 – 12.40 BENEFITS OF MEMBERSHIP OF THE INSTITUTE OF MATERIALS, MINERALS & MINING (tbc Sarah Boad, IOM3)

• Friday 5<sup>th</sup> November, 12.30 - 13.30 and 14.30 - 15.30 PROJECT MANAGEMENT: Dr Paul D Warren - ex NSG (Pilkington Glass) & Adrian Taylor

• Friday 19<sup>th</sup> November, 15.00 – 16.30 LOOKING TO THE FUTURE - WHAT DO EMPLOYERS SEEK? Adrian Taylor and a Careers Advisor from the OU Careers Service

• Wednesday 24<sup>th</sup> November, 11.30 – 13.00 repeated on Friday 26<sup>th</sup> November, 11.30 – 13.00 WORKSHOP ON JUNIOR DEMONSTRATING: Sergio Lozano-Perez

#### Michaelmas Term

WORKSHOP INDUCTION AND SAFETY COURSE: Les Chorley or colleague.

This workshop induction course is mandatory for anyone who wishes to use the workshop and is also useful

as general skills training and safety awareness - even if you never need to use workshop equipment yourself,

you may well be responsible one day for people who do.

When the equipment is not in demand for department business, you are also permitted to use the workshop

for other work such as urgent bicycle repairs – but only if you have done the training course!

The default position is that we recommend all new research students to attend the course but, with the

permission of your supervisor, you may opt out of this by sending an e-mail to Les Chorley (copied to

graduate.studies@materials.ox.ac.uk and your supervisor) in advance of the time reserved for your course.

IF YOU DO OPT OUT AND SUBSEQUENTLY FIND THAT YOU NEED TO USE THE WORKSHOP, IT WILL BE NO USE AT THIS TIME PLEADING THAT YOU DESPERATELY NEED ACCESS TO THE WORKSHOP FOR YOUR RESEARCH (OR TO MEND YOUR BIKE SO THAT YOU CAN GET HOME THAT NIGHT) – YOU SHOULD BE AWARE THAT YOU MIGHT HAVE TO WAIT FOR THREE TO FOUR MONTHS BEFORE THE WORKSHOP STAFF RUN THE NEXT TRAINING COURSE.

#### WELCOME

It is a pleasure to welcome you to the Department of Materials at Oxford University. We are proud to be one of the world's leading materials research laboratories and strive to continually strengthen our reputation for research excellence. You are joining a Department made remarkable by the incredibly talented people that constitute it. Graduate students play a crucial and valued role in this.

The technological world faces significant engineering grand challenges which will impact on economic, environmental, and societal progress across the globe. Materials Science is central to so much of this and the Department is rightly proud of our continuing contributions in areas such as Energy Generation (eg nuclear fusion and fission, photovoltaics), Energy Storage (eg improved batteries, super-capacitors), Transport (eg improved turbine engines, light-weighting of automobiles), Quantum Technologies (eg quantum information processing, photonics), and Healthcare (eg biomaterials, superconductors for MRI scanners).

Your work, whether in these example areas or not, will add to the wealth of knowledge and technology available. As well as contributing to the department's 300+ peer-reviewed research outputs each year, graduate students play an active part in patenting of new ideas and in many and varied activities transferring our research knowledge beyond the academic world. These activities include events to promote the public understanding of science, interactions with school students and staff, and the setting up of spin-off companies.

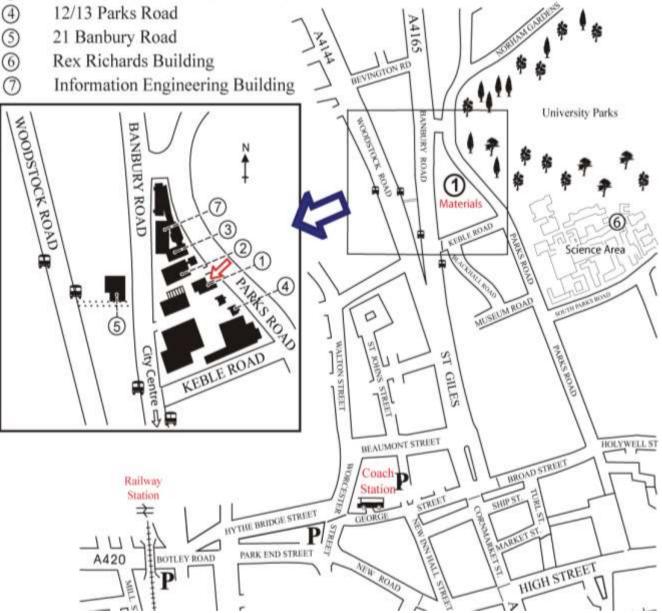
With so much to do, and such strongly motivated people, it is important that you strike some balance and remember to factor in some time for you. Time away from work, letting your mind reset, is good for you and in the long run benefits your productivity and creativity.

We wish you every success in your work at Oxford, and urge you to the make the most of our vibrant and exciting research environment, to enjoy your time in the department, and to aim always to produce the highest quality research.

Professor Hazel Assender and Professor Angus J Wilkinson Joint Heads of Department

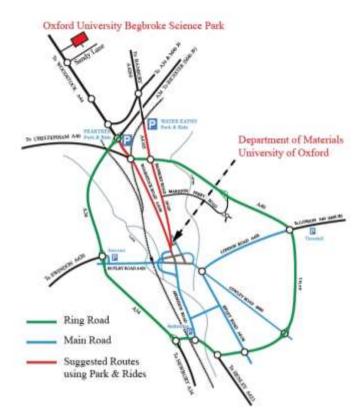
#### Department of Materials – Map of Central Site

- Reception =
- 1 Hume-Rothery Building
- 0 Holder Building
- 3 Engineering Technology Building
- 12/13 Parks Road
- 21 Banbury Road

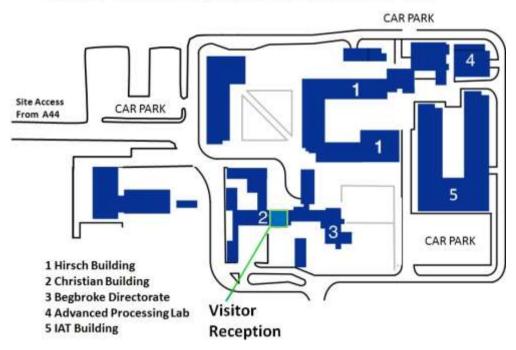


Contact us at: Materials Graduate Studies **Department of Materials** University of Oxford Parks Road, Oxford, OX1 3PH Email: graduate.studies@materials.ox.ac.uk

#### Department of Materials – Maps of Begbroke Site



#### **Oxford University Begbroke Science Park**



A minibus operates from the central site (stop outside the Hume-Rothery Building) to the Begbroke site several times a day. The journey takes approximately 15-20 minutes. Timetables are posted on the Departmental notice boards and are circulated to all members of Department via the 'notices' mail list and are available on the Begbroke webpage <a href="http://www.materials.ox.ac.uk/local/begbroke.html">http://www.materials.ox.ac.uk/local/begbroke.html</a>. Research students who finish a piece of work at Begbroke after the last bus may, <u>if approved by their supervisor</u>, take a taxi back to Oxford and claim reimbursement.

#### Table of Contents

#### 1. INTRODUCTION

Your years as a graduate student are an exciting time when you will explore the challenges of performing creative research with the accompanying dreams, frustrations, and fulfilment. This 'Materials Graduate Student Handbook' is provided to help you make the most of these few years by describing the structure of the 'DPhil' and 'MSc by Research' programmes within the Department of Materials. It is essential that you read this handbook; it is your initial resource in the event of any queries and it gives much helpful guidance on the Materials research degree programmes. The Handbook is supplemented by the MPLS Graduate School's 'Researcher Training & Development Opportunities' booklet and is complemented by three other handbooks at which you should take a quick look, referring to them in more detail as appropriate during your studies:

(i) The Mathematical, Physical and Life Sciences Division's on-line 'MPLS Graduate Student Handbook' can be found on the MPLS website in sections. This is produced by the Graduate School of the Mathematical, Physical and Life Sciences Division (MPLSD) which comprises the Departments of Mathematics, Statistics, Computing, Engineering Science, Chemistry, Earth Sciences, Biological Sciences, Physics, and Materials. It describes in detail the structure of postgraduate training at Oxford University that is common to all the Mathematical, Physical and Life Science departments. It explains in an informal way the rules and regulations that govern the pursuit and award of research degrees. THERE IS ALSO A USEFUL OVERVIEW OF THE PROCEDURE FOR SUBMISSION OF YOUR THESIS AND THE EXAMINATION PROCESS. Information on Training and Professional Development is provided too. You can find out more about the MPLS Graduate School, of which you are a member, and what it offers you <a href="http://www.mpls.ox.ac.uk/graduate-school/">http://www.mpls.ox.ac.uk/graduate-school/</a>.

(ii) The Materials 'Postgraduate Lecture Synopses and Research Colloquia 2021-22' booklet can be found on the Oxford Materials website at <u>Postgraduate Handbooks & Lecture Synopses</u>. This booklet details the courses available to graduate students and lists the Departmental Colloquia that will be given during Michaelmas Term. It is important that you peruse this carefully before you decide which courses you would like to attend during your first year. We will return to courses and colloquia in sections 6 and 9 of the present Handbook.

(iii) <u>The Materials Information Centre (MIC)</u>. This describes some of the facilities within the Department such as the library, mechanical workshops and computing laboratories that are available to all graduates. For other Materials research facilities see <u>Research Resources</u>. The MIC also links to the procedures needed, for example, in ordering consumables and equipment both from the main stores and from external suppliers, getting logged onto the University Computing network and arranging for work to be carried out in the mechanical workshops. Finally, it includes information and links on how to claim re-imbursement for expenses and payment for casual employment such as teaching.

Finally, in Appendix VII of the present handbook there is a summary of the minimum provision for research students in the Department of Materials.

Timetables for lecture courses, research-specific skills training and transferable career skills training offered by the Department of Materials can be found at

http://www.materials.ox.ac.uk/teaching/lecturelists.html.

To book a place on a Materials lecture or training course please contact the person teaching the course, inform them you are a Materials research student wishing to undertake their course, and ask them if you may attend the course and if you need to book a place or may simply attend informally.

The timetable for MPLS Graduate School transferable career skills training courses can be found at <a href="https://www.mpls.ox.ac.uk/training/pgr">https://www.mpls.ox.ac.uk/training/pgr</a>.

There are some 400 academic lecture courses, research-specific skills training courses and transferable career skills training courses available to you across the MPLS Division; you can find out about these via the individual <u>MPLS department websites</u> or at <u>Lecture Lists</u>.

## 2. SAFETY, TRAVEL, EXTERNAL WORKING, EXPORT CONTROL LEGISLATION, OPEN ACCESS & ACT ON ACCEPTANCE, AND RESEARCH INTEGRITY

The Department takes safety matters very seriously. It is compulsory, and part of the Induction Course, that you attend the Safety Lecture by Ian Bishop, the Departmental Safety Officer (DSO), at 10.00 am on Tuesday of Week 1 (12th October 2021). You will not be allowed to undertake any experimental work until you have attended the briefing and received adequate safety training. Please note that in the event of injury to other persons as a result of your negligence you could be subject to civil claims for damages. Soon after the safety lecture you and your supervisor must complete, and submit to the DSO, a project risk assessment form; the form is available via the Health & Safety section of the Materials Information Centre .

#### Extract from the Head of Department's 'Statement of Health & Safety Organisation' (see the 'Department Safety Policy' document, available via the Health & Safety section of the <u>Materials</u> Information Centre and which should be read by all new research students):

"Note that the Department has a "no-fault" policy. I shall be supportive of those who report incidents or problems, even when they themselves made mistakes. I will take a far graver view of anyone who conceals a safety incident, or who fails to report a potential problem".

An important policy of the University Health and Safety Committee is that a **Deputy Supervisor** must be appointed to cover for times when your sole supervisor or your 'responsible' co-supervisor is (i) ill or (ii) absent, either in the short-term at conferences and holidays or in the long-term on sabbatical. Their responsibilities when providing this cover include the approval of any novel experimental work or to stop it if worried by the safety aspects. If you have three or more supervisors you must agree with your Responsible Supervisor which of the other supervisors is to be your formal Deputy Supervisor. If you have a sole supervisor then your Department Advisor will be your Deputy Supervisor. The role of your Department Advisor is explained in <u>Section 3</u>.

#### Travel, and working in a laboratory external to the University of Oxford

Students who are travelling beyond the UK in connection with their studies **must** take out travel insurance through the University scheme, even if this travel is solely for attendance at a conference. In all cases where a student intends to work in a laboratory external to the University, whether overseas, at another university or company in the UK or even just at a company based at the Begbroke Science Park, and whether just for a few hours or an extended period of time, it is **compulsory** for the student together with their supervisor to carry out risk assessments for this work and to ensure that all appropriate insurances are in place including those to cover both liability **of** the student and liability **to** the student (for example in the case of a work-related injury). Further guidance is available from the Department Safety Officer (Ian Bishop). Risk assessment forms for overseas travel and work in an external laboratory can be found via <u>travel and fieldwork risk assessment</u>. Travel insurance forms can be found at <u>https://finance.admin.ox.ac.uk/travel-insurance</u>. These forms need to be signed by you and counter signed by **both** your supervisor and the Head of Administration and Finance.

#### **Export control legislation**

Individual academics and researchers in the University have an obligation at law to consider whether they may need a licence from the UK <u>Export Control Organisation</u> (ECO), part of the UK Department of International Trade to 'export' goods, technology, software, designs or other related 'know-how'. Failure to obtain a licence or to comply with its provisions may constitute a criminal offence involving potential fines, legal costs and/or prison sentences of up to 10 years. See <u>further information and guidance on Export Control Legislation</u>.

#### **Open Access and Act on Acceptance**

The University of Oxford academic community wishes to ensure the widest possible access to its world-class research. The value and utility of research outputs increases the more broadly they are available to be considered and used by others. A core component of this is <u>open access</u>. Oxford's policy is that all authors should deposit the peer-reviewed manuscripts (Author Accepted Manuscripts – AAMs) of newly-accepted papers into the University's repository ORA via Symplectic Elements. Please visit <u>Act on Acceptance</u> for details of what to deposit and how.

#### **Research integrity and ethics**

The University of Oxford is dedicated to the highest standards of research integrity. As set out in its Academic Integrity in Research: Code of Practice and Procedure, it expects all members of the University including staff and students, and those who are not members of the University but who are conducting research on University premises or using University facilities, to observe the highest standards in the conduct of their research.

The following website provides links to the relevant University policies, guidelines and procedures which are intended to promote the responsible conduct of research in the University's ongoing research activities.

You are asked to reflect on how this applies to your own research <u>https://researchsupport.admin.ox.ac.uk/governance/integrity</u>. In particular see the <u>Research Integrity</u> <u>Checklist</u>.

Before you apply to Transfer Status, at the end of year one, from Probationer Research Student (PRS) to DPhil or MSc(R) student it is mandatory that you have completed the University's on-line course on '<u>Research Integrity Training</u>'. More information on Research Integrity can be found in <u>Appendix XIII</u>.

#### 3. RESEARCH SUPERVISION AND SUPPORT STRUCTURE

An effective relationship and good communication between you and your supervisor(s) is key to the smooth progress of your DPhil. You will be supervised by a single Supervisor or two or more Co-supervisors (for the case where projects involve expertise in more than one area). One of these supervisors will be designated as your 'Responsible Supervisor' with primary responsibility to the Department for guiding your academic progress and providing pastoral care. You may also have an Associate Supervisor (typically a researcher with less than 3 years' experience at post-doctoral level). You could have an External Supervisor, for example if your project involves collaboration with another university or an industrial company or laboratory. Your supervisor(s) will be your main source of information and advice throughout the course of your research. Their responsibilities include:

- planning the framework of your research programme (in the light of the programme structure discussed in <u>section 4</u>);
- (ii) advising you about lecture courses, both specialist and broadening (see section 6.1);
- (iii) advising you about transferable 'career skills' and more generally about skills-training courses, including those on research techniques (see <u>section 6.2</u>);
- (iv) advising you about safety;
- (v) advising you about literature sources;
- (vi) regularly meeting with you to discuss your work;
- (vii) keeping you informed of your progress (both informally and through the formal report submitted to the University (GSR) at the end of each quarter, taking into account the project management forms submitted at regular intervals to the Department by you (see section 5);
- (viii) advising you about the content of written submissions such as your literature review, first year progress report, 2nd year talk, 3rd year poster and your thesis;
- (ix) advising you about the progression examinations (transfer of status and confirmation of status);
- (x) offering informal guidance on careers;

#### (xi) providing pastoral care.

Continuation on the course depends on your satisfactory progress, so you should take very seriously any warnings expressed by your supervisor(s) that you are not working as well as you ought. You should also bring to their attention, in good time, any problems that are significantly affecting your progress whether academic or personal, before the situation becomes too serious. The University, Department and College carefully monitor the progress you make with your project, and copies of your supervisor(s) reports will be available to the Director of Graduate Studies (DGS) and to your College Tutor for Graduates plus your College Advisor. If you have significant concerns, of any kind, do not just tick a box on the GSR report, in addition please arrange to meet the DGS (Dr Adrian Taylor). Remember too that you can meet with Adrian at any time during your DPhil / MSc(Res), not just at the time of the quarterly GSR reports.

It occasionally happens during the course of a research degree that relations between the student and the supervisor(s) can become strained, perhaps due to differences in opinion as to the direction in which the research should proceed. You will, therefore, be assigned a **Department Advisor** who is reasonably familiar with the field of your research and to whom you can turn for independent advice. Remember that your Department Advisor should be someone other than any of your supervisors: during your first two weeks in the Department you need to agree with your supervisor(s) who should be your Advisor and who should be your Deputy Supervisor (see Section 2); if you have a sole supervisor then your Department Advisor also takes the role of Deputy Supervisor. Of course, your Director of Graduate Studies (DGS) and members of the Graduate Studies Committee (see section 15) are also always available for a confidential chat. In addition, you might like to seek advice from your **College Advisor** (who will be assigned by College) or your College Tutor for Graduates. Please note that your College Advisor must not be one of your supervisors. The Department and Colleges all work together to ensure that your time here in Oxford is as trouble free as possible. It is a good idea to meet your advisors during your first term as a probationary research student. Informal advice is available from your JCCG representatives. Finally, as explained at Induction, the Department has a zero tolerance policy towards harassment and several members of staff are designated, trained, Harrassment Advisors who will treat any issues you raise with them in strict confidence.

As described in subsequent sections of this Handbook, during your research programme there are two formal progress assessments, the Transfer of Status exam (DPhil and MSc) and the Confirmation of Status Exam (DPhil only). Your supervisor must name four members of the Faculty of Materials who could act as your Lead Assessor for these exams – the DGS will select one of these to take on the role.

Once you have agreed, in consultation with your supervisor(s), on your Department Advisor, Deputy Supervisor and candidates for the role of your Lead Assessor, you must inform the **Materials Graduate Studies Office**. You do this by entering the names on the 'New Graduate Student' on-line Questionnaire, a specimen copy of which is included as an appendix to the present handbook. Make sure you complete all the items on this on-line form and submit it by the end of Week 4 (5<sup>th</sup> November 2021) for review by the Materials Graduate Studies Office. Remember too to save a pdf copy of the on-line submission and upload it to your folder in the 'Materials: PGR Progression' on-line site.

If you become concerned that your working relationship with your Responsible Supervisor has shortcomings and matters do not improve in the course of a few weeks you are encouraged to discuss your concerns with the DGS, Adrian Taylor, without delay. This discussion may be in strict confidence if you wish.

Information on the expectations and responsibilities of research supervision, and guidance on fulfilling these, is available as follows:

1. The Mathematical, Physical and Life Sciences Divisional Code of Practice on the Supervision of Research Students can be found via the link within the webpage <a href="http://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students/supervision">http://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students/supervision</a> and in Appendix VIII of the present Handbook.

#### 2. Very helpful guidance to both students and supervisors can be found at:

(i) The Oxford Centre for Teaching and Learning (CTL, formerly OLI) on-line course and guidance on Research Supervision (<u>https://www.ctl.ox.ac.uk/online-courses</u>).

(ii) The Vitae guides on 'Supervising a Doctorate' at <u>https://www.vitae.ac.uk/doing-research/supervising-a-doctorate</u> and 'Doing a Doctorate' (supervision and key relationships) at <u>https://www.vitae.ac.uk/doing-research/doing-a-doctorate/starting-a-doctorate/supervision-and-key-relationships</u>.

(iii) The Materials JCCG (our staff - graduate student liaison committee) run an annual student-led course in Michaelmas Term, 'Owning a Successful DPhil', which includes guidance on the

supervisory relationship. All probationer research students in Materials are strongly recommended to attend this course.

(iv) The University of Oxford Education Committee's (EdC) 'Policy on Research Degrees' (<u>http://www.admin.ox.ac.uk/edc/policiesandguidance/policyonresearchdegrees</u>). Within this document please see in particular the '**Responsibilities of the Student**' section, which you can read at the end of Appendix VIII of the present Handbook.

(v) The Quality Assurance Agency's Assuring and Enhancing Academic Quality
 (<u>https://www.qaa.ac.uk/quality-code</u>), see Quality Code, Chapter B11: Research Degrees.

(vi) The EPSRC Statement of Expectations for Research Council funded students (<u>http://www.epsrc.ac.uk/skills/students/help/expectation</u>).

(vii) The following training courses are run at least annually:

**Students**: In addition to the Materials JCCG course on 'Owning a Successful DPhil', the MPLS Division normally run an induction course 'Your Successful DPhil'.

**Supervisors**: In addition to the on-line course on research supervision mentioned at 2(i) above, CTL run the <u>Oxford Essentials</u> annual 'Introduction to Academic Practice at Oxford' on-line induction course for new academic staff, which includes a session on Research Supervision; and an on-line courses on the Admission of Research Students.

#### 4. OVERVIEW OF DPHIL PROGRAMME

The present section provides an overview of the 777 working days that make up a 3.5 year DPhil project. An illustrative DPhil diary is provided together with a year-by-year outline. More detail on the key topics mentioned in the Diary and the Outlines is then given in sections 5 onwards. The present section also provides an introduction to (i) our 'Materials: PGR Progression' on-line site and (ii) the University's 'GSO forms'.

<u>Section 4.7</u> identifies the variations on the 3.5 year programme that apply to the 4-year EPSRC CDT DPhil programmes.

An equivalent overview and diary for our MSc (Research) Programme are given in Appendix IX.

The University rules stipulate that unless dispensation has been granted you must be resident within a 25 mile radius of the city centre for at least 6 terms (2 academic years) before you can submit your DPhil thesis (unless you already hold an Oxford MSc degree, when the residence requirement is reduced to 3 terms). The rules also stipulate that the maximum time normally allowed for a student to complete the research and write the thesis is 12 terms (4 academic years). However, funding for research studentships is usually only for 3 or 3½ years. Thus, the Department aims for DPhil students to submit their theses within 3-3½ years (4 years for a CDT DPhil, reckoned from the date you embark on the CDT programme). A schedule for keeping to this timetable is illustrated below under the title 'A DPhil Diary'.

	1st Year
Michaelmas T	Геrm, October - January
Week 0	First year Induction Course, including meeting with Responsible Supervisor, Assignment of Deputy Supervisor, Department Advisor and propose Lead Assessor Department Newcomers' Party
Week 1	Safety Lecture
Week 2	Information Skills Workshop
Week 3	Latest date for submission of Personal Registration and Risk Assessment Form and DSE Form
Week 4	Deadline for completed on-line 'New Graduate Student' Questionnaire Project Management Workshop
Week 4	MPLS Graduate School 'Your Successful DPhil' Workshop (repeated later in MT)
Week 6	Looking to the Future Workshop
Weeks 7-9	GSR Report
Week 7	Institute of Materials, Minerals & Mining Talk
Week 7	Training Workshop for prospective Teaching Assistants on 'Junior Demonstrating' in the UG Teaching Lab
Week 9	Poster Presentation Skills workshop
МТ	Attend Workshop Induction
МТ	Owning a Successful DPhil Workshop
Weeks 1-8	Attend graduate lecture courses (including 2 assessed) Thursday Departmental Colloquia
Hilary Term,	January - April
Week 0-1	Upload Project Management Form 1 (with Gantt Chart) to 'Materials: PGR Progression'
HT	Presentation Skills and Powerpoint workshops
HT	Writing Skills, Lab Notebooks, IPR and Patents workshop
Weeks 7-9	GSR Report
HT	Managing your References Workshop
HT	Research Impact and Open Access (Chemistry and Materials)
HT	Patent Information Workshop
HT	Intensive one-week Academic Writing Course (for non-UK students)
Weeks 1-8	Attend graduate lecture courses (including 2 assessed)

#### **A DPhil Diary**

Thursday Departmental Colloquia

Trinity Term (in	cluding the Long Vacation), April - October
Weeks 1-4	Thursday Departmental Colloquia
Weeks 2-4	Arrange informal meeting with your Lead Assessor
Weeks 7-9	Submit 'Preparing for Transfer of Status' form to GSR and submit GSR Report
Week 8	Upload Literature Review to 'Materials: PGR Progression'
Before July	Complete on-line course on 'Research Integrity Training'
July	Upload Project Management Form 2 (with Gantt Chart) to 'Materials: PGR Progression' Apply for Transfer of Status
Mid-September	GSR Report
	XXXXXXXX
	2nd Year
Michaelmas Tei	rm, October - January
Friday, Week 1	Normal latest date for Materials Transfer of Status Interviews
Weeks 1-8	Thursday Departmental Colloquia
Weeks 7-9	GSR Report
Hilary Term, Jai	nuary - April
Week 0-1	Upload Project Management Form 3a (with Gantt Chart) to 'Materials: PGR Progression'
Weeks 7-9	GSR Report
Week 7	2nd Year Talks, Monday to Friday, 9.00 am – 6.00 pm,
	KEEP ALL DATES FREE! Hetherington Prize
HT	Academic Writing Course (for non-UK students)
Weeks 1-8	Thursday Departmental Colloquia
Trinity Term (in	cluding the Long Vacation), April - October
Weeks 1-4	Thursday Departmental Colloquia
Weeks 7-9	GSR Report
July	Upload Project Management Form 3b (with Gantt Chart) to 'Materials: PGR Progression'
Mid-September	GSR Report
	XXXXXXXX
	3rd Year
Michaelmas Ter	rm, October - January
Week 1	Active Job Hunting - Introduction to Oxford University Careers Service
Week 1	Careers and Networking Evening with Alumni
Week 7-9	GSR Report
Weeks 1-8	Thursday Departmental Colloquia
Hilary Term, Jai	
Week 0-1	Upload Project Management Form 3c (with Gantt Chart) to 'Materials: PGR Progression'
Week 3	Deadline for submission of poster for Competition
Week 6	3rd Year Poster Presentation Session (Rolls Royce and Ironmongers' Prizes)
Weeks 7-9	Submit 'Preparing for Confirmation of Status' form to GSR and submit GSR Report
Weeks 1-8	Thursday Departmental Colloquia
Week 6 HT to	Apply for Confirmation of Status (GSO.14.MPLS + appendices)
Week 6 TT	

Trinity Term (in	cluding the Long Vacation), April - October
Weeks 0 to 10	Confirmation of Status interview
Week 2	Upload to 'Materials: PGR Progression' Project Management Form 4 (3 year projects only), to include thesis outline and Gantt Chart
Weeks 1-4	Thursday Departmental Colloquia
July	Upload Project Management Form 3d (with Gantt Chart) to 'Materials: PGR Progression' (3 <sup>1</sup> / <sub>2</sub> year projects only) GSR Report
Week 10	Latest date for Materials Confirmation of Status Interviews
July	Apply for Appointment of Examiners (on-line form GSO.3) – 3 year projects
Mid-September	GSR Report
September	Submission of thesis via on-line portal – 3 year projects
	XXXXXXX
	4 <sup>th</sup> Year (3½ Year Projects Only)
Michaelmas Te	rm, October - January
Weeks 0-1	Upload to 'Materials: PGR Progression' Project Management Form 4 (3.5y projects) to
	include thesis outline and Gantt Chart
Week 1	Active Job Hunting - Introduction to Oxford University Careers Service
Week 1	Careers and Networking Evening with Alumni
Weeks 7-9	GSR Report
Weeks 1-8	Thursday Departmental Colloquia
Hilary Term, Ja	nuary - April
Jan-Feb	Application for Appointment of Examiners (on-line form GSO.3) - 31/2 year projects
March	Submission of thesis via on-line portal - 3½ year projects

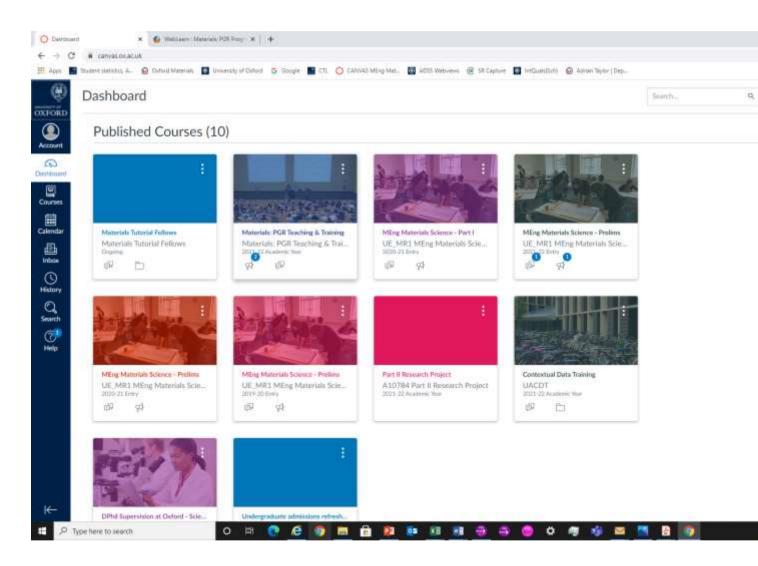
Materials students following one of the EPSRC CDT DPhil programmes have different timings for some of these required elements – details are given in <u>Section 4.7</u> of this Handbook. **Via** Appendix XII, for each Materials Research degree programme [ 3.5y DPhil (includes the Fusion 'CDT-lite' variant), 3y DPhil (includes some CDTs), 4y EPSRC 'Fusion' CDT, 4y DPhil, and 2y MSc(R) ], you will find convenient year-by-year timelines for the key required elements.

Materials students following a standard DPhil in Materials programme <u>and</u> who have full funding for <u>forty-</u> <u>eight</u> months, for example EPSRC Industrial CASE studentships and Faraday Institution studentships, follow the same timings as the 3.5-year DPhil diary except: (i) a PMF**3e** is uploaded in weeks 0-1 of the eleventh term (usually HT of Year 4); (ii) PMF4 is uploaded in weeks 0-1 of the twelfth term (usually TT of Year 4), **not** in weeks 0-1 of MT; (iii) the target date to apply for appointment of examiners is July of Year 4; and (iv) unless there are exceptional circumstances the latest date for thesis submission is the end of the four-year period (usually 30<sup>th</sup> September).

Note: The JCCG will meet every term at 12.00 pm on Wednesday of Week 1.

#### 4.1. THE 'MATERIALS: PGR PROGRESSION' ON-LINE SITE

During the course of your DPhil or MSc (Res) programme there are several formal requirements that you have to meet, for example six-monthly project management reviews, Transfer and Confirmation of Status, and presenting a research talk. All the paperwork associated with these requirements is uploaded by you to the named folder we create for you on our '**Materials: PGR Progression**' on-line site (this site is at present hosted via WebLearn, but will be moving during 2021/22); the site is accessible via your <u>CANVAS VLE</u> dashboard – the link to the site being found within the 'Materials PGR Teaching & Training' *course*). Guidance on how to upload a document is given on the site.



Thus you, your supervisors, your Department Advisors, the DGS, and your assessors for Transfer and Confirmation of Status all have easy access to these documents, all in one place. In a small number of cases the University requires signed paper copies of the documents – in these cases once you have scanned and uploaded a pdf version to your on-line folder you will provide the paper copy to our Materials Graduate Studies Office. You will first use this on-line folder to upload a pdf of your 'New Graduate Student' Questionnaire.

#### **Table of Contents**

#### 4.2. GRADUATE STUDIES OFFICE (GSO) FORMS

(See also <u>Section 13</u> for more guidance on the forms relating to thesis submission and the DPhil or MSc(R) examination.)

Throughout your studentship you will need to complete various graduate forms (known as GSO forms), including transfer of status, confirmation of status and an application for the DPhil examination. Most of the forms and associated notes can be found on the website Graduate Forms Online at <a href="http://www.ox.ac.uk/students/academic/guidance/graduate/progression">http://www.ox.ac.uk/students/academic/guidance/graduate/progression</a>. If you find yourself in "exceptional circumstances" you may need to complete an exceptional circumstance form, such as a deferral or extension of time form which can be found at

https://www.ox.ac.uk/students/academic/guidance/graduate/progression/exceptional.

The forms should be completed by you, by your supervisor(s) and then your College. The form should only then be sent to the Materials Graduate Studies Office for Dr Adrian Taylor to give his final approval. The forms then will be sent by the Materials Graduate Studies Office to the Graduate Studies Assistant at MPLSD. These forms must be circulated by email, <u>using the phrase</u> <u>GSO.<insert form number here> submission in the subject line</u>, to obtain the various signatures and <u>must</u> be kept as a <u>Word document</u> at each stage so that the next person in the sequence is readily able to complete their part of the form. If any of the signatories is unwilling to add their e-signature to this Word document they may instead type their name into the signature box and cc <u>graduate.studies@materials.ox.ac.uk</u> when they email the form to the next person in the sequence.

There are TWO exceptions to this procedure:

GSO.3 (Application for appointment of examiners) - an on-line form

Usually as above, but if your thesis exceeds the word limit the procedure with this form is modified. In this case in addition to completing the form and obtaining a signature from your supervisor, you must obtain a letter of support from your supervisor to justify the need to exceed the word limit. The GSO.3 form also includes an option for you to request an 'early examination' – this option should be used only in exceptional circumstances and does not guarantee that an early exam will be possible.

**GSO.25** (Change of supervisor or appointment of additional supervisor) – a Word form Once you have completed this form and your supervisor has signed it, the form should be emailed to the Materials Graduate Studies Office. This form does NOT go to your College. Over a period of several years the University is gradually moving the GSO forms to a paperless online system. When you access a particular form via the on-line links you will be directed to the appropriate paperless or paper-based form.

#### 4.3. THE FIRST YEAR

(The specific timings given are for a student who commenced the programme in Michaelmas Term 2021)

You have arrived at the start of your postgraduate degree as a Probationer Research Student (PRS). The University rules allow you to hold this status normally for up to 4 terms. PRS students who arrive intending to pursue a Materials doctorate, are expected to transfer to DPhil status near to the end of their first year. Permission to <u>apply</u> to transfer is subject to the approval of your Supervisor, College and Director of Graduate Studies, normally following the completion of three threshold requirements:

- (i) passes in two assessed courses (see <u>Section 6</u>);
- (ii) attendance at a minimum of seven Colloquia during the first two terms (see <u>Section 9</u>);
- (iii) completion of the University's mandatory on-line course on 'Research Integrity Training' (see <u>Appendix XIII</u>)

Two members of staff, other than your Supervisor(s), College Advisor or Departmental Advisor, will be appointed as the Assessors for your Transfer of Status application, which is normally submitted in your tenth month as a PRS.

In the period of weeks two to four of your third term you will meet with your Lead Assessor for an independent, informal discussion of your progress to date. Further information on this meeting, which **you** must arrange, is given in <u>Section 10</u>.

By the end of Trinity full-term of your first year or its equivalent if you started in HT or TT, you are required to have completed a substantial Literature Review (<u>Section 10.3</u>). This should ensure that you are familiar with the prior work in your area of study before you progress too far with your research. Your Literature Review must be submitted by Friday of week 8 of Trinity Term (17 June 2022). After your Transfer of Status interview you will receive written feedback on this Review from your Lead Assessor.

Having attended the Writing Skills workshop, completed your literature review, **ensured that you understand what is the new science it is anticipated your project will reveal**, engaged appropriately with your project management and held regular discussions with your supervisor, you should be beginning to have some sense of what are the requirements for a thesis (see also <u>Section</u> <u>13</u>) and what <u>might be</u> the content of <u>your</u> thesis. Once you have met the three threshold criteria and submitted your literature review: In your tenth month, and normally no later than the end of that month (usually 31July), you should complete and submit to the Materials Graduate Studies Office by email an 'Application Form for Transfer of a Graduate Student from One Status to Another' (form GSO.2.MPLS), following the procedure set out in <u>Section 10</u> of the present Handbook. In considering your application your Supervisor, College and Director of Graduate Studies will take into account your progress over the whole of your first year to date.

Noting that many students, academic staff and support staff take their main annual leave during the summer, it <u>really</u> is important that you submit the GSO.2.MPLS to the Materials Graduate Studies Office by 31 July in order that everything is in place for your transfer interview in mid-September to early October. If your GSO.2.MPLS is not submitted by 31 July do not be surprised if there are delays in your Transfer of Status process. Other than in exceptional circumstances your transfer interview cannot take place until the DGS (Dr Taylor) has approved your GSO.2.MPLS application.

Section 10 of this Handbook provides more detail on the transfer of status process and examination.

The purpose of the transfer of status process is to ensure that you have a convincing research proposal, that you are making satisfactory progress in its development, and to satisfy the assessors that the work is potentially of DPhil or MSc by Research quality. Satisfactory progress in this context includes not only your ability to generate an appropriate amount of good quality data, but also your ability to understand both these data and the broader project and your ability to begin to take ownership of the project.

Submission of the GSO.2.MPLS form will, if approved, initiate arrangements for your **transfer of status examination**, which will be conducted by two assessors (neither of whom may be your Supervisor, your Department Advisor or your College Advisor). This examination will include a 15 to 30 minute interview with the assessors, normally to be held within the period of weeks -3 to +1 of your 4<sup>th</sup> term. Please see <u>Section 10.4</u> for information on who is responsible for arranging the date for this interview.

Further information about transfer of status and other 'progression' matters can be found in subsequent sections of the present Handbook and on the MPLS Graduate School webpages at <a href="http://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students/progression">http://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students/progression</a>.

During your first year you are required to ensure that you have a clear understanding of what is plagiarism, and when and how to reference prior work. Please read <u>Section 21</u> of the present Handbook very carefully, and consult your Responsible Supervisor if you need any clarification. In addition you may find it helpful to complete the University's on-line course on <u>Plagiarism</u>.

#### 4.4. THE SECOND YEAR

Your project should now be proceeding apace, you should be making good progress with your research and you should feel increasing ownership of this research.

During week 7 of Hilary term of your second year you will present to all members of the Department a short talk on your research (see <u>Section 11</u>). By Tuesday of week 6 you should upload to the 'Materials: PGR Progression' site an abstract of your talk. A senior member of the Department will Chair the talk and will judge whether or not your progress as demonstrated by the talk is satisfactory. Thus you and your supervisor are provided with an informal, independent opinion on your progress.

Your supervisor(s) will attend this talk. If the second year talk is unsatisfactory you may be required to give another talk during week 7 of Hilary Term of your third year.

During your second year you will continue to devote a small proportion of your time to the development of transferable career skills. Among other courses, you might wish to engage with the excellent and varied suite of 'Enterprise & Entrepreneurship' courses offered by the MPLS Division.

#### 4.5. THE THIRD YEAR

Your DPhil project should now be coming together nicely and if you continue to make good progress with your research you will be on track to have your status as a DPhil student confirmed in the 3<sup>rd</sup> full term of Year 3. To remain on target for completing within the allotted time you should most probably be starting to write-up your thesis by Easter (3 year projects), or October (3<sup>1</sup>/<sub>2</sub> year projects), allowing yourself six months to the finished final copy (see <u>Section 13</u>). The Project Management Form that you submit approximately 6 months before your funded period ends must include an outline plan for your thesis.

During your third year, **and no later than Week 6 of your third term in this year** (for a Michaelmas term starter with no periods of suspension this will be Trinity Term), you will need to complete form GSO.14.MPLS to apply to be considered for **Confirmation of Status** as a Student for the Degree of Doctor of Philosophy. This will initiate the arrangements for the formal assessment of your

application to confirm DPhil status. It is suggested that you and your supervisor aim to apply for Confirmation at the end of the second term of your third year, that is 2½ years after you commenced your DPhil research. If your GSO.14.MPLS is not submitted by email to the Materials Graduate Studies Office by the end of Week 6 of Trinity Term of your 3<sup>rd</sup> year do not be surprised if there are delays in your Confirmation of Status process. Other than in exceptional circumstances your confirmation interview cannot take place until the DGS (Dr Taylor) has approved your GSO.14.MPLS application.

Section 12 of this Handbook provides more detail on the confirmation of status process and assessment.

The purpose of confirmation of status is to enable research students to receive an assessment of their work by two assessors other than their supervisor(s). It is intended to provide an important indication of progress towards submission of a satisfactory thesis.

Normally the two independent assessors who conducted your Transfer of Status Examination will also assess your Confirmation of Status application. This assessment will include a 15 to 30 minute interview with the Assessors, normally to be held during the third term of your third year and normally by the tenth week of that term (and no later than 30<sup>th</sup> September of your third year, or the final day of your third year if you did not commence your research degree during a Michaelmas term). Please see <u>Section 12.2</u> for information on who is responsible for arranging the date for this interview.

Further information about confirmation of status and other 'progression' matters can be found on the MPLS Graduate School webpages at <a href="http://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students/progression">http://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students/progression</a>

Four to six weeks <u>BEFORE</u> you are ready to submit your thesis, you should apply for the 'Appointment of Examiners' (on-line form GSO.3). This form requires certification by you that the thesis is your own work except where otherwise indicated, by your supervisor that you have satisfied residency requirements, and by your college. This form can be accessed from the website <u>http://www.ox.ac.uk/students/academic/guidance/graduate/progression</u>. Once two copies of your thesis and abstract have been submitted via the on-line RTDS portal to the Examination Schools, your Internal Examiner will arrange the date for your oral examination (*viva voce*) (see <u>Section 13</u>).

#### **Poster Competition**

In the third year you are required to present a poster in the Department's DPhil Poster Symposium and Competition that is held in Hilary Term. One poster per student should be submitted, on a topic associated with your research, either in the category of 'public understanding of science' or in the category of a 'standard scientific conference'. For each category there will be a prize of £200 for the best poster, sponsored by the Ironmongers' Company and by Rolls Royce respectively. The poster competition also provides an opportunity to socialise with your peers whilst finding out more about their latest research. If you wish you may submit a poster which you have displayed at a conference as long as it is appropriate (please check with your supervisor if you have any doubts). Your poster can be portrait or landscape, though portrait is preferable as it will fit the poster boards better.

You will be asked to participate in peer review of two posters authored by your fellow students and in return will receive comments on your poster from two other students. The thought that you give to presenting some or all of your work as a clear scientific story in your poster should aid you when you come to write your thesis.

By noon on Monday of 3rd week HT you must submit to Materials Graduate Studies Office four copies of your poster on A3 size paper. At the same time a pdf copy of this A3 version should be uploaded to the 'Materials: PGR Progression' site. The paper copies will be sent to the judges to shortlist 10 finalists for the prizes in advance of the poster session itself. The winners will be decided on the day, after the judges have looked at the full-size A0 posters. (If you miss the 3rd week deadline you will not be eligible for the competition, but will be required to show a poster in 6th week.)

Remember that the content of your poster will be seen by the external judge, who is a senior scientist at Rolls Royce, and that after the competition some of the posters will be displayed in the Materials Section at Rolls Royce Derby. Hence consult carefully with your supervisor regarding the intellectual property revealed in your poster.

#### 4.6 CAVEAT

A hard and fast timetable for the successful completion of a DPhil project is, of course, not possible, given the unpredictability of creative research. The DPhil Diary suggests that you should have applied for confirmation of DPhil status during your third year and that you should have started writing six months before your 3 or 3½ year funded period has expired. These times should be taken as a guide illustrating what is generally required in order to submit within time. Part of the purpose of the Project Management Scheme is to enable students themselves to monitor their own progress and to flag to their supervisor and the Department a warning signal as soon as possible if they feel that their DPhil schedule is slipping (see Section 5). If you are not devoting most of your effort to thesis writing at the 36 month milestone, you should arrange to meet with the Director of Graduate Studies to discuss your progress.

#### 4.7 OXFORD MATERIALS DPHIL STUDENTS FOLLOWING AN EPSRC CDT (4 year)

#### PROGRAMME

Provided they have led to an <u>evidenced pass result</u>, lectures undertaken during the first year of a 4year EPSRC CDT programme, including those during the MSc phase of the Diamond or TMCS CDT programmes and **academic lecture courses** taught as part of the Year one Fusion 'CDT-lite' 3.5year programme, and the Faraday Institution's (FI) 4y programme are acceptable in lieu of the two assessed lecture courses required for the Materials Transfer of Status process. CDT and FI students **are** expected to attend at least seven colloquia during the first two or three terms for which they are based mainly in the Department of Materials at Oxford.

Students on the <u>4-year EPSRC</u> CDT programmes have slightly different timetables for their progression and project management requirements. For the EPSRC CDT in Science & Technology of Fusion Energy programme (the 'Fusion' CDT) these are as follows:-

n n-line 'New Graduate Student' Questionnaire the 'Materials: PGR Progression' on-line site minimum of 7 colloquia and the 3 compulsory workshops Management, Looking to the Future, Junior Demonstrating) 'Materials: PGR Progression'		
the 'Materials: PGR Progression' on-line site minimum of 7 colloquia and the 3 compulsory workshops Management, Looking to the Future, Junior Demonstrating)		
minimum of 7 colloquia and the 3 compulsory workshops Management, Looking to the Future, Junior Demonstrating)		
Management, Looking to the Future, Junior Demonstrating)		
'Materials: PGR Progression'		
meeting with Lead Assessor for Transfer of Status		
for submission of Literature Review		
ig for Transfer of Status' form to GSR		
to apply for Transfer of Status		
o 'Materials: PGR Progression'		
for transfer of status examination, and decision		
For further detail and information on the period from TT 2023 to September 2024 please see the Fusion		
CDT timeline provided on our 'Materials: PGR Progression' on-line site as per Appendix XII in the		
present Handbook.		
'Materials: PGR Progression'		
Appointment of Examiners		
nesis		

MT 2025 DPhil Viva

If you are unsure which programme you are following, then please contact the Materials Graduate Studies Office (<u>graduate.studies@materials.ox.ac.uk</u>) for clarification.

#### 5. PROJECT MANAGEMENT

A Project Management scheme is included in our graduate programme structure. This allows and encourages you as the student to take responsibility for the successful outcome of your research by assessing expectations and progress throughout the duration of your programme (see the 'project management form' entries in the relevant timeline provided via Appendix XII. Guidance can be found at http://www.materials.ox.ac.uk/teaching/pg/pgprojectmanagement.html and the Project Management Form templates are available on the 'Materials: PGR Progression' site. The scheme will enable you to flag up any concerns you might have that your research is not keeping to schedule, so that your supervisor(s) and, if necessary, the Graduate Studies Committee can consider whether to take remedial action. If you are expressing such concerns on a particular Project Management Form, you must also send a short e-mail to the Director of Graduate Studies to warn him of this. He will then consider your Project Management Form as a priority matter. In all other cases unless we become concerned over your progress your PMFs are reviewed only by you and your supervisor(s). You upload most of your project management forms to Materials: PGR Progression site in weeks 0-1 of HT and at the start of the 'Long Vacation' (in July). Integral to each PMF is a 'training needs analysis' and appended to your PMF there will always be an updated Gantt Chart. NOTE: The Gantt Chart should show a timeline for your WHOLE studentship.)

It is compulsory that you attend the Project Management workshop on Friday of Week 4 MT during which initial training is provided and the workings of the scheme will be explained. In advance of this workshop you are requested to prepare a first draft of your Project Management Form 1 (excluding the Gantt Chart where there will be specific training). To enable this you will need to discuss your project, its overall scientific objectives, your objectives for the next six months, your training needs, and your resources needs with your supervisor. There are some helpful prompts in the MPLS Division's <u>'Project Initiation Plan</u>' and <u>'Training Needs analysis documents</u>'.

Experience of basic project management, a useful generic skill, is valued by graduate recruiters, and for those of you who remain in academia Gantt charts are often a requirement when academics apply for research funding.

### 6. GRADUATE COURSES (ACADEMIC LECTURE COURSES, RESEARCH-SPECIFIC SKILLS TRAINING, AND TRANSFERABLE 'CAREERS SKILLS' TRAINING)

#### 6.1. ASSESSED LECTURE COURSES

The examiners of your DPhil or MSc thesis will be asked to state whether they are satisfied that 'the candidate possesses a good general knowledge of the particular field of learning within which the subject of the thesis falls'. The role of lectures is therefore not only to deepen your knowledge in your own specialist area of research but also to broaden your general knowledge within materials science and engineering. Accordingly, the first requirement for transfer from PRS to DPhil/MSc status is that you have passed two assessed courses, at least one of which must fall in an area **not** directly related to your own research topic. The extensive programmes of colloquia offered by the Department and its research groups fulfil a similar broadening role.

To pass an assessed course you must (i) normally have attended a significant proportion of the complete course of lectures (some lecturers will define this more specifically in the synopsis for the course) and (ii) obtain a grade of at least 50% on the written work set by the lecturer (this is equivalent to a 'Pass' at MSc level and is regarded as satisfactory for the purpose of transfer of status).

The on-line handbook on 'Postgraduate Lecture Synopses and Research Colloquia' lists the assessed courses on offer under the title 'Postgraduate Teaching'. These include the third year M-level undergraduate options, which you may attend and offer for assessment by submitting the appropriate coursework – provided of course that you have not already taken the course as an undergraduate! Other courses are assessed by a series of mathematical problems or written questions that you must complete and submit to the lecturer for marking. You should agree your choice of assessed courses with your supervisors, to make sure they are acceptable for your transfer requirement.

Due to the diverse range of students' academic backgrounds and the increasingly interdisciplinary nature of modern research, your supervisor might advise you to attend courses other than those listed; either others given within the Department (eg the first year Crystallography course) or from outside. Listings of all lecture courses that are being given within the Mathematical, Physical and Life Sciences Division can be found via each department's website. Links to these websites can be found at <u>MPLS Department Websites</u>.

If you wish to offer as one of your **two assessed courses** a course from another department or a Materials course that is <u>not</u> listed in the 2021/22 Materials Postgraduate Lecture Synopses, then you

should first discuss with your supervisor whether this is appropriate and then request approval from the Director of Graduate Studies (DGS), indicating to him how the course will be assessed. Once approval is given, you can book a place on the course with the host department or course lecturer as appropriate. Provided your performance on the course can be properly assessed the DGS will be sympathetic to your request because the Department's policy is to make graduate provision responsive to the needs of the individual student.

Academic lecture courses taught as part of the Year one Fusion CDT programme, are acceptable in lieu of the two assessed lecture courses required for the Materials Transfer of Status process.

# Please let the Materials Graduate Studies Office know which assessed courses you are taking by week 7 MT.

If you attend a <u>Materials</u> undergraduate lecture course as one of your assessed courses, please let the lecturer know so that he/she is aware of the need to provide an assessment for you. On any work submitted please put your name followed by 'postgraduate' in brackets so the assessor knows you are a postgraduate and not an undergraduate.

Usually in Hilary term the lecturer will inform the DGS (via the Materials Graduate Studies Office) if your performance in the assessed work was satisfactory. The lecturer will also provide you with feedback on your performance. Normally this will be provided within four working weeks of your submission of the work for assessment, may be verbal or written, and will comprise <u>more</u> than just a grade or a short sentence. If you do not receive this feedback, please remind the lecturer and if the reminder has no effect then please inform the Materials Graduate Studies Office.

Note that the on-line handbook on 'Postgraduate Lecture Synopses and Research Colloquia' gives only the list of lectures and the term in which they are given. The lecture times and venues will be available at the start of each term and can be found on the Department web site under <a href="http://www.materials.ox.ac.uk/teaching/lecturelists.html">http://www.materials.ox.ac.uk/teaching/lecturelists.html</a>. Information on courses and workshops offered by the MPLS Division is available at <a href="https://www.mpls.ox.ac.uk/training">https://www.mpls.ox.ac.uk/teaching/lecturelists.html</a>. Information on courses and workshops offered by the MPLS Division is available at <a href="https://www.mpls.ox.ac.uk/training">https://www.mpls.ox.ac.uk/training</a>. Timetables for lecture courses and workshops offered by other departments can be found via each department's website. Links to these websites can be found at <a href="https://www.mpls.opartmentWebsites">MPLS Department Websites</a>.

# 6.2 SKILLS-TRAINING COURSES (Research-Specific Skills <u>and</u> Transferable Career Skills) (For Teaching Skills see Sections 8 and 17 of this Handbook)

Graduates need to be skilled not only in the experimental and/or theoretical techniques relevant to their own research, but also in skills for communicating their results to a wider audience and for

managing their own research programme and future career development. The Materials handbook of 'Postgraduate Lecture Synopses and Research Colloquia' lists the different skills training courses on offer under the title 'Postgraduate Training'. **You should keep a log-book or portfolio to record the various training that you undertake**, of all kinds, formal and informal, since you may be asked to summarise this by your research sponsor or by a prospective employer and you will be required to summarise it on your applications for transfer of status and confirmation of status. There is an expectation by some sponsors and by the University that you will engage in approximately 100 hours per annum of transferable career skills training during years one to three of your research degree. Included in the 100 hours is skills training and feedback provided by your supervisor, for example on presentation skills, report writing or writing a scientific paper.

Transferable career skills are those in addition to your academic and research skills that employers both inside and outside academia value. The UK Government and funding agencies believe that these skills are essential for maintaining employability in a global economy which is increasingly requiring people to respond to and anticipate change.

If you wish to attend a 'course' external to the Department of Materials for which there is a modest charge and which is important for your research, including a 'summer school', then your supervisor is permitted to cover the costs from the 'baseline research costs' allowance she/he receives for each research student whose project is not funded directly by a sponsor.

# **MPLS Graduate Training Framework**

You might find it helpful to use the framework set out in the table below as a tool for planning and recording your training needs as you progress through your DPhil programme. It has been prepopulated with the small number of courses that are compulsory for Materials research students.

Phase	Foundations Phase (0-12 months)	Intensive Research Phase (12-30 months)	Completion Phase (24+ months)
Category			
Transferable Career Skills	<ul> <li>Project Management</li> <li>Career Planning</li> <li>Teaching (TA)</li> </ul>	Research Talk	
Research Skills	<ul> <li>Safety Induction Talk</li> <li>Colloquia</li> <li>The University's on- line 'Research Integrity Training' course</li> </ul>		Poster Presentation
Academic Skills	<ul><li> Two assessed lecture courses</li><li> Literature Review</li></ul>		

#### Notes:

1. The phases are for guidance rather than rigid timescales.

The skills categories are defined as follows: Academic skills are lecture courses/subjects that form an extension to, and fill gaps in, UG-level knowledge; research skills are those needed to actually carry out research, for example safety, equipment use, programming; transferable career skills are those which are core to every student's development and are genuinely transferable, although they may have a subject nuance.
 Therefore Academic skills and Research skills sit in departments. Transferable career skills sit in both Department and Division (and other providers as appropriate).

Several years ago University College London compiled a table of key transferable career skills with links to further information on each topic:

Academic		
Learning Actively	Analysing Data	Thinking Critically
Using Sources	Solving Problems	Managing Projects
Self-Management		
Reflecting on Learning	Managing Time	Being Creative/Innovative
Assessing Oneself	Being Independent	Managing Resources
Communicating		
Writing	Listening	Using Information Technology
Presenting	Communicating Globally	Planning and Making Decisions
Working with Others		
Working in Teams	Negotiating	Leading
Understanding Others	Assessing Self and Peers	Managing Change

The Vitae organisation has compiled a **Researcher Development Framework** (RDF) which you are strongly encouraged to browse:

The Vitae 'Researcher Development Statement' (<u>https://www.vitae.ac.uk/vitae-publications/rdf-related/researcher-development-statement-rds-vitae.pdf</u>).

The RDF provides a framework for planning and supporting the personal, professional and career development of graduate students and research staff. It encourages individual researchers to identify strengths and prioritise their professional development. It helps them consider the skills and experiences that will enhance their career prospects and to articulate their knowledge, behaviours and attributes to employers.

The RDF and RDS are made up of four top level domains which encompass the knowledge, behaviour and attributes that are needed to be a successful researcher. These are:

- A: Knowledge and intellectual abilities
- **B:** Personal effectiveness
- C: Research governance and organisation
- D: Engagement, influence and impact

The RDS is put in context by the **EPSRC's Statement of Expectations** for its students at <a href="http://www.epsrc.ac.uk/skills/students/help/expectation">http://www.epsrc.ac.uk/skills/students/help/expectation</a>.

Further information on the Researcher Development Statement (RDS) and RDF can be found at <u>https://www.vitae.ac.uk/researchers-professional-development/about-the-vitae-researcher-</u> <u>development-framework/</u> and <u>https://www.vitae.ac.uk/researchers-professional-development/why-</u> <u>focus-on-professional-development.</u>

Some of the skills training courses available to you as a Materials graduate student are:

- (i) Project management skills (Dr A O Taylor and others, MT Week 4);
- (ii) Presentation skills (Staff of IT Services & Dr A O Taylor, HT);
- (iii) Writing skills, lab notebooks, IPR and patents (Prof H E Assender & others, HT);
- (iv) Information skills (Staff of the Bodleian, MT Week 2);
- (v) Career-planning (Alumni of Dept, OU Careers Service & Dr A O Taylor, MT Weeks 1 and 6);
- (vi) Workshop skills (workshop technicians, throughout year);
- (vii) Microscopy skills (see Materials Postgraduate Lecture & Training Course Synopses an optical microscopy course and a very wide range of electron microscopy courses);
- (viii) A suite of 'Enterprise' training courses (see MPLS courses);
- (ix) Institute of Materials Benefits of student membership (Sarah Boad, MT Week 7);
- (x) Poster presentation skills (Dr A O Taylor, MT Week 9);
- (xi) Teaching skills (Lecturing, laboratory demonstrating, tutorials, classes, maths classes, [see lecture lists]);
- (xii) Managing your References Bibliographic software (Staff of the Bodleian, HT);
- (xiii) Academic Writing Skills (for non-native English speakers);
- (xiv) Foreign Language Skills (register on-line with the OU Language Centre <u>http://www.lang.ox.ac.uk/courses/courses.html</u> by Friday of MT Week 1);
- (xv) Your successful DPhil course (MPLS event);
- (xvi) An introduction to Public Engagement and Science Communication (see MPLS courses);
- (xvii) Labview Workshop (MT);
- (xviii) Patent Literature (Staff of the Bodleian, HT);
- (xix) Owning a successful DPhil (run by JCCG, MT);
- (xx) Research Integrity (on-line course via Integrity & Ethics Training).

The Project Management Workshop in Week 4 of Michaelmas Term is compulsory.

The Career Planning Workshop in Week 6 of Michaelmas Term is compulsory.

The Training Workshop for Junior Demonstrators (MT, Week 7) is compulsory.

The University's on-line course on Research Integrity Training is compulsory before you apply for Transfer of Status. For more information on Research Integrity and the on-line course see <u>Appendix XIII</u>.

It is also strongly recommended that you attend some of the workshop sessions in Hilary Term on 'Presentation skills' and on 'Writing skills', since you will need the former to give a good presentation at your first-year interview and second-year talk, and you will need good writing skills for your

Literature Review, first-year report and your thesis. These courses assume you know the basics of word processing and use of Powerpoint, but introductory courses to these (and a wide range of other IT courses) are available from the University IT Services (<u>http://www.it.ox.ac.uk/do/training-and-facilities</u>).

Students whose first language is not English, should consider attending the courses on 'Academic Writing' and 'Advanced Communication Skills' that are offered by the Oxford University Language Centre at 12 Woodstock Road (<u>http://www.lang.ox.ac.uk</u>). For some, this attendance will have been set as a compulsory course requirement.

You should also attend the lecture in Week 2 of Michaelmas Term on 'Information Skills' as the latter is critical for accessing the research already done in your chosen field. Information on accessing and searching the materials literature can be found at <u>http://libguides.bodleian.ox.ac.uk/friendly.php?s=oxford</u>.

In Michaelmas Term of your first year, sometimes supported by one or two alumni/ae of the Department, together with a representative from the Oxford University Careers Service, Dr Taylor will run a compulsory and very useful workshop on Career Planning - Looking to the Future. Further information about the Careers Service can be found on their website (http://www.careers.ox.ac.uk/).

Towards the end of your degree there is an opportunity to discuss career opportunities for Materials Scientists on a one-to-one basis with several alumni and alumnae of the Department. This complements the many activities available through the OU Careers Service.

The MPLS Division also offers a range of courses on enterprise and entrepreneurship, as outlined to you at Materials Induction by Dr Anne Miller, <u>https://www.mpls.ox.ac.uk/training/enterprise/enterprise</u>.

The MPLS Division runs a workshop on 'Your Successful DPhil', which to some extent complements the Department's Project Management Scheme, details can be found at <a href="https://www.mpls.ox.ac.uk/training/mpls-training/our-courses/mpls-induction-courses/your-successful-dphil">https://www.mpls.ox.ac.uk/training/mpls-training/our-courses/mpls-induction-courses/your-successful-dphil</a>.

As mentioned already in <u>Section 3</u> of this Handbook, in Michaelmas Term the JCCG run a workshop on "Owning a Successful DPhil".

If you wish to attend a transferable, academic or research skills training course that is not offered by the Department of Materials or MPLS Division and for which a fee is charged, you may apply to the Director of Graduate Studies for funding using a copy of the form shown in

# <u>appendix VI</u> of this handbook. A Word version of this form can be found via the 'Materials: PGR Progression' site.

If you wish to use the supervised mechanical workshop, then it is mandatory that you first attend a Workshop skills course given by one of the technicians.

Similarly, if you wish to use the electron microscopes, then you should first complete an access and training request form (see <u>Section 7</u> of this Handbook).

You should also attend the lecture in Week 7 of Michaelmas Term by Sarah Boad on the benefits of student membership of the Institute of Materials. The receipt of their monthly magazine 'Materials World' and attendance at their meetings should both increase your general knowledge and improve your networking skills! The first year's membership is paid for you by the Department if you attend this lecture.

Finally, you may wish to develop skills in 'Public Engagement'. The ability to communicate the essence of your work to a non-scientist, to excite them, without hyperbole, about its potential applications and benefits, and to help them understand any associated societal risks is a valuable transferable skill. To find out more see the 'Public Engagement' pages of the MPLSD website (http://www.mpls.ox.ac.uk/support-services).

Further transferable skills training information and courses can be found via the MPLSD Researcher Training site at <a href="https://www.mpls.ox.ac.uk/training/pgr">https://www.mpls.ox.ac.uk/training/pgr</a> .

For example in addition to the transferable skills training courses offered by the Materials Department, the MPLS Division's Graduate School and other academic departments, Oxford University IT Services and the Bodleian Library provide a wide range of courses (for these and other courses see http://www.skillstoolkit.ox.ac.uk), and courses in foreign languages are offered by the Oxford University Language Centre (http://www.lang.ox.ac.uk).

Finally, a wide range of on-line courses and training are available via 'Linked-in Learning', which is accessible to you via the University IT Services site '<u>Molly</u>'.

# 6.3 VITAE

Vitae was set up under the sponsorship of the UK's Engineering and Physical Sciences Research Council (EPSRC). The Vitae website contains an excellent section, originally designed by postgraduate students, 'Postgraduate Researchers', and you are strongly advised to browse through this at your earliest convenience (<u>https://www.vitae.ac.uk/doing-research/doing-a-doctorate</u>). It contains several interlinked sections some of which we have referred to earlier in this Handbook, including:

- Managing yourself
- Planning your research project
- Developing as a researcher
- Career management
- Completing your doctorate tips on writing your thesis, submission and viva
- Supervision and key relationships.

In their February 2001 review of the original site, Science magazine wrote: 'The great strength of this site is that it has been put together for a very specific target group (doctoral students) and has clearly been written by people who know what they are talking about.

#### 7. TRAINING IN ELECTRON MICROSCOPY

The Electron Microscopy (EM) Facility offers an extensive range of research instrumentation, and training courses that run throughout the year. The EM Facility allocates researchers to training courses that are suitable and timely for their research projects. A provisional plan for EM access and training is drawn up between EM research support and project supervisors prior to the arrival of new graduate students in order to get teaching and training off to an efficient start. Researchers normally master one technique or instrument before embarking on the next, and training is tailored to match instrument capability with the scientific objectives of user projects. There are three research support scientists, each specialising in one of the three main technique areas of scanning electron microscopy (SEM), transmission electron microscopy (TEM) and focused ion beam (FIB).

EM training courses are designed to teach new users how to obtain the required data for their research project and also use the instrumentation safely. Following successful completion of a training programme, "approved users" may book equipment themselves, operating within the booking rules detailed on the website and on-line booking form. These are designed to give a fair share of instrument time to all. Requests for additional instrument access outside the booking rules should be directed to the relevant support scientist. EM support scientists are here to make sure you get the

most out of EM for your research project so do not be afraid to ask questions about EM or data analysis.

The Postgraduate Synopses booklet contains the EM training course synopses and details of associated post-graduate level lecture courses. More information can be found at <a href="http://www-em.materials.ox.ac.uk/">http://www-em.materials.ox.ac.uk/</a>. Applications for training and access normally will be made by your supervisor using the form provided in consultation with the relevant research support scientist. For further information please contact EM Facility staff at <a href="mailto:emaccess@materials.ox.ac.uk">emaccess@materials.ox.ac.uk/</a>. Or Neil Young directly at <a href="mailto:neil.young@materials.ox.ac.uk">neil.young@materials.ox.ac.uk/</a>.

# 8. OUTREACH TO SCHOOLS - AMBASSADOR PROGRAMMES

Oxford Materials Science has a very active access and outreach team. Each year we offer a wealth of activities and events aiming to inform schools about this exciting discipline, raise aspirations and inspire the next generation of Materials Scientists. The outreach team are supported by staff and students across the department in realising these aims and welcome your involvement as an ambassador.

What do I gain as an ambassador?

Apart from it being good for the Department as a whole if some of our research students are involved with such schemes, it is a good thing to have on a CV for jobs in industry or education: for anyone even remotely thinking of a career in teaching it can be very helpful indeed as it provides useful contacts in teaching and a good insight into what is involved. Anyone who is already involved with schools through their children, as governors etc., may also find it useful. Finally, developing communication skills with the general public, as well as communicating with other scientists and engineers, is a valuable personal skill in itself.

How do I get involved?

(i) Information on outreach ambassador programmes is outlined below and further details are available from the Access & Outreach Manager, Helena Cotterill, in the Department. (Email: <u>schools.liaison@materials.ox.ac.uk</u>). Helena will be very pleased to hear from you so just drop our Access & Outreach Office an email expressing interest.

(ii) Student members of the Department are invited to use the online form
 <u>http://www.materials.ox.ac.uk/admissions/schools/ambassadors.html</u> to express interest in acting as ambassadors at outreach workshops and projects we are running.

(iii) Keep an eye out for emails or Departmental Newsletter items requesting assistance with specific activities.

#### 8.1 Outreach Ambassador

There are a wide range of opportunities to help with the Department's substantial outreach work to schools: giving short talks, assisting with laboratory-based workshops for school pupils, helping with open days, visiting schools, acting as a host for residential courses held at Oxford and supporting our wealth of collaborative events. We offer training and support to those interested in developing and delivering outreach activities and we are always looking for enthusiastic volunteers. An overview of our outreach events can be found at

http://www.materials.ox.ac.uk/admissions/schools/schools-outreach-events.html

#### 8.2 Making Materials Matter Ambassador

Making Materials Matter (MMM) aims to inspire students to become the next generation of materials scientists and engineers through early and sustained engagement from Yr8 to Yr10 (these are the years leading up to the sitting of GCSE exams in the summer of Yr11, normally at age 16). The project has been running since 2016/17 with support from the Ironmongers' Company working closely with the University of Oxford in particular. The core programme is run for Yr8 students and their teachers. It is centred on independent research projects pursued by 10 students at each of 10 partner schools (7 in London, 3 in Sheffield) with guidance from materials ambassadors (from Oxford, Cambridge, Imperial and Sheffield) and support from their teachers. The projects are managed by MMM ambassadors and the students have 5 months in which to carry out the project. At least one visit to each school is made by the ambassadors and the students report their work during a "Student Conference" in Oxford. Finally, a teachers' conference is held at Ironmongers' Hall to share resources and raise awareness of materials science within the school curriculum. To sustain engagement with previous project participants, follow up events are held for Yr9 and Yr10 students that previously completed the main programme. Further details on this project including a short video clip can be found at http://www.materials.ox.ac.uk/admissions/schools/making-materials-matter.html

#### 8.3 STEM Ambassador

This important voluntary programme aims to put "real" scientists and engineers in school classrooms with the intention of motivating schoolchildren towards further study and careers in science and engineering. STEM Ambassadors bring a fresh and inspiring perspective to STEM subjects and careers, engaging young people from around the country. They achieve this by delivering a range of activities such as career talks, mentoring, practical workshops and exhibitions. Further information can be found at <u>https://www.stem.org.uk/stem-ambassadors</u> and you can apply online directly from this website.

#### 9. DEPARTMENT COLLOQUIA

We have seen that the first requirement for transfer from PRS to DPhil/MSc status is that you have passed two assessed courses. The second requirement is that you have attended at least seven colloquia during your first two terms (or your first three terms if you are following the Fusion CDT programme), to include at least **three** of the Department's Thursday afternoon Colloquia during this period. A list will be circulated at each Departmental colloquium for you to sign, thus providing a record that you were present. **The Department regards attendance at the Thursday afternoon colloquia as very important in broadening your general knowledge about materials science and engineering.** The invited lecturers are asked to spend the first part of their talk in bringing up to speed graduate students with little or no expertise in the colloquium topic. Coffee and biscuits are served immediately before the colloquium in the foyer outside the Hume-Rothery lecture theatre. This is to encourage students and others to meet the speaker, if they so wish, and to discuss the topic of the talk amongst themselves and with the other academic staff attending.

# At least three of your minimum of seven colloquia must be from the Department's Thursday afternoon series.

Subject to the above constraint:

- some students involved in interdisciplinary projects may feel they want to attend colloquia in other departments in order to broaden or deepen their knowledge of other subjects. This is acceptable.
- (ii) some students may wish to broaden their knowledge by attending other colloquia, seminars, etc organised within the Materials Department (eg Begbroke, MML, Characterisation or QIP seminars and ad hoc colloquia). This is acceptable provided that the colloquium is NOT from the series run by your own main research grouping (normally, subject to guidance from your supervisor, you are expected to attend these anyway). For example MML students may not count the MML seminars, but may count QIP or Characterisation Seminars, etc. Similarly FI students may not count FI colloquia.

In cases (i) and/or (ii) above, the Department will accept towards the 1st year course requirement attendance at up to **four** colloquia that are not part of the Thursday afternoon series. **Students will need to obtain the agreement of their supervisor in advance that such substitution is appropriate**. As there will be no signing-in sheet in these cases students should set out the title of the lecture, date and who is giving the talk in an e-mail to their supervisor asking the supervisor to forward this message to the Materials Graduate Studies Office to confirm the student's attendance. If there is to be more than one colloquium attendance offered towards the requirement and not drawn

from the Thursday afternoon series, it is recommended that students ask their supervisor to provide the confirmation of attendances in one go at the end of term.

Information on colloquia within the Materials Department and elsewhere can be found at <a href="http://www.materials.ox.ac.uk/news/colloquia.html">http://www.materials.ox.ac.uk/news/colloquia.html</a>.

For colloquia in other departments see for example, Physics (<u>http://www2.physics.ox.ac.uk/research/seminars/colloquia</u>), Engineering (<u>https://eng.ox.ac.uk/events</u>), Chemistry (<u>https://www.chem.ox.ac.uk/talks-and-seminars</u>), Maths (Solid Mechanics) (<u>https://www.maths.ox.ac.uk/events</u>), Medical Sciences Division (MSD) (<u>https://www.medsci.ox.ac.uk/</u>).

# 10. TRANSFER OF STATUS

Helpful general guidance on 'Transfer of Status' may be found on the MPLS Grad School website, (<u>https://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students/progression</u>).

As outlined in <u>Section 4.3</u> of the present Handbook, you commence your research degree with the status of Probationer Research Student and towards the end of your first year your progress is assessed in the Transfer of Status examination that is conducted by two members of staff we appoint as your Assessors. Remember that none of the following may act as your assessor: Your Supervisor(s), Department Advisor or College Advisor.

The purpose of the transfer of status process is to ensure that you have a convincing research proposal, that you are making satisfactory progress in its development, and to satisfy the independent assessors that the work is potentially of DPhil or MSc by Research quality. Satisfactory progress in this context includes not only your ability to generate an appropriate amount of good quality data, but also your ability to understand both these data and the broader project and your ability to begin to take ownership of the project.

If you are successful in the examination your assessors will recommend that you transfer to either DPhil Status or MSc(Research) Status, as appropriate.

In the normally rare event that the assessors of a Materials student are minded to recommend 'Failure to Transfer Status' the student will be asked to attend a second interview, conducted by the two assessors together with at least three members of the Department's Graduate Studies Committee including the DGS, and with his/her supervisor(s) in attendance. Following this second interview, which will be held as soon as practicable after the first, informed by a discussion between the Materials Graduate Studies Committee members, assessors and the supervisor(s), your Assessors will reach a final recommendation. In the event the two assessors cannot agree on the outcome the DGS will have a casting vote, for which purpose he would take into account the views of all present at the discussion. The primary purpose of the second interview is to allow consistency across all Materials PGR students in any 'failure to transfer' outcomes.

If the 'Failure to Transfer Status' recommendation is confirmed, then the student has a right to one, and only one, further attempt to transfer status, usually one term after the original attempt.

In the present section we provide more detail on the key stages of transfer of status.

#### 10.1 INFORMAL MEETING WITH LEAD ASSESSOR

During the period of weeks two to four of their third term an informal meeting is held between the student and their Lead Assessor. The informal meeting with Lead Assessor procedure is as follows:

1. Student arranges directly with their Lead Assessor a mutually convenient time for the informal meeting, of duration 15 to 30 minutes. The Lead Assessor is to stipulate the venue (and, if not using the Assessor's office, will ask the student to book a meeting room).

2. One week in advance of the meeting, the student will provide to the Lead Assessor, by email, the two documents described under (i) & (ii) below.

(i) <u>As a single, one-page, Word document</u>
The full name of the student
The name(s) of their supervisor(s)
The name of the programme for which they are registered [normally this will be one of - DPhil in Materials, MSc(R) in Materials, or 'Fusion' CDT]
The agreed title of their research project
A 100-word summary of the new science to which it is anticipated the project will lead.

# (ii) A copy of a recent update of their Gantt Chart

In addition, the above two documents will be uploaded in pdf format by the student to their 'Transfer' subfolder on our 'Materials: PGR Progression' on-line site. Please read the notes you will find on the

# 'Overview' page of this site. For these pdf uploads please give the documents filenames according to the following protocols:

SURNAME Forename PRS Informal Progress Meeting New Science SURNAME Forename PRS Informal Progress Meeting Gantt Chart

3. At the start of the meeting the Assessor will ask the student to summarise in five minutes their progress and principal achievements to date. To aid this summary the student may wish to bring to the meeting paper copies of up to five A4 'slides'.

Following the discussion between assessor and student, verbal comments will be offered on the student's progress and on their project. Should the Lead Assessor have significant concerns he or she will, in addition, communicate these to the Supervisor and DGS by email.

# 10.2 PREPARING FOR TRANSFER OF STATUS FORM

In weeks 7-9 of the third term of your first year (Trinity Term in most cases), as in every quarter, you are required by the University to submit a GSR report. To accompany this particular report you are expected by the MPLS Division to upload to GSR a completed copy of the 'Preparing for Transfer of Status' form. The purpose of this is to start you thinking about the requirements for a successful Transfer of Status well ahead of the actual examination. The form is available from the 'Materials: PGR Progression' site and via the GSR system.

# 10.3 LITERATURE REVIEW

By the end of your third full term, usually Trinity Term of your first year, you must successfully complete a Literature Review, the aim of which is to ensure that early in your project you are fully conversant with the prior research in your area of study. The Literature Review and subsequent Progress Report also provide vehicles for you to practise your scientific writing skills and for your supervisor to advise on any further training that might be necessary. Your supervisor will provide you with guidance on the content. You should ask him/her to identify one or two published review chapters (eg in a thesis) that provide good examples.

The Literature Review must be submitted as a pdf file and be formatted for double spacing with 3.5 cm left margin and 3 cm for top, bottom and right hand margins, using either Times New Roman 12 font or Arial 11 font or Calibri 11 font (note: margins specified to allow for binding should you wish to print a paper copy.) This pdf review should be submitted via your 'Transfer' subfolder on our

'Materials: PGR Progression' site by noon on Friday of week 8 of your third full term. Please read the notes you will find on the 'Overview' page of this site.

\*\*Please make sure that you submit your review on time\*\*

The filename for the report should be formatted as follows:

SURNAME Forename PRS Literature Review

The Review should comprise a 5,000 to 6,000 word survey of your research field (the word count excludes the title page, table of contents, acknowledgements, references and figure captions). Your survey should not omit any references to work that would crucially affect the nature or direction of research, but it should not be simply a catalogue. It should show critical judgement and discussion, and above all it should tell a scientific 'story', setting the scene for your own work. You should regard this as the preparation of an early draft for a chapter of your eventual thesis. Its structure and content are discussed further in the 'Writing Skills' workshop. Your Literature Review will be read by your lead transfer of status assessor, whose written comments on overall standard, breadth of coverage, critical judgement shown, and style and presentation of the review will be provided to you via the 'Materials: PGR Progression' site , normally after the Transfer of Status exam. A satisfactory Literature Review is a requirement for transfer of status.

NOTE: If, in exceptional circumstances, you need to ask for an extension to the Literature Review submission deadline, your supervisor needs to approve this request and e-mail <u>graduate.studies@materials.ox.ac.uk</u> to confirm this is appropriate.

A further incentive for writing a high-quality critical review is provided by the Materials Science and Technology (MST) Editorial Board, which offers a Materials Literature Review Prize for the best review from a graduate studying in the UK. Further information can be found on the website of <u>Taylor</u> and <u>Francis</u>. Winning reviews are published in the journal, Materials Science & Technology. Students from the Department have won a number of prizes in the past, so a high standard has been set.

# 10.4 APPLICATION PROCESS (GSO.2.<u>MPLS</u>) and EXAMINATION FOR TRANSFER OF STATUS

In the tenth month of your first year, usually July, it is time for you to apply to be considered for transfer of status. Ultimately this requires you to upload to our 'Materials: PGR Progression' site a fully signed GSO.2.MPLS form plus appendices (all combined into a single pdf document). Please read the notes you will find on the 'Overview' page of this site. This overview page contains links to a number of helpful documents / webpages, including the GSO.2.MPLS template form, a 'Transfer

Checklist' and the present Postgraduate Handbook. In the last you can see a sample copy of the assessment form and associated guidelines that will be used by your Assessors (Appendix X). Remember too the 'Preparing for Transfer of Status' document that you have seen already.

# As you will read on the GSO.2.<u>MPLS</u> form, within this form your supervisors have to write a short report on your progress. In this report they comment on:

- (i) Your progress, including the quality of your work, your competence and application to your project, the balance between your own input to the project and the assistance given by your supervisor and the members of the research team, your original contributions to date, and your readiness to undertake advanced, increasingly independent, research.
- (ii) The proposed research project.
- (iii) The extent to which the project forms part of a well-established research programme in the group.
- (iv) Any major factors outside your control that have significantly affected the progress of the work.

# IMPORTANT GUIDANCE ON COMPLETING AND SUBMITTING THE GSO.2.MPLS FORM AND ITS APPENDICES

# Please read this guidance very carefully.

Seeking guidance from your supervisor(s), you should complete the **GSO.2**.<u>MPLS</u> form as a **Word** document, and submit the signed copy by email, <u>using the phrase GSO.2</u> submission in the <u>subject line</u>, to the Materials Graduate Studies Office by 31 July in your first year (or your tenth month of Y1) for review. With the GSO.2.MPLS form in Word format, you also submit a second document, this one as a pdf, comprising the two appendices: 'Summary of Research Progress' report and Gantt chart. Normally your transfer interview should take place in mid-September to early October (i.e. near to the end of Y1).

# In summary, the sequence is:

- You complete section one, including the research ethics and research integrity subsections, and the supplementary sections at the end of the form. With the GSO.2.MPLS form in Word format, you also provide a second document (pdf) comprising the two appendices described below.
- When completing the form you will be required to confirm that you have completed the University's on-line course on 'Research Integrity Training'.

• Your Responsible Supervisor completes section two\*, including confirming they have discussed with you the relevant principles of good research practice.

At this time you should also discuss with your supervisor which of you will make the arrangements for the transfer interview – see the detail section below for guidance on this.

• Your College completes section three\*.

\* The GSO.2.MPLS form must be **must** be kept as a Word document at each stage so that the next person in the sequence is readily able to complete their part of the form. If any of the signatories is unwilling to add their e-signature to this Word document they may instead type their name into the signature box verifying their approval by copying-in <u>graduate.studies@materials.ox.ac.uk</u> when they email the form to the next person in the sequence.

- Your DGS (Adrian Taylor) reviews the form and completes section four, after which the Materials Graduate Studies Office emails the fully signed form back to you.
- In due course you upload to the 'Materials: PGR Progression' site a single pdf document comprising the fully signed GSO.2.MPLS form plus your summary of progress report, your Gantt chart and a copy of the 'Preparing for Transfer of Status' form that you uploaded to GSR. If you wish you may update the progress report and/or the Gantt chart prior to this upload, but the GSO.2.MPLS form must not be modified. You are advised to carry out the upload no sooner than three weeks before your transfer interview and normally must do this no later than one week before your transfer interview.
- Transfer Interview and Assessment take place (see detail below for the arrangement of the interview date with the Assessors)

#### In detail:

In addition to completing section one and the supplementary sections, Materials students are required to add the following two appendices to their GSO.2.MPLS form:

1. A 2000 to 2500 word summary of their research progress to date.

The report should be no more than 2,500 words (excluding the title page, table of contents, acknowledgements, references and figure captions). It should give an account of the background to your project (including <u>brief</u> references to the key literature), an outline of your research plans for the full duration (2, 3, 3.5 or 4 years) of your project (including an explicit indication of the new science it is anticipated that the project will lead to if all goes to plan – typically this new science section should be 300-500 words in length), and a description of the progress you have made so far. When writing this report please use the first person singular – that is, 'l' rather than 'we' – to distinguish clearly those parts of the report which refer to your **own** work (experiments, results, conclusions, plans for the rest of the project, etc).

2. An updated A4 copy of their latest Gantt Chart, using a <u>legible</u> font size. Be sure that this chart is concise but includes sufficient task lines within the work packages, to enable your assessors to understand your current intended work plan for the duration of your project.

<u>A note on completing the supplementary sections of GSO.2.MPLS:</u> Materials students are asked simply to provide a bullet point list of relevant items in each section. Taking guidance from the helpful examples provided within the form please take care to list 'research skills' in section A and transferable 'career skills' in section B. For example, since you all attended the Project Management training in year one and have practised this at six-monthly intervals thereafter you can include a bullet point for 'Project Management Training' in section B.

After completing the GSO.2.MPLS form as a Word document and the two appendices as a single pdf document, you sign the form and email both documents to your Responsible supervisor requesting her/him to complete their part of the application form, then you request endorsement of the form by your College, and finally you submit it and the pdf appendices by email, <u>using the phrase GSO.2</u> <u>submission in the subject line</u>, to the Materials Graduate Studies Office for review by the DGS (Adrian Taylor).

As already stated, the GSO.2.MPLS form **must** be must be kept as a Word document at each stage so that the next person in the sequence is readily able to complete their part of the form. If any of the signatories is unwilling to add their e-signature to this Word document they may instead type their name into the signature box verifying their approval by copying-in <u>graduate.studies@materials.ox.ac.uk</u> when they email the form to the next person in the sequence.

If you believe there are mitigating circumstances which may have had a significant impact on your progress to date you should inform the DGS in writing of these at the same time you request his endorsement of your GSO.2.MPLS form.

# Please ensure you have submitted the GSO.2.MPLS and appendices to the Materials Graduate Studies Office by the end of July (or your tenth month of Y1):

Noting that many students, academic staff and support staff take their main annual leave during the summer, it really **is** important that you submit the form to the Materials Graduate Studies Office by 31 July in order that everything is in place for your transfer interview, which for most students needs to take place in mid-September to early October. If your GSO.2.MPLS is not submitted by 31 July do not be surprised if there are delays in your Transfer of Status process. Other than in exceptional circumstances your transfer interview cannot take place until the DGS (Dr Taylor) has approved your GSO.2.MPLS application.

Once the DGS is satisfied your application is complete and has signed it, our Materials Graduate Studies Office will email you a copy of the fully-signed GSO.2.MPLS form and in due course you

upload to the 'Materials: PGR Progression' site a single pdf document comprising the fully-signed GSO.2.MPLS form plus your summary of progress report, your Gantt chart and a copy of the 'Preparing for Transfer of Status' form that you uploaded to GSR. If you wish you may update the progress report and/or the Gantt chart prior to this upload, but the GSO.2.MPLS form must not be modified. You are advised to carry out the upload no sooner than three weeks before your transfer interview and normally must do this no later than one week before your transfer interview. **Please give this pdf a filename using the following protocol:** SURNAME Forename GSO.2.MPLS

Once uploaded, your completed application is available on the 'Materials: PGR Progression' site for you, the DGS, your Supervisor(s), your Department Advisor, and your Assessors to view.

Your transfer interview and assessment can take place after the completed fully-signed form plus progress report and Gantt chart have been uploaded. Normally the interview should be held very near to the end of your first twelve months (thus for most students in the period mid-September to early October).

At the time your Responsible Supervisor signs your GSO.2.MPLS form in July, it is important that you ask him or her to confirm that they wish **you** to contact your Assessors in order to agree a provisional date for your Transfer of Status interview. Alternatively, they might indicate that **they** will contact the Assessors about this. Either way, soon after your Responsible Supervisor has signed the GSO.2.MPLS form it is advisable to agree this provisional date so that it is in the diaries of you and your assessors. If **you** make the arrangements, do ensure your supervisor(s) are aware of your interview date too. If either of your assessors does not respond to your efforts to make contact then please ask your Responsible Supervisor to contact the assessors.

Please note that, other than in exceptional circumstances <u>and</u> with permission of the DGS or the Chair of Faculty, the interview and assessment must not proceed until you have uploaded to the 'Materials: PGR Progression' site the scanned copy of the GSO.2.MPLS form <u>after</u> it has been reviewed and signed by the DGS (Adrian Taylor).

#### The Transfer Interview and Assessment

At the Transfer interview, which involves only you and your two assessors, you will be asked about your work and progress over the whole of your research project to date and your plans going forward. Prior to the interview your assessors will have read your GSO.2.MPLS form and the Lead Assessor will have assessed your Literature Review and uploaded a report on the latter to the confidential Supervisor/Assessors sub-folder within your folder on our 'Materials: PGR Progression' site. The duration of the interview will be between 15 to 30 minutes; the first five minutes for you to summarise your work to date and your intended next steps, and the remainder of the time for your Assessors to

ask questions and engage in discussion with you. For your five-minute introduction you may use up to five slides. At the end of this five-minute introduction you should display an additional final slide to summarise the new science to which it is anticipated your project may lead.

After the interview the Assessors complete a report form and make a recommendation on the outcome of the assessment (as mentioned already, you can see a blank copy of this form in Appendix X of the present Materials Graduate Course Handbook – do have a look at this form as it gives a good idea of what the assessors will be taking into account).

Finally, you will receive an e-mail direct from the MPLS Division once your Transfer outcome has been processed.

# 11. SECOND-YEAR TALK

Monday to Friday (9.00 am – 6.00 pm) of Week 7 in Hilary Term are reserved for the second-year talks, in which the students present their current research findings. In your second year you <u>must</u> keep <u>all</u> of these days free. If you have a clash, in the majority of cases your timetabled talk will take priority. In certain circumstances it may be agreed you can postpone your talk for a year or in exceptional circumstances such as family bereavement or hospital appointment, we will make best efforts to try and re-organise the talk schedule. Please e-mail <u>graduate.studies@materials.ox.ac.uk</u> and give an outline of the position if you fall into either category to seek postponement for a year or reschedule of talk.

The talks will be scheduled by the DGS in a series of themed Heats, a member of academic staff acting as 'Convenor' for each Heat. Within each Heat there may be a number of sessions, each chaired by a research group leader. The Convenor of the Heat in which your talk takes place will give <u>collective</u> written feedback to all speakers in their Heat within two weeks of the talks and in any cases where significant improvement is needed will write individually to the students concerned.

The presenter of the best talk in each Heat, as judged by the Convenor and the session chairs, will give their talk again in a Final, to be held on Friday of Week 7 HT in the Hume-Rothery Lecture theatre. The winner of each Heat will receive a prize of £25.

The best talk in the Final in terms of effective communication of science is awarded the Hetherington – Armourers & Brasiers' Prize. This provides a prize of £200 and the winner's name is added to the list on the award board in the foyer to the library. The talks in the Final will be judged by the DGS and senior members of academic staff. They will be looking at the quality of the visual aids; the pace and

diction; the structure of the talk; the ability to get points across to a mixed audience at peer-group level; self-confidence and the handling of questions; effectiveness of your presentational style; and timing.

You are required to include in the introduction section of your talk one slide which explicitly identifies the key new science to which the project has led and/or is expected to lead. The talk should include an appropriate introduction for a mixed audience of Materials Scientists, but focus mainly on your own results, the interpretation of these results and how they relate to other work in the field. The talks are each allocated 20 minutes, which comprises 15 minutes for presentation and 5 minutes for questions. Please take care to time your talk carefully. You are requested to load your slideshow onto the desktop of the PC in the lecture theatre in advance of your session – remember to include your name in the filename! Your progress as indicated by this talk provides a useful informal guide on your trajectory towards Confirmation of DPhil Status. If the senior member of staff who chairs the session in which you give your talk has concerns over your progress the DGS will alert you and your supervisor to these concerns, giving you ample time to address these in advance of your Year 3 Confirmation of Status assessment.

In advance of the talks please upload to our 'Materials: PGR Progression' site an abstract for your talk, of length 100 to 150 words, as a pdf, **using the following protocol for the filename:** SURNAME Forename Y2 talk abstract. **Please remember to include in the abstract your name and talk title!** 

And immediately after giving your talk please upload your slides under the filename: SURNAME Forename Y2 talk slides.

The members of each research group are requested to make arrangements such that for each speaker from your group one or more group members will take notes during the talk in order to provide constructive feedback on strengths and weaknesses. You will be able to provide this feedback soon after the talks and in the light of the generic feedback provided by the Convenor.

The Head of Department and the DGS wish to strongly encourage all research students and supervisors to support the individual speakers and the event by attending at least one of the several sessions. Further, we encourage the speakers to attend their own session and **at least** one other session. Unless they have made special alternative arrangements, normally at least one of a student's supervisors is required to attend a student's talk. Unless there are exceptional reasons please show courtesy to your fellow scientists by attending a whole session and not just "parachuting in" for one talk within a session. Do try to come along to the Final too to support the speakers.

### 12. CONFIRMATION OF DPHIL STATUS

Helpful general guidance on 'Confirmation of Status' may be found on the MPLS Grad School website, (<u>https://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students/progression</u>).

As outlined in <u>Section 4.5</u> of the present Handbook, towards the end of your third year your progress is reviewed in the Confirmation of Status assessment that normally is conducted by the two members of staff who were appointed in Year One as your Assessors.

The purpose of Confirmation of Status is to enable research students to receive an independent assessment of their work by two assessors other than their supervisor(s). It is intended to provide an important indication of progress towards submission of a satisfactory DPhil thesis.

If you are successful in the assessment your assessors will recommend that your DPhil Status is confirmed.

In the normally rare event that the Confirmation of Status assessors of a Materials student are minded to recommend 'Failure to Confirm Status', if the 'Failure to Confirm Status' recommendation is confirmed upon review by the DGS, then the student has a right to one, and only one, further attempt to confirm DPhil status, usually one term after the original attempt.

If after a **2<sup>nd</sup> attempt** at Confirmation of Status the assessors of a Materials student are minded to recommend 'Failure to Confirm Status' the student will be asked to attend a second interview, conducted by the two assessors, together with at least three members of the Department's Graduate Studies Committee including the DGS and with his/her supervisor(s) in attendance. Following this second interview, which will be held as soon as practicable after the first, informed by a discussion between the Materials Graduate Studies Committee members, assessors and the supervisor(s), your Assessors will reach a final recommendation. In the event the two assessors cannot agree on the outcome the DGS will have a casting vote, for which purpose he would take into account the views of all present at the discussion. The primary purpose of the second interview is to allow consistency across all Materials PGR students in any 'failure to confirm' outcomes.

In the remainder of the present section we provide more detail on the key stages of confirmation of status.

### 12.1 PREPARING FOR CONFIRMATION OF STATUS FORM

In weeks 7-9 of the second term of your third year (Hilary Term in most cases), as in every quarter, you are required by the University to submit a GSR report. To accompany this particular report you are expected by the MPLS Division to upload a completed copy of the 'Preparing for Confirmation of Status' form. The purpose of this is to start you thinking about the requirements for a successful Confirmation of Status ahead of the actual assessment. The form is available from the '**Materials: PGR Progression'** site and via the GSR system.

# 12.2 APPLICATION PROCESS (GSO.14.<u>MPLS</u>) and ASSESSMENT FOR CONFIRMATION OF STATUS

Towards the end of the second term of your third year, usually Hilary Term, it is time for you to upload a set of documents pertaining to confirmation of status to the 'Materials: PGR Progression' site. Please read the notes you will find on the 'Overview' page of this site. This overview page contains links to a number of helpful documents / webpages, including a 'Confirmation Checklist' and the present Graduate Handbook. Remember too the 'Preparing for Confirmation of Status' document that you have seen already.

• In Materials, your application to be considered for confirmation of status is formally **submitted** by uploading a fully-signed completed form **GSO.14.<u>MPLS</u>** to our 'Materials: PGR Progression' site.

#### WHAT MUST YOU INCLUDE IN YOUR GSO.14.MPLS FORM?

Please read this guidance very carefully:

- 1. Within the GSO.14.MPLS form, under 'Progress Report (i)': In this section Materials students are required to provide a 500 to 1000 word summary of their research achievements to date. This summary should outline in particular the key new science which the project has achieved and/or is on target to achieve, and should include a list of any refereed publications or patents that have arisen from their work to date.
- 2. Also as part of GSO.14.MPLS you are required to provide a timeline to submission: in the box under 'Progress Report (ii)' Materials students may just type 'See appended Gantt Chart' and then append as a final page to the GSO.14.MPLS form an updated A4 copy of your latest Gantt Chart, using a legible font size. Be sure that this chart is concise but includes sufficient task lines within the unfinished work packages, including that for thesis writing, to enable your assessors to understand in outline your timeline to submission.

3. Finally please complete the supplementary information section of GSO.14.MPLS. Materials students are asked simply to provide a bullet point list of relevant items in each section. Taking guidance from the helpful examples provided within the form please take care to list 'research skills' in section A and transferable 'career skills' in section B. For example, since you all attended the Project Management training in year one and have practised this at sixmonthly intervals thereafter you can include a bullet point for 'Project Management Training' in section B. Similarly you all presented a third year poster, and had the opportunity to attend training on preparing a poster, so you can include a bullet point for 'Communication Skills – Poster Presentation'.

• Seeking your supervisor's guidance you should complete this form as a Word document, sign it, and then email it to your supervisor\* to complete and sign section 3 of the form. In this section, to aid the DGS and your assessors, your supervisor is required to write a short report on your progress.

• Next, also by email, request endorsement of this application first by your college\*

The GSO.14.MPLS form must be **must** be kept as a Word document at each stage so that the next person in the sequence is readily able to complete their part of the form. If any of the signatories is unwilling to add their e-signature to this Word document they may instead type their name into the signature box verifying their approval by copying-in <u>graduate.studies@materials.ox.ac.uk</u> when they email the form to the next person in the sequence.

• Finally submit the GSO.14.MPLS form with appended Gantt Chart, all as a single **Word** document, by email to the Materials Graduate Studies Office, <u>using the phrase GSO.14 submission in the</u> <u>subject line</u>, for review by the DGS (Adrian Taylor).

• If you believe there are mitigating circumstances which may have had a significant impact on your progress to date you should inform the DGS in writing of these at the same time you request his endorsement of your GSO.14.MPLS form.

• Once the DGS is satisfied your application is complete and has signed it, our Materials Graduate Studies Office will email you a fully signed copy which you then upload to our 'Materials: PGR Progression' site having first appended to the form a copy of the 'Preparing for Confirmation of Status form that you uploaded to GSR. **Please use the following protocol for the filename:** SURNAME Forename GSO.14.MPLS • Once uploaded your completed form is available for you, the DGS, your supervisor(s), your Department advisor, and your assessors to view. Only once this is done may your confirmation interview and assessment take place. If your GSO.14.MPLS and appended Gantt chart are not provided to the DGS by week 2 of TT, prior to your uploading it to 'Materials: PGR Progression' by Week 6 of TT, do not be surprised if there are delays in your Confirmation of Status process.

At the time your Responsible Supervisor completes the relevant section and signs your GSO.14.MPLS form it is important that you ask him or her to confirm that they wish **you** to contact your Assessors in order to agree a provisional date for your Confirmation of Status interview. Alternatively, they might indicate that **they** will contact the Assessors about this. Either way, soon after your Responsible Supervisor has signed the GSO.14.MPLS form it is advisable to agree this provisional date so that it is in the diaries of you and your assessors. If **you** make the arrangements, do ensure your supervisor(s) are aware of your interview date too. If either of your assessors does not respond to your efforts to make contact then please ask your Responsible Supervisor to contact the assessors.

Normally, for a Materials student, the Confirmation interview should take place no later than Friday of week 10 of Trinity Term of your third year (or two years and nine months after your start date).

Please note that, other than in exceptional circumstances <u>and</u> with permission of the DGS or the Chair of Faculty, the interview and assessment must not proceed until you have uploaded to the 'Materials: PGR Progression' site the fully-signed copy of the GSO.14.MPLS form, ie. <u>after</u> it has been reviewed and signed by the DGS (Adrian Taylor).

# The Confirmation interview

At the Confirmation interview, which involves only you and your two assessors, you will be asked about your work and progress over the whole of your research project to date and your plans going forward. Prior to the interview your assessors will have read your GSO.14 form including your supervisor's report within this form. The duration of the interview will be between 15 to 30 minutes; the first five minutes for you to summarise your work to date and your intended next steps, and the remainder of the time for your Assessors to ask questions and engage in discussion with you. For your five-minute introduction you may use up to five slides. At the end of this five minute introduction you should display an additional final slide to show in outline your vision at present of the table of contents for your thesis (chapter headings only, not sections within chapters).

After the interview the Assessors complete a report form and make a recommendation on the outcome of the assessment (the 'Preparing for Confirmation of Status form mirrors the Assessors'

report form – so do have a look at the former as it gives a good idea of what the assessors will be taking into account).

Finally, you will receive an e-mail direct from the MPLS Division once your Confirmation outcome has been processed.

# 13. THESIS WRITE-UP, SUBMISSION AND VIVA

The 'Postgraduate Researchers' section of the Vitae website <u>https://www.vitae.ac.uk/doing-research/doing-a-doctorate/completing-your-doctorate/writing-and-submitting-your-doctoral-thesis</u> contains an excellent section on 'Writing-up', with many helpful tips. Some of these will be covered during the 'Writing skills' lecture in Hilary Term, which will also deal with the practicalities of producing the thesis.

The primary source of advice on the structure and scientific content of your thesis is your supervisor. Before you first discuss this with her/him you should look at a recently published thesis from your research group.

# Proof-reading

It is your responsibility to ensure your thesis has been adequately proof-read before it is submitted. Your supervisor may alert you if they feel further proof-reading is needed, but it is not their job to do the proof-reading for you. You should proof-read your own work, as this is an essential skill in the academic writing process. However, for longer pieces of work it is considered acceptable for students to seek the help of a third party for proof-reading. Such third parties can be professional proofreaders, fellow students, friends or family members (students should bear in mind the terms of any agreements with an outside body or sponsor governing supply of confidential material or the disclosure of research results described in the thesis). Proof-reading assistance may also be provided as a reasonable adjustment for disability or special educational needs. **Your thesis may be rejected by the examiners if it has not been adequately proof-read.** 

The MPLS Division offers training in proof-reading as part of its <u>Scientific Writing</u> training programmes.

Please note the University Guidance and Regulations covering the use of 3<sup>rd</sup> Party proof-readers for pieces of work of 10,000 words or more (<u>http://www.admin.ox.ac.uk/edc/policiesandguidance/</u>.)

Following a successful examination and once 'leave to supplicate' has been granted, you will need to prepare at least four hard-bound copies of the thesis: one for the University's Bodleian Library, one for the Department's Library, one (or more) for your supervisor(s), and one for yourself. You are also required to submit an electronic copy of your thesis to the Oxford Research Archive (you should check what, if any, automatic period of embargo is applied – only after this period will it be accessible via the ORA). For this purpose you will need to provide copies of permissions granted for the use of any copyrighted material that may be within your thesis (see <u>Section 21</u>, under 'copyright'). It is up to you to cover the cost of hard-binding your thesis. However, you can claim a contribution of £35 towards the cost of DPhil or MSc theses when you submit one final hardbound copy to the Department Librarian.

Further detailed information on the examination process may be found in:

#### (i) the notes of guidance

(http://www.ox.ac.uk/students/academic/guidance/graduate/progression) from the University Graduate Studies Office. You should look at these notes early on during the writing of your thesis and make sure that you are in a position to submit the on-line form GSO.3 and, if needed, GSO.3c, also on-line, four to six weeks prior to submitting your thesis. If you do not submit these forms within the timeline recommended above, do not be surprised if your examination is delayed. In form GSO.3 you are asked to state the date by which you will submit your thesis. It is OK to submit sooner than this date, but you are expected to submit by or very soon after this date. If you do over-run please contact the Research Degrees Exams & Assessment Office so that they are aware.

- the 'Mathematical, Physical and Life Sciences Division's on-line Graduate Handbook (<u>https://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students</u>). This contains useful sections on the preparation and submission of theses, the appointment of examiners and examination arrangements, and the notification of the results of the viva and the conferring of the degree.
- (iii) the on-line University Examination Regulations, look at chapters on General Regulations Governing Research Degrees, General Regulations Governing ... MSc(Res) and DPhil, and Research Degrees in the MPLSD and Research Degrees in Physical Science and Doctoral Training Programme in MPLS - see <u>http://www.admin.ox.ac.uk/examregs/information/contents/</u>.

It suffices to note here that for the award of a DPhil you will need not only to have demonstrated a good general knowledge of your research discipline but also to have presented 'a significant and

substantial' piece of research of a kind which might 'reasonably be expected of a capable and diligent student after three or at most four years of full-time study' (from Oxford University's 'Examination Regulations'). Typically, external examiners will interpret this phraseology to mean that the DPhil thesis exhibits 'substantial evidence of original scholarship and contains material worthy of publication (in a peer-reviewed international journal)'. For the award of an MSc the standard required is that the candidate should have made 'a worthwhile contribution to knowledge or understanding of a kind which might reasonably be expected after two years of full-time study'.

Note the word limits for Materials Science theses (<u>http://www.admin.ox.ac.uk/examregs/2014-</u> <u>15/rdinphysscie/)</u>:

- (i) MSc (by Research) 25,000 words;
- (ii) DPhil 40,000 words.

Materials research students are required to state on their GSO.3 form the number of **words** in their thesis. If you leave this entry blank or enter the number of pages instead of the number of words your GSO.3 will be returned to you, thus delaying the appointment of your examiners.

Only in exceptional circumstances will your supervisor be able to make a case to the Director of Graduate Studies for an increased word limit. There is however no limit on references, diagrams, tables, photographs, computer programmes, etc.

Materials Science theses must be A4 size and formatted with double line spacing. Further details can be found in document GSO.20a. You are advised to use a font size of Calibri 11, Arial 11 or Times Roman 12.

Some subjects at Oxford permit the submission of a so-called 'integrated thesis'. This option is **not** permitted for Materials theses.

For the purpose of the examination, you must submit a **digital copy** of your thesis via the 'Research Thesis Digital Submission' (RTDS) portal (in addition you are advised to make a soft-bound paper copy of this digital submission for yourself). Normally the thesis is submitted a few weeks after the form GSO.3 for Application for Appointment of Examiners, and no later than the date you indicated in your GSO.3 form. Your soft-bound copy can be printed and bound in the Department. Materials IT Support can offer guidance on the most appropriate way to do this. Staff at researchexams@admin.ox.ac.uk may be contacted for further information and tracking of progress.

Once appointed, the internal examiner (usually a senior member of the Department) will contact you to arrange a date for the viva. This is usually 2-3 months after submission of your thesis, but special arrangements can be made for an early examination if you have good reason to need this. In this case, you should contact the Department's Graduate Studies Office well in advance of submission to ensure all the paperwork is handled quickly.

If all goes well at the viva you will be granted 'leave to supplicate', a quaint Oxford term dating back to 1691. You will then submit to the Examination Schools forms GSO.3a and GSO.26 (with an additional copy of the abstract of your thesis and a hard-bound copy of your thesis incorporating any amendments required by the examiners for deposit in the Bodleian Library) and wait for a suitable Saturday when you may have your degree conferred at the Sheldonian Theatre. Good luck!

Guidance about the additional requirement to deposit a digital copy of the final version of your thesis can be found at <u>http://ora.ox.ac.uk</u>.

Useful Books:

W E Russey, H F Ebel and C Bliefert, How to Write a Successful Science Thesis (Wiley, 2006);

R Arshady, Science and Medical Style Guide, Volume 1 (Kentuo, 2006);

H Kirkham, R C Dumas, The Right Graph: A Manual for Technical and Scientific Authors (Wiley, 2009).

FINALLY, JUST BEFORE YOU LEAVE THE DEPARTMENT FOR PASTURES NEW (OR START ON A POST-DOC CONTRACT WITH US) IT IS A <u>COMPULSORY REQUIREMENT</u> THAT YOU SUBMIT A HARD COPY THESIS TO THE MATERIALS GRADUATE STUDIES OFFICE (OR GRACE IN THE MATERIALS LIBRARY) FOR DEPOSIT IN THE DEPARTMENT LIBRARY. AT THE SAME TIME WE REQUEST THAT YOU COMPLETE A LEAVER'S FORM: THE INFORMATION IN THIS IS VERY IMPORTANT TO US, INCLUDING INFORMATION ON YOUR ROLE NOW THAT YOU HAVE FINISHED YOUR DOCTORATE.

# 14. EXTENSIONS OF TIME

Students undertaking a DPhil in Materials are expected to submit their thesis within 3 to 3.5 years of full-time study [2 years for MSc(Res), 4 years for an EPSRC CDT DPhil, and 4 years for projects under the EPSRC Industrial CASE scheme, EPSRC NPIF scheme and Faraday Institution Studentship scheme]. As indicated in Section 2 and 3 of this Handbook, if you do not think you will meet this expectation you should arrange to meet with the DGS to discuss your progress. If you are unable to complete your research within the maximum period normally allowed by the University (9

terms for MSc by Research, 12 terms for the DPhil), then you may apply for an extension of time. Approval for extensions will be granted only if you and your supervisor can justify the request. The maximum total periods of extension are up to 6 terms for DPhil candidates and 3 terms for MSc by Research candidates. Students are allowed to apply for a maximum of three terms at any one time. However, it is MPLS policy that where a request for an extension is approved normally this be only one term at a time, so that your progress can be kept under close review.

To make a request to extend you need to complete an on-line form GSO.15, which can be found on the Graduate Progression Forms webpage

<u>http://www.ox.ac.uk/students/academic/guidance/graduate/progression</u>. You must give full reasons for your request, and these must also be supported in writing by your supervisor and College. On the form you need to indicate the present state of your thesis, ie how much has been completed and how much remains to be done, include a new Gantt Chart which should contain a timetable for completion and also when you expect to apply for confirmation of status (if this is yet to be done), and the expected submission date for your thesis. Your application must be submitted before your status lapses. See also Section 20 (Continuation Bursaries & Continuation Charges).

#### 15. SUPPORT STRUCTURE

The Department of Materials is a medium-sized, cohesive unit in which you will find support as a graduate student from many quarters, not only from your own immediate research group and supervisor(s). In addition you have a second line of support from your College, not only for personal and academic matters, but also often for help with travel, conference attendance and hardship. In <u>Appendix VII</u> you will find a list of people in the Department you might need to approach for personal, financial, technical or academic advice; you should have been given access to a corresponding list for your College.

#### 16. FACILITIES

# The Department and University provide a range of general facilities to which you will have access during the course of your research:

- Libraries (books, journals, literature searching, study space)
- Mechanical workshop (shared with Engineering, tools, construction of components)
- Heat treatment workshop (furnaces for a variety of needs)
- Specimen preparation (cutting, grinding, polishing)
- Electron microscopes (SEMs, TEMs, microprobes)

- Optical microscopes
- X-ray diffraction facilities
- Stores (supply of chemicals, components, stationery etc.)
- IT Support (hardware, software, modelling, advice and help)
- Digital Print Room (A4/A3 colour printing, scanning, laminating)
- Binding can be carried out via Reception and plastic covers can be obtained from Stores
- A wide range of analytical instruments (see <u>http://www-omcs.materials.ox.ac.uk</u>).

You will find full details of the facilities and how to obtain access and training via the on-line <u>Materials</u> <u>Information Centre</u> (MIC) and at <u>http://www-omcs.materials.ox.ac.uk</u>.

The MIC provides a portal to guidance about the many facilities within the Department such as the library, mechanical workshops, computing laboratories, and electron/optical microscopes that are available to all graduates. Also covered are the procedures needed, for example, in ordering consumables and equipment both from the main stores and from external suppliers, getting logged onto the University Computing network and arranging for work to be carried out in the mechanical workshops. Information and links on how to claim re-imbursement for expenses and payment for casual employment such as teaching are included too.

**Research students may request access to the facilities in the teaching laboratory.** Access should always be arranged in advance with the Teaching Laboratory Technician. Users must provide their own consumables, and supervisors should endorse the request having judged whether or not the researcher is competent in using the necessary equipment. Pre-arranged and planned access should negate the need for out-of-hours access, and access during afternoon undergraduate practicals is actively discouraged. All usage is subject to having satisfied the Teaching Laboratory Technician that adequate training has been received. A well-equipped metallographic outfit, including resources, is available at Begbroke and when access to the teaching laboratory is not possible or convenient suitably trained researchers should use the equipment there.

The provision of appropriate COMPUTING FACILITIES for your particular research project is the responsibility of the individual research group. It is very important that you discuss this provision with your supervisor soon after induction (in this respect see <u>Section 25.5</u> of the present Handbook). Research students may also use the computers in the teaching laboratory computer room, but undergraduates have priority use of this resource. Outline guidance on software (recommendations and availability) can be found on the Departmental website at <a href="http://www.materials.ox.ac.uk/local/it/itsoftware.html">http://www.materials.ox.ac.uk/local/it/itsoftware.html</a>, and excellent support and guidance is available on hardware and software both from the Departmental IT Support team

(<u>http://www.materials.ox.ac.uk/local/it</u>) located in the ETB building room 10.14 and also from Oxford University IT Services (<u>http://www.it.ox.ac.uk</u>) located beside our 21 Banbury Road laboratories.

# 17. GAINING TEACHING EXPERIENCE

Some experience of teaching, whether as a Junior Demonstrator in our Teaching Laboratory, as a tutor, or assisting with activities provided for school pupils, is a very useful transferable skill. Also, such teaching is paid work. As part of your skills training you are encouraged to volunteer for teaching and/or outreach duties. Unless your sponsor forbids it, the Department expects its graduate research students to participate in a minimum of 30 hours per annum teaching if so requested by the Department. This teaching is paid at standard University rates and is subject to 'right-to-work' checks.

UK students: please note that earnings from sources such as teaching and demonstrating may be taxable and should be aggregated with income from any other employment when assessing income tax liability for a given tax year (your EPSRC maintenance grant is counted as a training award and not normally regarded as income for UK income tax purposes; a small number of exceptions include certain European Commission-funded studentships, where you are paid a salary).

Overseas students: please note that whether or not we are able to employ you will depend on the terms of your visa. In some cases your visa may still permit you to take a teaching role but unpaid.

# 17.1 JUNIOR DEMONSTRATING IN THE TEACHING LABORATORY

An essential part of the undergraduate courses is practical work which is undertaken in the Teaching Laboratories. This provides an opportunity for graduate students to gain experience of teaching by acting as Teaching Assistants (TA) and at the same time earn a useful supplement to their subsistence grant.

Each year the Department requires about 15 TAs to help with the Undergraduate Practical Classes. The TA appointments are for one year, with the expectation of renewal for a second and perhaps a third year subject to satisfactory performance, and provided the Department continues with the scheme. Students will be remunerated at the appropriate rate **for work done**.

Normally **all** new research students are required to attend our Junior Demonstrating Training Workshop (usually held in MT). This means that you all become eligible to apply for a Practical Course Teaching Assistantship.

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Each Teaching Assistant on Practical Class duty will be in the teaching laboratory for, typically, 4-6 afternoons (2.00 - 5.00 pm) for each of two terms. Second year students should ensure that any commitments they agree to do not clash with the 2nd Year Talks in Hilary Term. There will also be some training time, including a requirement to assist with setting up equipment and a requirement to attend experiment specific training, and to carry out the full experiment and to produce a set of model results. Each TA will be expert in one particular undergraduate practical being carried out during the term. The contract is for up to 120 hours per year, but in most years for most TA's the actual requirement is much less. As ever, good verbal communication skills and a reasonable amount of practical expertise will be essential requirements. You should also have the agreement of your supervisor from whom we will seek a reference. Further details on junior demonstrating can be obtained from the Practical Courses Organiser.

# 17.2 TUTORING

A special feature of undergraduate courses at Oxford is the college tutorial. Every week students prepare work for 1 or 2 tutorials, which they then discuss (usually in pairs or groups of three) with a college tutor. Tutoring undergraduates is valuable experience and an excellent way of consolidating your knowledge. It also provides extra income. If opportunities arise, in an area where you feel confident, you are encouraged to take on a moderate amount of teaching (discuss it with your supervisor). You should be aware though that the ratio of staff and postdoctoral researchers to undergraduates is high in the Materials Department and relatively few postgraduate students actually have the opportunity to act as tutors. If you attend the 'Tutoring Materials Science' Workshop your name will be added to the list of potential tutors that we make available to the Materials Tutorial Fellows at the Colleges.

Some demonstrators are needed for Y1 UG crystallography classes, Y1 UG computing for materials science classes, Y3 UG materials modelling and materials characterisation modules, and some tutors for Y1 & Y2 UG mathematics classes.

Further details (i) on tutoring materials science can be obtained from the Chair of the Tutors' Committee, Professor Michael Moody or from Professor Susie Speller, and (ii) on tutoring Maths Classes from Professor Jonathan Yates.

### 17.3 TRAINING TO TEACH

A number of training workshops are organized for those new to teaching. Details are announced by e-mail and appear in the termly lecture lists, <u>http://www.materials.ox.ac.uk/teaching/lecturelists.html</u>.

#### 17.4 SCHOOLS OUTREACH WORK

There are a wide range of opportunities to help with the Department's substantial outreach work to schools: giving short talks, assisting with laboratory-based workshops for school pupils, helping with open days, visiting schools, acting as a host for residential courses held at Oxford and acting as a MMM or STEM Ambassador (see Section 8 of this booklet). We offer training and support to those interested in developing and delivering outreach activities and we are always looking for enthusiastic volunteers. For more details, please contact our Access & Outreach Manager at any time in the year and also look out for emails seeking help with specific outreach events.

#### 18. THE JOINT CONSULTATIVE COMMITTEE FOR GRADUATES (JCCG)

The Department of Materials is very interested in receiving feedback and suggestions from its students on everything that impacts their time here. For this reason we have the JCCG, a body through which the postgraduate students have an official voice in the decision making of the Department. The JCCG consists of 2 to 4 student representatives from each year together with a small number of members of staff. Meetings are held once a term (and one in the Long Vacation) and student representatives act as Chair and Deputy Chair. The minutes of the JCCG are then brought to the attention of the senior committees in the Department. The JCCG Chair reports each term to our Materials Graduate Studies Committee. It is the aim of the JCCG to provide the Director of Graduate opinion as well as to provide postgraduates with a forum to bring up issues concerning the running of our research degree programmes and the many other issues concerning them and the Department.

A similar committee exists for the undergraduate course (JCCU), and both JCCU and JCCG have managed to influence many decisions of the Department on the course structure and teaching provision, and helped to introduce new initiatives.

One of the roles of the JCCG is to collate feedback on graduate lectures and report this to the lecturers concerned. All the lecturers are asked to circulate questionnaires at the end of their course. The JCCG is keen to obtain your feedback on the courses, and sees the questionnaires as very

important, so please make sure you receive, complete and return your forms. Apart from student feedback on graduate lectures, the JCCG organizes an annual questionnaire covering a broad range of subjects such as facilities, course structure and colloquia. However, it is also the intention that the student representatives will raise at the termly meetings any matters or suggestions brought to their attention by other postgraduates. Therefore, your feedback on any aspect of the course is welcome at all times throughout your stay in the Department. Any comments will be brought up at the next JCCG meeting, so feel free to contact any of the representatives. (A full list is given in Appendix VII of this booklet.)

To provide a forum at which (i) your views can be sought and (ii) you can meet and network with research students from other groups, once a week, on Wednesdays at 11.00 am in the Holder Café, and at the same time in the Hirsch Building common area (next to the NanoSIMS) for those at Begbroke, the JCCG organise free coffee and biscuits for all research students.

#### 19. CONFERENCES AND STUDY TRAVEL

# (It is <u>essential</u> that you refer also to the paragraph on Travel and External Working in <u>Section 2</u> of this Handbook.)

During the course of your postgraduate studies, it is likely that you will have to travel to a conference or to visit other laboratories as part of a collaborative research programme. The Department is keen that every student should have the opportunity to attend at least one conference in their field of study during the course of their project. We do not expect students to cover the cost of such travel, this being funded instead from grants or other sources. However, this means it is essential that students organise themselves to secure sources of funding well in advance of the date of registration and travel, and before any expenditure has been incurred. This of course does not apply to routine travel, such as visits to an industrial sponsor, the costs of which should be included within the grant allocation for the project and are claimed by means of a Departmental travel claim form or direct from the sponsor. The form can be downloaded via the 'Materials: PGR Progression' site. For pre-authorised expenditure that you pay from personal funds and will then claim reimbursement it is essential that you obtain paper receipts (credit card slips are not accepted by the University Finance Office) and follow exactly the latest procedure required by the University Finance Office.

If you are considering travelling to attend a conference or for a study visit, first consult your supervisor and consider possible sources of funding **several months before you plan to travel**. There are a number of sources to which you can apply for travel funds, including your College, the Institute of Materials (all students are encouraged to join), the Institute of Mechanical Engineers (if you are a member) and the Institute of Physics (if you are a member). Some sources are available for travel to given locations, such as the Sasakawa Fund for study visits to Japan. Your supervisor will be able to advise you on suitable sources of funding.

There are sources of funding, both internal and external (such as the Worshipful Company of Armourers and Brasiers and the Worshipful Company of Founders), which are available to graduate students to fund conference and study travel. In 2021/22 grants from the Department will typically be to the value of up to £1,200, and would normally be awarded only once during the period of a programme of study. However, it is also possible to apply more frequently for smaller amounts of money (say, £200) to 'pump-prime' applications to other sources who would be paying the majority of the cost (such as the Sasakawa Fund). Note that students with earmarked research funding (such as a CASE studentship, project studentship or a government or industrial research grant) are expected to use these sources to cover the cost of travel and conferences and are NOT eligible to apply to the Department.

Applications for Departmental conference/travel funds should be made at least **ONE MONTH in advance**, using the specific Department form, a specimen of which is attached as an appendix to this Handbook. The form can be downloaded via the 'Materials: PGR Progression' site. Students will need to obtain the support of their supervisor for the application, and also indicate the other sources of funding they have approached to cover at least some of the cost of travel.

If they are to be offered in that year, in a given year, usually in Hilary Term, the Head of Department will circulate information on how to apply for one of four annual 'Founders Graduate Travel Scholarships', each worth £500.

Information on support for members of the Institute of Materials can be found at <a href="http://www.iom3.org/scholarships-grants-and-bursaries">http://www.iom3.org/scholarships-grants-and-bursaries</a>.

Information on support for members of the Institute of Mechanical Engineers can be found at <a href="http://www.imeche.org/membership-registration/become-a-member/associate-member">http://www.imeche.org/membership-registration/become-a-member/associate-member</a>.

Requests for support from the Armourers and Brasiers' company should be made to The Clerk, Armourers & Brasiers' Company, Armourers Hall, 81 Coleman Street, London, EC2R 5BJ. A number of awards are available for postgraduate students in any subject who are travelling to countries within the Santander network for academic-related activities (namely Argentina, Brazil, Chile, Colombia, Mexico, Peru, Puerto Rico, Uruguay, Venezuela, Spain and Portugal). This includes short visits to Santander universities to carry out collaborative work, to conduct fieldwork, to attend a conference, or to engage in other study projects. The maximum value of each award is £1,250. Awards will be made subject to the availability of funds. The application form together with deadlines will be available to download from <a href="http://www.ox.ac.uk/students/fees-funding/international/scholarships-exchanges/santander">http://www.ox.ac.uk/students/fees-funding/international/scholarships-exchanges/santander</a>. Also available at <a href="http://www.ox.ac.uk/students/fees-funding/international/scholarships-exchanges/santander">http://www.ox.ac.uk/students/fees-funding/international/scholarships-exchanges/santander</a>. Also available at <a href="http://www.ox.ac.uk/students/fees-funding/international">http://www.ox.ac.uk/students/fees-funding/international/scholarships-exchanges/santander</a>. Also available at <a href="http://www.ox.ac.uk/students/fees-funding/international">http://www.ox.ac.uk/students/fees-funding/international/scholarships-exchanges/santander</a>. Also available at <a href="http://www.ox.ac.uk/students/fees-funding/international">http://www.ox.ac.uk/students/fees-funding/international</a> is information for all nationalities to study, work and travel abroad.

You might wish to consider attending the "Junior Euromat" conference at some point during your DPhil (<u>https://www.fems.org/event/fems-junior-euromat-2020</u>).

You may also be interested in taking a look at the online <u>research funding opportunities database</u> where you will find information about <u>https://www.researchprofessional.com/0/rr/home</u>. Much of the information on this site is aimed at post-docs and academics, but some funding for research students is covered too.

Finally, in addition to all of the funding described above, any EPSRC-sponsored students who attended the first-year Presentation Skills Workshop and/or Poster Skills Workshop may in their second year apply to the Director of Graduate Studies for a grant of up to £500 from the 'Roberts Skills Training Fund', in order to attend a conference at which they are presenting their work as an oral or poster contribution. Applications should be made using the abovementioned Department form.

#### 20. CONTINUATION BURSARIES, HARDSHIP FUNDS, AND CONTINUATION CHARGES

#### (a) Materials Continuation Bursaries

As indicated in <u>Section 2</u> of this handbook, the normal period for completion of a DPhil is 3 or 3½ years, and one of the purposes of the regular project management reviews is to assist in achieving the relevant target. However it sometimes happens that unavoidable or unpredictable delays or problems prevent completion in the allotted time. For this reason the Department has provision to fund a small number of continuation bursaries to assist with living costs during a few months over-run. Note however that the award of such a bursary is an exception: the funds for any one year are sufficient to help only a small fraction of the total number of DPhil students. **Normally, a student** who has been funded for a 3½-year or 4-year project or a 4-year CDT programme will not be eligible for consideration for a continuation bursary (an exception to this rule is where substantial and extended delays, beyond those delays which are a common feature of any research project, have occurred that were outside the control of student and supervisor and could not be mitigated by careful project management).

If you think that you are likely to over-run you should discuss this with your supervisor, and if necessary the Director of Graduate Studies, **before** your three year period has ended. The procedure for application for a continuation bursary is as follows:

- (i) The student/supervisor to make best efforts to source matching funds (normal continuation bursaries will be awarded only in exceptional circumstances if matching funds are not offered).
- (ii) A **realistic** timetable for completion, including thesis writing, must be agreed with your supervisor and submitted as a Gantt chart with your application.
- (iii) A formal written letter of application should then be made to the Director of Graduate Studies, emailed as an attachment to the Materials Graduate Studies Office, to include an outline of the reasons your project is over-running, its planned timescale, your agreed completion plan and evidence of the matching funding.
- (iv) Your supervisor should e-mail to the Materials Graduate Studies Office a brief statement for the attention of the DGS to support your application and, <u>in particular, to confirm explicitly that</u> <u>your completion plan is realistic</u>. This e-mail should also identify the grant code for any matching funds.

Please note that normally the DGS and Materials GS Office will take no action at all on receipt of an incomplete application for a continuation bursary, so please ensure you address ALL the requirements outlined above and CHECK with your supervisor that he or she has sent the supporting e-mail.

The rate for a continuation bursary is pro-rata to approximately the lower value of the guidance on living costs range published annually on the University of Oxford Graduate Admissions website, for 2021/22 the figure we use is £14,100 pa and the Department will normally fund up to 3 months (£3,525). Thus with the matching funding a period of **up to** 6 months funded continuation is possible. Regardless of this funding cap your completion plan is expected to be a genuine assessment of the time required for completion - which rarely will be exactly six months.

## (b) Hardship Funds

In total there is only a relatively small amount of money available within the Collegiate University to help with hardship. Your College Office is a key source of advice on some of the sources of hardship funds. Enquiries can also be made to student.funding@admin.ox.ac.uk. The website below outlines several sources for hardship funds.

Hardship Funding (<u>http://www.ox.ac.uk/students/fees-funding/assistance/hardship</u>). Details are given for several sources of funding. For some sources applications can be made at any time during the academic year, for others there are specific deadlines (University hardship Fund – very early in each term; Vice Chancellors Fund – annually, usually early in Hilary term). You should discuss applications with your College in the first instance.

## (c) Continuation Charges

The period of standard fee liability is six terms for the MSc (by research), nine terms for a standard DPhil programme and twelve terms for an EPSRC CDT 4-year DPhil programme.

If you have not submitted your thesis within the period of standard fee liability then, subject to the exceptions described in the next two paragraphs, you **will** be liable for both college and University Continuation Charges for each subsequent term.

For MPLS research students the University Continuation Charge for the first three terms after the period of standard fee liability is covered by the Department.

For Materials DPhil students supported by a 3- or 3½-year EPSRC-funded studentship the Department will cover your **college** continuation charge for the first two terms after the period of standard fee liability.

Continuation charge rates can be found at <u>http://www.ox.ac.uk/students/fees-</u> <u>funding/fees/liability/graduate-continuation-charge</u>.

## 21. PLAGIARISM, REFERENCING AND COPYRIGHT (Including a note from the University's Education Committee)

This information can be applied to all aspects of assessment during the course. You are required to make yourself familiar with, and ensure you understand what is plagiarism during your first year and before you submit your Literature Review.

In their **Disciplinary Regulations for Candidates in Examinations**, the University's Proctors and Assessor draw attention to three extremely important disciplinary regulations for all students:

"3. No candidate shall cheat or act dishonestly, or attempt to do so, in any way, whether before, during or after an examination, so as to obtain or seek to obtain an unfair advantage in an examination.

4. No candidate shall plagiarise by presenting someone else's work as their own, or by incorporating other people's work or ideas into their own work without full acknowledgement. Examples of this practice include: verbatim quotation, cutting and pasting from the internet, and paraphrasing without clear acknowledgement; collusion; misleading citation; failure to acknowledge assistance; and unacknowledged use of material written by professional agencies or other persons.

5. Unless specifically permitted by the Special Subject Regulations for the examination concerned, no candidate shall commit autoplagiarism ie submit to the examiners any work which he or she has previously submitted partially or in full for examination at this University or elsewhere. Where earlier work by the candidate is citable, he or she shall reference it clearly."

All students must carefully read regulations 3, 4 and 5 (see above) in the <u>Proctors' Disciplinary</u> <u>Regulations for University Examinations</u>, which make clear that:

- you must always indicate to the examiners when you have drawn on the work of others, using quotation marks and references in accordance with the conventions of your subject area
- other people's original ideas and methods should be clearly distinguished from your own
- the use of other people's words, illustrations, diagrams etc should be clearly indicated regardless of whether they are copied exactly, paraphrased or adapted
- material you have previously submitted for examination, at this University or elsewhere, cannot be re-used unless specifically permitted in the special Subject Regulations.

Failure to acknowledge your sources by clear citation and referencing constitutes plagiarism. The University's description of plagiarism should be read carefully. That description includes a link to the University's online course about understanding what plagiarism is, and how to avoid it. You are strongly advised to complete the course.

## http://www.ox.ac.uk/students/academic/guidance/skills/plagiarism

The University reserves the right to use software applications to screen any individual's submitted work for matches either to published sources or to other submitted work. In some examinations, all candidates are asked to submit electronic copies of essays, dissertations etc for screening by 'Turnitin'. Any matches might indicate either plagiarism or collusion. Although you are encouraged to use electronic resources in academic work, remember that the plagiarism regulations apply to online material and other digital material just as much as they do to printed material.

...Where plagiarism is proven, it will be dealt with severely: in the most extreme cases, this can result in the student's career at Oxford being ended by expulsion from the University." (Section 7 of the University <u>Student Handbook</u>).

Guidance from the University's Education Committee defines plagiarism as:

'Plagiarism is the copying or paraphrasing of other people's work or ideas into your own work without full acknowledgement. All published and unpublished material, whether in manuscript, printed or electronic form, is covered under this definition. Collusion is another form of plagiarism involving the unauthorised collaboration of students (or others) in a piece of work.

Further guidance from the University's Education Committee can be found at <a href="http://www.ox.ac.uk/students/academic/guidance/skills/plagiarism">http://www.ox.ac.uk/students/academic/guidance/skills/plagiarism</a> and within its associated resources menu.

An on-line training course on how to avoid plagiarism is available at <a href="https://weblearn.ox.ac.uk/portal/site/:skills:generic:avoidplag">https://weblearn.ox.ac.uk/portal/site/:skills:generic:avoidplag</a>. This course is expected to migrate to a different site during 2021/22.

#### Some Brief Guidance on Avoiding Plagiarism and Related Topics

## Text

Take care when referring to the work of others. Not only are published words and computer code subject to plagiarism, but ideas and opinions can be plagiarised too. You should not allow the opinions and conclusions of others to appear to be your own or be confused with your own criticism. If a body of text, for example a sentence or paragraph, is recognisably derived from prior work, albeit with some changes made by you, you MUST reference the original work and may also need to use quotation marks for some of the text.

An extract from Stone IC & Tsakiropoulos P, Materials Science and Engineering A, Vol.189 (1994) 285-290:

"The peak-aging time of Al-4wt.%Cu, aged at 463 K, was not altered by the addition of 20 wt.%SiCp. The particle size of the reinforcement and the matrix to reinforcement particlesize ratio did not affect the peak-aging time. This implies that, on a bulk scale, aging is not affected by the spatial distribution of the reinforcement, although it is likely to be affected locally."

Here is one example of the use of this extract:

Stone and Tsakiropoulos studied the aging of metal matrix composites based on Al-4wt%Cu containing 20wt% SiC particles [Stone & Tsakiropoulos, 1994]. The peak-aging time of Al-4wt.%Cu, aged at 463 K, was not altered by the addition of 20 wt.%SiCp. The particle size of the reinforcement and the matrix to reinforcement particle-size ratio did not affect the peak-aging time. This implies that, on a bulk scale, aging is not affected by the spatial distribution of the reinforcement, although it is likely to be affected locally.

The first sentence is fine and is properly referenced. However the rest is plagiarised because (i) it is **directly copied** from the original without being identified as a quote and (ii) the author has not attributed the opinion in the fourth sentence to the original authors.

A second example:

Stone and Tsakiropoulos studied the aging of metal matrix composites based on Al-4wt%Cu containing 20wt% SiC particles [Stone & Tsakiropoulos, 1994]. They showed that the addition of the reinforcing particles had no effect on the time for peak aging of the matrix at 463K. The implication of this is that whilst aging is likely to be affected locally by the dispersion of the particles, it is not affected macroscopically by the spatial distribution of the reinforcement.

This example is an improvement because the second sentence is now attributed to the original authors. The opinion in the final sentence is still plagiarised. This final sentence could be improved by

The authors concluded that the implication of this is that whilst aging is likely to be affected locally by the dispersion of the particles, it is not affected macroscopically by the spatial distribution of the reinforcement. This is a sensible conclusion.

because whilst the new author agrees with the original opinion/conclusion they have not passed it off as their own. A belt and braces approach might be:

The authors concluded, "This implies that, on a bulk scale, aging is not affected by the spatial distribution of the reinforcement, although it is likely to be affected locally" [Stone & Tsakiropoulos, 1994]. This is a sensible conclusion.

Quite often you will be not simply referring to a single piece of published work, but comparing & contrasting several reports of relevance to a particular point in your own document and then offering your own considered opinion on this previous work and/or comparing it with your own data and conclusions. The principles illustrated above in respect of Stone & Tsakiropoulos of course still apply to this more complicated case and in addition it is necessary to separately identify each contribution, for example:

It has been reported by two groups that the time for peak aging of the matrix at aging temperatures in the range 460-475K is not affected by the addition of reinforcing particles [Stone & Tsakiropoulos (1994), Bloggs & Jones (1997)]. Although a more recent study did observe an apparent influence of the reinforcing particles [Smith (2006)], in the present work we have been unable to reproduce this effect, our data being fully consistent with the original work of Stone & Tsakiropoulos. It seems likely that the results reported by Smith were an artefact of the analytical method that they adopted, such artefacts having been observed by others in related studies of a series of Al-Cu-Mg alloys [Jones et al (1999)].

### **Figures and Computer Code**

Figures too are a potential source of plagiarism. Likewise computer code. If you use somebody else's computer code, diagram, graph, photograph or other artwork without acknowledging the original source then you are guilty of plagiarism (and possibly also of breach of copyright). If you use a figure from elsewhere then you should cite the original reference in the figure caption and in the associated body text. Even if you redraw a figure then you should still refer to the original source, e.g. [redrawn from Jones et al, 2006]. If you use a collection of data from other works to create a completely new figure (eg a graph to show a trend arising from a collection of data from several sources) then you must acknowledge the original data sources.

#### Copyright

If you wish to use artwork (this includes drawings, images, graphs and other figures etc) in a publication that is "communicated to the public" (including your thesis or material placed on an 'ox-only' website) you must seek permission from the copyright holder(s). A hard-copy thesis that is for examination purposes only is exempt from this rule but, since (i) such theses have to be deposited with the Bodleian and the British Library, who make them available to readers, and in particular (ii) you are required to deposit an e-thesis with the Oxford University Research Archive, you will not normally be able to take advantage of this exemption. For articles in journals the copyright holder is usually the publisher, although it is professional courtesy to ask the lead author too. Seeking permission from most publishers is a fairly painless task these days, usually achieved by completing a simple web-form. See for example <a href="http://www.sherpa.ac.uk/romeo/">http://www.sherpa.ac.uk/romeo/</a> and <a href="https://www.elsevier.com/about/policies/copyright">https://www.elsevier.com/about/policies/copyright</a>. You will then receive a certificate of permission from the publisher. Keep these permissions in a safe place – you will need to provide copies when you make the mandatory deposit of your e-thesis with the Oxford University Research Archive. Where web-based application for permission to use material in a thesis is not available you should e-

#### Why is referencing important?

Quite apart from the need to avoid plagiarism because of the danger that this may invalidate a piece of assessed work and/or lead to some other penalty, there are a number of other good reasons for the internationally accepted practice of using references in a factual document:

mail the publisher, or other copyright holder, directly to seek such permission.

- (i) It is a simple professional courtesy to a fellow scientist who has laboured long & hard to generate the work to which you are referring.
- (ii) It enables the reader to verify the statements that you are making, to make his/her own judgements on both the conclusions that you report from the referenced work and the

judgements that you make on this work, and of course to learn more about the detail of the original work.

- (iii) Your work is strengthened by its reference to respected authorities in a given field; as scientists we all build our work 'on the shoulders of giants'.
- (iv) It enables the reader to identify very clearly what are your own original contributions to the matters discussed. Since these contributions will undoubtedly be erudite and valuable, you will want the world to know that they are yours and to be able to give you credit for them when your work is referenced in the future!

## Further information on referencing can be found at <a href="https://www.ox.ac.uk/students/academic/guidance/skills/referencing">https://www.ox.ac.uk/students/academic/guidance/skills/referencing</a>

The two main referencing systems are Harvard (author name, year of publication) and Vancouver (numbered sequentially in order of use). Whichever system you decide to use, good practice dictates that references should include (depending on publication type): authors, title of book or article, title of journal or other work, name of conference, place of publication, date of publication, publisher and page numbers. The conventions for citing internet resources include URL and date accessed. Your supervisor will be able to provide further guidance. Where material available on the internet is taken from prior published work you must always reference the original source(s) and, if appropriate, the internet resource too. See also <a href="https://odoc.princeton.edu/curriculum/academic-integrity">https://odoc.princeton.edu/curriculum/academic-integrity</a>.

## 22. UNIVERSITY POLICY ON INTELLECTUAL PROPERTY RIGHTS

The University of Oxford has in place arrangements governing the ownership and exploitation of intellectual property generated by students and researchers in the course of, or incidental to, their studies. These arrangements are set out in the University's Statutes 2002 under which the University claims ownership of certain forms of intellectual property which students may create. The main provisions in the Statutes are as follows.

Intellectual property (IP) is the result of creativity and innovation, to which legal rights (intellectual property rights) may be associated, such as patents, copyright, trademarks, design and database rights. Oxford was one of the first UK universities to develop an intellectual property policy to govern the ownership and exploitation of IP generated by students and employees in the course of their employment or studies.

Oxford's IP policy is governed by the University's Statutes and Regulations. For ease of reference, an extract from the Statutes and Regulations is contained below. The Statutes and Regulations, as they relate to the University's IP policy, together with regulations for the administration of the IP policy, may be found in full on the University website (<u>http://www.admin.ox.ac.uk/statutes/regulations/182-052.shtml</u> and <u>http://www.admin.ox.ac.uk/statutes/790-121.shtml</u>).

Essential ingredients of the University's approach are a generous revenue-sharing policy, which brings significant personal benefits to researchers (employees or students), and a hugely successful and well-resourced technology transfer operation, Oxford University Innovation (OUI), which has earned national and international recognition. OUI was established specifically to help researchers in the University commercialise their research. OUI files, on average, one new patent a week, and has helped create more than 75 spin-out companies and many more licence deals. OUI works closely with Research Services, a part of the University's central administration. Research Services' remit includes the management of research grants and contracts to the University, and the assignment of University intellectual property to Isis for exploitation.

## University intellectual property policy

(Extract from Statute XVI – Part B)

5. (1) The University claims ownership of all intellectual property specified in section 6 of this statute which is devised, made, or created:

- (a) by persons employed by the University in the course of their employment;
- (b) by student members in the course of or incidentally to their studies;

(c) by other persons engaged in study or research in the University who, as a condition of their being granted access to the University's premises or facilities, have agreed in writing that this Part shall apply to them; and

(d) by persons engaged by the University under contracts for services during the course of or incidentally to that engagement.

(2) The University's rights under sub-section (1) above in relation to any particular piece of intellectual property may be waived or modified by agreement in writing with the person concerned.

6. The intellectual property of which ownership is claimed under section 5 (1) of this statute comprises:

(1) works generated by computer hardware or software owned or operated by the University;

(2) works created with the aid of university facilities including (by way of example only) films, videos, photographs, multimedia works, typographic arrangements, and field and laboratory notebooks;

- (3) patentable and non-patentable inventions;
- (4) registered and unregistered designs, plant varieties, and topographies;
- (5) university-commissioned works not within (1), (2), (3), or (4);
- (6) databases, computer software, firmware, courseware, and related material not within (1),

(2), (3), (4), or (5), but only if they may reasonably be considered to possess commercial potential; and

(7) know-how and information associated with the above.

7. The University will not assert any claim to the ownership of copyright in:

(1) artistic works not listed in sub-section (2) of section 6 of this statute, books, articles, plays, lyrics, scores, or lectures, apart from those specifically commissioned by the University;

(2) audio or visual aids to the giving of lectures;

(3) student theses, exercises and answers to tests and examinations save to the extent that they contain intellectual property claimed by the University under subsection (6) of section 6 of this statute; or

(4) computer-related works other than those specified in section 6 of this statute.

8. For the purpose of sections 6 and 7 of this statute, 'commissioned works' are works which the University has specifically employed or requested the person concerned to produce, whether in return for special payment or not, but, save as may be separately agreed between the University Press and the person concerned, works commissioned by the University Press in the course of its publishing business shall not be regarded as 'works commissioned by the University'.

9. Council may make regulations:

(1) defining the classes of persons or naming individuals to whom section 5 (1) (c) of this statute shall apply;

(2) requiring student members and such other persons as may be specified in regulations to sign any documents necessary in order to give effect to the claim made by the University in this Part and to waive any rights in respect of the subject-matter of the claim which may be conferred on them by Chapter IV of Part 1 of the Copyright, Designs and Patents Act 1988; and

(3) generally for the purposes of this Part.

10. This Part shall apply to all intellectual property devised, made, or created on or after 1 October 2000 and is subject to the provisions of the Patents Act 1977.

## 23. COMPLAINTS AND APPEALS

Complaints and academic appeals within the Department of Materials:

1. The University, the Mathematical, Physical and Life Sciences Division and the Materials Department all hope that provision made for students at all stages of their programme of study will make the need for complaints (about that provision) or appeals (against the outcomes of any form of assessment) infrequent.

2. However, all those concerned believe that it is important for students to be clear about how to raise a concern or make a complaint, and how to appeal against the outcome of assessment. The following guidance attempts to provide such information.

3. Nothing in this guidance precludes an informal discussion with the person immediately responsible for the issue that you wish to complain about (and who may not be one of the individuals identified below). This is often the simplest way to achieve a satisfactory resolution.

Many sources of advice are available within colleges, within faculties/departments and from bodies like OUSU or the Counselling Service, which have extensive experience in advising students.
 You may wish to take advice from one of these sources before pursuing your complaint.

5. General areas of concern about provision affecting students as a whole should, of course, continue to be raised through Joint Consultative Committees or via student representation on the department's committees.

## Complaints

#### 6. If your concern or complaint relates to teaching or other provision made by the

**faculty/department**, then you should raise it with the Director of Graduate Studies (Dr Adrian Taylor). Within the department the officer concerned will attempt to resolve your concern/complaint informally.

7. If you are dissatisfied with the outcome, then you may take your concern further by making a formal complaint to the University Proctors. A complaint may cover aspects of teaching and learning (e.g. teaching facilities, supervision arrangements, etc.), and non-academic issues (e.g. support services, library services, university accommodation, university clubs and societies, etc.). A complaint to the Proctors should be made only if attempts at informal resolution have been unsuccessful. The procedures adopted by the Proctors for the consideration of complaints and appeals are described in the <u>University Student Handbook</u> and the relevant Council regulations [http://www.admin.ox.ac.uk/statutes/regulations/].

8. If your concern or complaint relates to teaching or other provision **made by your college**, then you should raise it either with your tutor or with one of the college officers, Senior Tutor, Tutor for Graduates (as appropriate). Your college will also be able to explain how to take your complaint further if you are dissatisfied with the outcome of its consideration.

#### **Academic appeals**

9. An appeal is defined as a formal questioning of a decision on an academic matter made by the responsible academic body.

10. For undergraduate or taught graduate courses, a concern which might lead to an appeal should be raised with your college authorities and the individual responsible for overseeing your work. It **must not be raised directly with examiners or assessors.** If it is not possible to clear up your concern in this way, you may put your concern in writing and submit it to the Proctors via the Senior Tutor of your college. As noted above, the procedures adopted by the Proctors in relation to complaints and appeals are on the web [http://www.admin.ox.ac.uk/statutes/regulations/].

11. For the examination of research degrees, or in relation to transfer or confirmation of status, your concern should be raised initially with the Director of Graduate Studies. Where a concern is not satisfactorily settled by that means, then you, your supervisor, or your college authority may put your appeal directly to the Proctors.

12. Please remember in connection with all the cases in paragraphs 5 - 7 that:

- a) the Proctors are not empowered to challenge the academic judgement of examiners or academic bodies.
- b) The Proctors can consider whether the procedures for reaching an academic decision were properly followed; i.e. whether there was a significant procedural administrative error; whether there is evidence of bias or inadequate assessment; whether the examiners failed to take into account special factors affecting a candidate's performance.
- c) On no account should you contact your examiners or assessors directly.

13. The Proctors will indicate what further action you can take if you are dissatisfied with the outcome of a complaint or appeal considered by them.

(see <u>http://www.admin.ox.ac.uk/statutes/regulations/247-062.shtml</u> and section 7 of "Research Degrees" at <u>http://www.admin.ox.ac.uk/edc/policiesandguidance/</u>.

## 24. DISCIPLINARY PROCEDURE: MISUSE OF ICT FACILITIES BY RESEARCH STUDENTS (Further details provided during the IT briefing)

**1st Offence:** Referral to the DGS following investigation by the Departmental IT Manager. If the offence is confirmed a written warning will be issued by the DGS. This will be placed on file and copied to the Supervisor(s) and the Dean/Senior Tutor for Graduate Students at the offender's college (it will include a reminder of the consequences of a 2nd offence). Also the Department's IT Manager will present to the offender a detailed verbal reminder of the University ICTC Regulations. In addition the Department reserves the right to (i) require surrender to the Department's IT staff of the offending PC (for the removal of prohibited software), (ii) to require the student to pay any administration charge imposed by IT Services in relation to the offence, and (iii) in the case of infringements judged to be more serious to report the matter for action by the Proctors and to withdraw access to ICT facilities pending a Proctorial investigation.

**2nd Offence:** Referral to the Proctors. Pending an investigation, access to ICT facilities may be withdrawn or made subject to such conditions as the Proctors shall think proper in the circumstances. In addition the Department reserves the right to require the student to pay any administration charge imposed by IT Services in relation to the offence. The Supervisor(s) and the Dean/Senior Tutor for Graduate Students at the offender's college will be informed of the referral to the Proctors.

## 25. GENERAL

## 25.1 DATES OF TERM

A list of term dates for 2021-22 can be found on the website and also the provisional dates for 2023-2025. These can be found at <u>http://www.ox.ac.uk/about/facts-and-figures/dates-of-term</u>.

## 25.2 STUDENT HOLIDAYS AND WORKING HOURS

The Department of Materials policy is as follows: You should agree any days off in the working week (Monday-Friday) with your supervisor. As a minimum you are entitled to take six weeks leave per year plus bank holidays (8 days); the six weeks to include periods of fixed closure for the Department (at Christmas and Easter, 6 days in total). You must also inform your College about holiday dates. Keep a record of the days you have taken as holiday.

Standard DPhil working hours, defined by the MPLS Division for all of its research students, are an average of **40 hours of focussed, quality work time per week** (this <u>excludes</u> extended coffee breaks and non-work internet surfing, for example).

Should you voluntarily work for longer hours than this you are strongly advised normally not to exceed the UK Government's Working Hours Directive of a maximum average working week of no more than 48 hours, when averaged over a 17 week period (<u>https://www.gov.uk/maximum-weekly-working-hours</u>).

See also the MPLS website under "Your rights and responsibilities" which can be found at <u>http://www.mpls.ox.ac.uk/study/currentpostgraduates/information-for-postgraduate-research-students/your-rights-and-responsibilities</u>.

## 25.3 PAID WORK (including Consultancy) AND AD HOC INTERNSHIPS

You should not normally undertake more than about 120 hours of paid work, including teaching and outreach, each year while you are studying full time for a research degree.

In principle this paid work could include consultancy. If you wish to engage in consultancy then you should seek your supervisor's permission. Clearly such consultancy must not conflict with the topic(s) of your DPhil or MSc(R) project, and must be acceptable to any sponsor of your full-time DPhil project. You are strongly advised to conduct such consultancy under the auspices, and with the support, of Oxford University Innovation Ltd (<u>http://innovation.ox.ac.uk</u>).

On occasion, other than internships which are integral part of your DPhil programme (for example EPSRC DTP-CASE, iCASE and NPIF studentships), valuable opportunities may arise to take up an *ad hoc* internship (for example with an industrial company, business organisation or UK Government body).

If you are considering such an internship you will need the permission of your Responsible Supervisor and must consult with the DGS and your College at an early stage and <u>before</u> committing to the internship. For a single internship of up to 3 months that is clearly beneficial to your career development or your DPhil project, the Department normally will be supportive provided you have transferred status to DPhil and are progressing well with your DPhil project.

Should you choose to take up an *ad hoc* internship it is wholly your responsibility to satisfy yourself that adequate Health & Safety policies & procedures are in place at your host organisation. You are advised too to ensure that all appropriate insurances are in place including those to cover both liability **of** the intern and liability **to** the intern (for example in the case of a work-related injury). If you are a 'visa national' you should also check any implications taking up an internship might have for your visa.

Depending on the nature of the *ad hoc* internship it may be appropriate to suspend studies (and suspend any stipend from a studentship) for the period of the internship. The DGS will advise you. Normally internships must be arranged to commence on or near to the start of an Oxford Term or the start of the 'Long Vacation'.

You will need to check the implications of suspending status (i) with your funding body (or if an EPSRC-funded student with the DGS), (ii) on your visa status, and (iii) on your liability to pay Council Tax.

Note: you must inform your College about the internship and the dates when you will be away from Oxford. It may be that you will be either asked to leave your College accommodation during the internship or to pay for both College accommodation as well as accommodation elsewhere whilst undertaking the internship.

## 25.4 NATIONAL INSURANCE (NI)

Home students should be aware that they can, if they wish, pay contributions as non-employed persons (normally your maintenance grant is counted as a training award and is not regarded as income for UK income tax purposes; a small number of exceptions include certain European Commission-funded studentships, where you are paid a salary). Please consult your local office of the Department for Work and Pensions about your position to determine the impact of non-payment

of contributions on any future claims for benefit including the basic State Pension. Students may become liable for NI contributions in connection with any paid work, including teaching, they undertake.

## 25.5 COMPUTING FACILITIES

It is the policy of the MPLS Division that all departments will ensure PGR students have access to adequate personal computing resources to enable them to work effectively on their projects. The computing facilities provided will necessarily vary from department to department and group to group, dictated by specific needs for that group and the tools required.

You should discuss what computing facilities are available to you with your supervisor(s). Your supervisor is permitted to allocate up to £800 of the 'baseline research costs' allowance<sup>a</sup> they receive for each research student for purchase of a computer (a larger amount may be spent for this purpose if you are engaged on a theory project since your consumables needs will be lower). Normally when you have completed your research degree the computer remains the property of the Department. If you are unhappy with your computing provision you should let your supervisors know and if this issue is not resolved satisfactorily you could either speak to members of the JCCG to compare your provision with other students and/or discuss the issue with the Director of Graduate Studies. You should also discuss with your supervisors the possibility of using research money to buy appropriate software, such as EndNote, BUT ONLY IF THIS IS NOT AVAILABLE FROM OTHER SOURCES – in the first instance you should take a look at the Materials website at

https://www.materials.ox.ac.uk/local/it/software.html and then discuss the issue with Paul Warren from IT Support.

<sup>a</sup> This allowance is currently £3,000 over the 3 to 4 year period of a DPhil. This sum does not include the approximately £1,200 conference allowance. The allowance is funded from one of three sources depending on your main funding source, namely the EPSRC DTP, the Department, or part of a (often larger) research costs allowance from another sponsor.

## 25.6 EXTENSION OF VISAS

All new overseas DPhil students will have a visa which is valid for 4.5 years. If your research project is delayed or you have ill health and subsequently your project overruns, you may require a visa extension. Students should email <u>graduate.studies@materials.ox.ac.uk</u>, at least 4 weeks before their original visa expires. Make sure that you request your CAS number in good time before you need to make your visa application. This is because we need to contact both your supervisor and College to seek relevant information for the extension. It may also take Student Immigration several days to issue the CAS. The CAS number will be e-mailed direct to you when it is ready.

Please be aware that renewal applications can be made no more than 3 months in advance from your current visa expiry date.

NOTE: information for the CAS application is taken from the student database (e-Vision system). If you have renewed your passport it is vital to update your passport information. If you have difficulties then let <u>graduate.studies@materials.ox.ac.uk</u> know the new passport number and the new expiry date so that the student database can be updated BEFORE a CAS number is requested. If you have failed to update your address details this could delay the process whilst a new CAS request is prepared. Please ensure that you maintain the correct address and other details on the Student Self-Service system and we should like to point out that this is a requirement for overseas students during your stay in the UK under the new Immigration Rules.

## 25.7 STAYING IN THE UK TO WORK AFTER YOUR RESEARCH DEGREE

If you are interested in staying in the UK to work after your course you will need to apply for the right type of visa permission to do so. The <u>After your Studies</u> webpage gives an overview of some of the options available. One of these options is the 'Graduate Route', which is outlined below.

#### **Graduate Route**

The Graduate Route is an opportunity to apply for a visa to remain in the UK to work or look for work for two years if you have completed a Masters degree, or three years if you have completed a DPhil. You do not need a job offer and you do not need to be sponsored by the University or an employer. You will need to have successfully completed your qualification before you apply i.e. received your official results/leave to supplicate. The Home Office also requires the University to report online when all visa holders have successfully completed their studies, in case you wish to apply for this visa, and the Student Immigration team will run a report every Friday throughout the year for this purpose. You will receive an email on the Friday of the week you have received your results/leave to supplicate, to confirm this has been reported to the Home Office. You should wait until you have received this email confirmation before you apply for the Graduate Route. Remember that you can only apply from within the UK and you need to still have a valid Tier 4 or Student visa.

#### 25.8 RETENTION OF AND ACCESS TO DATA

Please note that your paper and/or digital laboratory notebooks (or equivalent), data and other information gained during your research project, whether in manuscript, typescript, electronic or other form, are the property of your supervisor and should be left with him/her when you complete or withdraw from your degree. You are required to give your supervisor access to files containing any such data which is in electronic format. You may wish to make copies of written data for your own

files. Your supervisor will advise you further on statutory or fuller requirements regarding "Open Access" and "Open Data".

## 25.9 HEALTH, WELLBEING, WELFARE AND DISABILITY (including Parental Leave)

If you become ill during your studentship, whether for one day or for several weeks, please inform your supervisor on the day you go off sick and indicate when you hope to return. If your sickness is serious, you should talk to your supervisor and consider whether it is appropriate to suspend your studies for a term. If you are funded by the EPSRC then we are able to continue your stipend for a limited period of 'sick leave' during each year of your studentship.

Further information on health and welfare can be found in the MPLS Division's on-line Graduate Handbook (see <u>Resources for Staff & Students</u>, <u>Other Facilities & Support</u>, and <u>Mental Health</u> <u>Awareness</u>) and on the Student Gateway website at <u>http://www.ox.ac.uk/students/welfare</u>.

There is also information on the Student Gateway about University policy on student maternity, paternity and adoption leave. The main elements of the policy are that student parents will now be entitled to take an additional period of suspension of study (up to 1 year) for maternity, extended paternity or adoption leave (consonant with the requirements of their funding bodies). This will be granted automatically and is additional to the 6 terms of leave that their board may allow. Fathers may also take a standard two weeks' of paternity leave, which is not treated as a suspension of study. Further information can be found in the Health and Welfare Section of the University's website at <a href="https://www.ox.ac.uk/students/welfare/childcare?wssl=1">https://www.ox.ac.uk/students/welfare/childcare?wssl=1</a>. There is a helpful summary on the MPLS website at <a href="https://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students/your-rights-and-responsibilities">https://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students/your-rights-and-responsibilities.</a>

The University Disability Advisory Service provides information and advice on disability issues and facilitates support for those with, for example, sensory or mobility impairments, long-term health conditions, specific learning difficulties, autistic spectrum conditions or mental health difficulties. Further details may be found at <a href="https://www.ox.ac.uk/students/welfare/disability">https://www.ox.ac.uk/students/welfare/disability</a> .

The Department of Materials Disability Contact is Ms Philippa Moss. If you have any questions concerning a known or suspected, declared or undeclared disability you are encouraged to speak to any of Philippa, the DGS (Adrian), your Supervisor, your Department Advisor, your College Advisor, or directly to the Disability Office. At your request any of these people will be happy to speak with you in strict confidence.

If you have a disability for which it is appropriate that reasonable adjustments are made to the oral components of your examinations (transfer of status interview, confirmation of status interview, and research degree viva voce examination) it is important that you raise this at an early stage with the DGS, who will advise you on the submission of a GSO.19 (Application for Adjustments to Assessment Arrangements) form.

## 25.10 DISPLAY SCREEN EQUIPMENT (DSE)SELF-ASSESSMENT FORM

Linda Curson, the Area Safety Officer, will be in touch with you in your first term (Michaelmas Term) to provide you with details of the on-line DSE Self-Assessment System.

## 26. APPENDICES

On the following pages you will find sample copies of forms that you will need to complete over the course of your research project and various other documents referred to in the main body of the present Materials Graduate Student Handbook:

- (I) 'New Graduate Student' on-line Questionnaire and a Brief Guide to Supervision
- (II) Project management form 1
- (III) Project management form 2
- (IV) Project management form 3
- (V) Project management form 4
- (VI) Application form for conference/travel/skills training funds
- (VII) Summary of Provision, Support & Oversight for a Materials Research Student
- (VIII) MPLSD Code of Practice on the Supervision of Research Students
- (IX) MSc(Research) programme: Overview and two-year diary
- (X) Sample copy of assessment form used for the Transfer of Status Examination
- (XI) Summary of and rationale for the compulsory requirements for Materials Students
- (XII) Concise timelines for each Materials Research Degree Programme
- (XIII) Research Integrity

You can find Word versions of forms (II) to (VI) and pdf versions of the ConciseTimelines (XII) via the Resources page on our '**Materials: PGR Progression**' on-line site, which you access through the CANVAS VLE Portal (<u>www.canvas.ox.ac.uk</u>).

## UNIVERSITY OF OXFORD Department of Materials 26.1 Appendix I: 'New Graduate Student' on-line Questionnaire (2021/22 cohort)

Last Name:	First Name:		Preferred Name:		
(Surname or family name) Oxford Address:		Telephone:			
Oxiora Address.		relephone.			
		Alternative email address:			
Post Code:		(not your University of Oxford email)			
Name of person to contact in an emergency:		Address:			
What is the relationship of this person to you?		Telephone Number:			
A note on disability: If you feel you have a disability, including specific learning difficulties such as dyslexia, we encourage you to disclose this to the University Disability Advisory Service <u>https://www.ox.ac.uk/students/welfare/disability</u> so that appropriate help can be offered. If you have declared or intend to declare a disability please tick here:					
Project Title:					
Responsible (Lead) Oxford Superv	risor <sup>a</sup> :	*Oxford Co-Superv	visor(s) <sup>a</sup> (if applicable):		
*Department Advisor <sup>b</sup>	:	*Oxford Associate Supervisor(s) (if applicable):			
(must <u>not</u> be one of your supervis	sors):				
		(typically a post-doct of post-doc for less t	coral researcher who has held the role han 3 years)		
*External Co-Supervisor (if applic	cable):	*Deputy Superviso	pr <sup>b</sup> :		
Full Address:	1	Department Advisor; one of these other th	supervisor this will be your : if you have co-supervisors it will be nan your Responsible Supervisor)		
Tel:		College Advisor:			
E-mail:		nust not be one of your supervisors; can be your epartment Advisor; your College will appoint this person)			

*In consultation with your Responsible Supervisor please name four members of the Faculty of					
Materials from whom the DGS should select your Lead Assessor <sup>b</sup> for Transfer and Confirmation of					
Status					
The following are <u>not</u> permitted to act as your Assessors:					
Supervisor(s), Deputy Supervisor, Department Advisor or College Advisor					
*By submitting this on-line questionnaire you are confirming the entries in the sections identified with an					
asterisk are exactly as stated to you by your Responsible Supervisor, and that all other entries are accurate.					
Total Period expected to be spent at external premises - name of host organisation and months per					
year (if none, please state nil):					
Professional Body Membership:					
IoM3: IoP: RSC: Other:					
• Please confirm that you have discussed with your supervisor what transferable 'careers skills' training					
and research skills training you should undertake in the first few weeks of Michaelmas Term (Delete as					
necessary) Yes / No					
• Please confirm that you have :					
(i) considered with your supervisor the outline guidance on <u>Research Supervision</u> that is available on the					
Oxford Materials website, and					
(ii) in addition read the <u>Summary of Provision for Materials Research Students</u> document that is					
available on the Oxford Materials website Yes / No					
PLEASE SUBMIT YOUR COMPLETED ON-LINE QUESTIONNAIRE BY THE END OF WEEK 4 MT (5/11/2021)					

 <sup>a</sup> For a Materials PGR student an Oxford supervisor or co-supervisor who is not a Professor or Associate Professor is <u>required</u> to have completed Oxford's online <u>DPhil Supervision at Oxford</u> course.
 <sup>b</sup> An outline of the roles of Deputy Supervisor, Department Advisor and Lead Assessor can be found in sections 2, 3 and 4 respectively of the Materials Graduate Course Handbook

#### Research Supervision: Brief Guide to the roles of research students and supervisors

The primary purpose of a research degree programme in the Mathematical, Physical and Life Sciences Division is to enhance and develop your knowledge in a specific area of research, and to equip you with the research and transferable skills needed to become an independent researcher, or to prepare you to be able to adapt the skills you have learnt to pursue a career in other fields. Our aim is to provide you with an excellent educational experience, which should also be enjoyable, as well as hard work. To achieve this result, both supervisors and students need to be clear about their respective roles and responsibilities. This note provides a brief guide to these roles. If you have any questions about the roles described below, do discuss these with your supervisor or the Director of Graduate Studies in your department.

#### • The role of the Responsible Supervisor (and in some cases the supervisory team) is to:

1. Establish a timetable of regular meetings for detailed discussion of your progress (these meetings should take place at least once every two weeks averaged across the year)

2. Agree a research plan and programme of work, and to establish clear academic expectations and milestones

3. Agree with you a timetable for the submission of any written work and to return your work within a reasonable time

4. Advise you of your department's health and safety regulations. Supervisors are responsible for all aspects of safety under their control, and in particular for the safe conduct of all experiments carried out in the course of their student's research

5. Assess formally your subject-specific and personal and professional skills training needs on a regular basis and ensure you are aware of the opportunities available to meet these needs. A full review of your skills training needs should be carried out each year with your supervisor

6. Write a quarterly report on your progress on the Graduate Supervision Reporting (GSR) system.

7. Ensure you are aware of the formal requirements in relation to transfer and confirmation of status and final submission, and help you to incorporate these into your plan of work

8. Inform the departmental Director of Graduate Studies of any concerns about your progress, attendance or other needs

## • The role of the Student is to:

1. Meet with your supervisor regularly and give due weight to any guidance or corrective action proposed, keeping a written record of your discussions where appropriate

2. Draw up a research plan and timetable of work in consultation with your supervisor, and to keep relevant records of all aspects of your work

3. Reflect and report on your progress at the end of each quarter using the Graduate Supervision Reporting system (GSR)

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4. Take ultimate responsibility for your research programme, including the development of subject-specific, research, personal and professional skills

5. Carry out research with proper regard to good health and safety practices

6. Be aware of the University's guidance on plagiarism and of any ethical or legal issues, health and safety requirements, or intellectual property issues arising from your research

7. Pursue opportunities to engage with the wider academic community at University, national and international level

8. Inform your supervisor immediately if you need to be away from the department, for example if you are ill.

9. Inform the departmental Director of Graduate Studies of any concerns about your progress, attendance or other needs

The Division's more detailed Code of Practice on the Supervision of Graduate Research Students is provided as Appendix (VIII) to your Materials Graduate Student Handbook and also is available at <u>http://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students/supervision</u>.

Also important is Section 5 of the University Education Committee's Policy on Research Degrees (**Responsibilities of the students**) <u>https://academic.admin.ox.ac.uk/policies/research-degrees/section-five</u>.

The Department's statement of provision for a research student is provided as Appendix (VII) to your Materials Graduate Student Handbook.

#### **Project Management Form 1**

#### Materials Graduate Studies - Initial Project Description PM Form

After discussion with your supervisor YOU should complete this form and associated Gantt Chart

Upload both PMF1 and Gantt Chart as a single pdf to 'Materials: PGR Progression' in <u>Weeks 0-</u> <u>1 of your second term – usually Hilary Term</u>

(3.5y 'Fusion-lite' students: as above. 4y Fusion CDT students: Weeks 0-1 of your third term)

Name:

Title of project:

Supervisor(s):

In general terms describe the overall scientific objectives of your project. (Do not put in much detail at this stage.)

For the next 6 months of your project:

What are your major objectives?

What research training will you need (eg. specific experimental equipment, software etc.) and how are you going to obtain that training?

What resources will you need (equipment, materials, technician support etc. ) and are they available?

What transferable 'career skills' training have you agreed with your supervisor it is appropriate for you to undertake (the equivalent of approximately 100 hours per year in years 1-3 is expected)?

Now complete a Gantt Chart for your project.

Your signature:

Your supervisor's signature:

Date:

Date:

#### You may find it helpful to first construct a Work Breakdown Structure

There are also some helpful prompts in the MPLS 'Training Needs Analysis' guidance and the MPLS 'Project Initiation Plan', both available via the '<u>Career Development & Training</u>' pages of the MPLS website.

#### **Project Management Form 2**

#### Materials Graduate Studies - Interim Progress Report PM Form

#### After discussion with your supervisor complete this form and update your Gantt Chart

## Upload both PMF2 and Gantt Chart as a single pdf to 'Materials: PGR Progression' in your tenth month as a Probationer Research Student – usually July

(3.5y 'Fusion-lite' students: as above. Fusion CDT students: Weeks 1-2 of MT of your second year)

Name:

College:

Title of project:

Supervisor(s):

Refer back to your initial Project Description Form. List your objectives for the previous 6 months as described on PMF1 and indicate briefly to what extent have you achieved each of them?

For the next 6 months of your project:

What are your major objectives?

What training will you need (eg. specific experimental equipment, software etc.) and how are you going to obtain that training?

What resources will you need (equipment, materials, technician support etc. ) and are they available?

What transferable 'career skills' training do you plan to undertake in the next 6 months?

Describe the objectives for the remainder of your project. Include brief details of the science involved and any experiments and/or models that you may need to develop.

Your signature:

Your supervisor's signature:

Date:

Date:

**Project Management Form 3** 

3A, 3B, 3C, 3D, 3E (please circle correct number)

#### Materials Graduate Studies - Regular Project Analysis PM Form

#### After discussion with your supervisor complete this form and update your Gantt Chart

All projects [(DPhil (including CDT) and MSc(R)]: Upload a PMF 3A and Gantt Chart to 'Materials: PGR Progression' as a single pdf in <u>weeks 0-1</u> of your 5<sup>th</sup> term – usually Hilary Term of Year 2

(3.5y 'Fusion-lite' students: as above. 4y Fusion CDT students: Weeks 0-1 of TT, year 2)

DPhil projects (including CDT): PMF 3B and Gantt Chart: tenth month of year 2 – usually July (3.5y 'Fusion-lite' students: as above. 4y Fusion CDT students: Weeks 1-2 of MT, year 3)

DPhil projects (including CDT): PMF 3C and Gantt Chart: weeks 0-1 of your 8<sup>th</sup> term- usually HT of year 3 (3.5y 'Fusion-lite' students: as above. 4y Fusion CDT students: Weeks 0-1 of TT, year 3)

3.5- and 4-year projects only:

PMF 3D and Gantt Chart: tenth month of year 3 – usually July(3.5y 'Fusion-lite' students: as above.4y Fusion CDT students: Weeks 1-2 of MT, year 4)

#### 4-year, non-CDT projects only: PMF 3E and Gantt Chart: weeks 0-1 of HT, year 4

Name:

Title of project:

Supervisor:

Describe the progress you have made in the last six months. To what extent have you achieved your objectives?

For the next 6 months of your project:

What are your major objectives?

What resources will you need (training equipment, materials, technician support etc. ) and are they available?

Are you satisfied with the progress of your work? If not can you identify how you may improve matters?

What transferable 'career skills' training do you plan to undertake in the next 6 months? (This Section is optional for PMF 3D and 3E)

Describe the objectives for the remainder of your project. Include brief details of the science involved and any experiments and/or models that you may need to develop.

Finally, complete a revised Gantt Chart covering the period from the start of your project up to thesis submission. Show all necessary tasks with their approximate dates. Indicate those tasks and milestones already completed.

Your signature:

Your supervisor's signature:

Date:

Date:

26.5 Appendix V:

#### **Project Management Form 4**

#### Materials Graduate Studies - Completion Phase PM Form

After discussion with your supervisor complete this form and update your Gantt Chart

Upload PMF4 and Gantt Chart, as a single pdf, to the 'Materials: PGR Progression' on-line site by one of:

3-year projects - Friday of 2<sup>nd</sup> week of your 9<sup>th</sup> term, usually your final Trinity Term;

3.5-year projects (including 'Fusion-lite') - Friday of 1<sup>st</sup> week of your 10<sup>th</sup> term, usually your final Michaelmas Term;

4-year, non-CDT, projects – Friday of 1<sup>st</sup> week of your 12<sup>th</sup> term, that is your final Trinity Term;

Fusion CDT projects – Friday of 1<sup>st</sup> week of your 12<sup>th</sup> term, that is your final Trinity Term;

Diamond & TMCS CDT projects – Friday of 2<sup>nd</sup> week of your 9<sup>th</sup> term on the DPhil programme, that is your final Trinity Term;

MSc(Res) projects - Friday of 5<sup>th</sup> week of your 6<sup>th</sup> term, usually your final Trinity Term.

Name:

College:

Title of project:

Supervisor:

Describe the progress you have made in the last six months. To what extent have you achieved your objectives?

When do you expect to submit your thesis?

For the final 5 months of your funded period (4 months for MSc):

1. Outline any remaining experiments/modelling runs that are essential to the completion of your thesis.

Are the resources for the above all available?

2. Give an outline structure for your thesis in the form of a provisional detailed table of contents page.

3. Are you satisfied with the progress of your work? If not can you identify how you may improve matters?

4. Finally, complete a revised Gantt Chart covering the period from the start of your project up to thesis submission. Show all necessary tasks with their approximate dates. Indicate those tasks and milestones already completed.

Your signature:	Your supervisor's signature:
Date:	Date:
	-100-

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## DEPARTMENT OF MATERIALS 26.6 Appendix VI: Application for Conference/Travel/Skills-training Funds

The Department has a policy of seeking to support each graduate student to attend a conference approved by their supervisor, during the course of their studies. Students are expected to seek support from other sources as well as approaching the Department. Please use this form when applying for funds, indicating in section 4 other sources you have approached. When you have completed sections 1-5, ask your supervisor to complete section 6 and sign it. The completed form should be sent by email to the Materials Graduate Studies Office at graduate.studies@materials.ox.ac.uk.

1.	Your details:	2.	Conference/Other Details:		
	Name:		Title:		
	Research Group:				
	College:				
	Sponsor *:				
	Year started:		Date:		
	* if applicable		Location:		
3.	Cost:	4.	Sources approached: (please tick)		
			Please indicate in each case the sum		
	Registration:		requested and granted		
	Travel:		Sponsor:		
	Subsistence:		College:		
	Other:		University.		
	Total:	$\square$	Other:		
	Any special feature:	$\diamond$	Total:		
5.	Request to Department				
	Sum requested this time:	Sums	Sums previously granted:		
		(give	ve date)		
6.	Statement of support by supervisor and signature of supervisor				
	Materials Graduate Studies Office use only				
	Amount granted				
	Notes/special conditions				
	Approval by DGS				
	Signed		Date		

## 26.7 Appendix VII: Summary of Provision, Support and Oversight for Materials Research Students

## A. <u>SUMMARY OF PROVISION</u>

The purpose of this statement is to indicate what a graduate research student might expect to be offered in the **Department of Materials**. It is expected that during a graduate's first term at Oxford, each graduate student and their supervisor will discuss the statement of provision, and, by means of the six-monthly Project Management Forms and the quarterly Graduate Supervision Reports, the student and supervisor will confirm any individualised provision as it applies to that student. The provision should be reviewed by the supervisor with the student at least once a year.

As a Materials research student you are also a member of the Mathematical, Physical and Life Sciences Division's **Graduate School** (<u>https://www.mpls.ox.ac.uk/graduate-school</u>) with access to its resources and support.

## 1. What arrangements will be put in place for supervising the graduate's work?

You will have a named supervisor or supervisors, normally as indicated in your offer letter, who will have overall responsibility for the direction of your work on behalf of the Department. Typically, you should expect to have meetings with your supervisor or a member of the supervisory team with a frequency of at least once a fortnight averaged across the year. The regularity of these meetings may be subject to variations according to the time of the year, and the stage you are at in your research programme. Please note that this is a minimum and your supervisors may require more frequent meetings. The MPLS Division publishes a Code of Practice for Research Supervision (<u>https://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students/supervision/mpls-division-code-of-practice-on-the-supervision-of-graduate-research-students ). If you are co-supervised one of your Oxford supervisors will be designated by the Department as your **Responsible Supervisor**, this reflects certain responsibilities they have to you and the Department and not necessarily the proportion of time they devote to your supervision compared to your other supervisor(s).</u>

## 2. What induction arrangements will be made?

You will have Departmental Induction at the beginning of your first term. The main induction to the Department is provided at the start of Michaelmas Term. Other arrangements will be made for students starting at other times of the year. Your supervisor(s) will arrange more specialised induction subsequently. The main set of slides from the most recent Departmental Induction event can be found via CANVAS and at <a href="http://www.materials.ox.ac.uk/teaching/pg/pginduction">http://www.materials.ox.ac.uk/teaching/pg/pginduction</a>.

## 3. What workspace will be provided?

Workspace will be related to individual circumstances. If undertaking experimental work, you will be provided with bench space, or its equivalent, in a laboratory and, where possible, with shared office space. If undertaking theory or computational modelling research, you will have shared office space.

## 4. What IT support/ library facilities/ experimental facilities will be available?

You will have access to the Department of Materials IT Support Team, the Joint Materials and Engineering Student Workshop (after completing workshop induction), the Department of Materials Library (in addition to the University Science Library (RSL) and other University libraries, and centrally provided electronic resources). Experimental and materials modelling facilities are available as appropriate to your research topic. The provision of other resources specific to your project should be agreed with your supervisor as a part of the planning stages of the agreed project. Details of the facilities mentioned above and others are given in the on-line Materials Information Centre (<u>https://www.materials.ox.ac.uk/mic</u>) and at <u>http://www-omcs.materials.ox.ac.uk</u>. Library resources for Materials Science are outlined at <a href="https://libguides.bodleian.ox.ac.uk/materials">https://libguides.bodleian.ox.ac.uk/materials</a>. Your college has a library too.

## 5. Which research seminars will be available?

You will have access to Departmental Seminars and Colloquia in the Department of Materials, and many of those offered by other departments too. You will also have access to the additional seminars that individual research groups or groups with common areas of interest organise for their own members and others. See <a href="http://www.materials.ox.ac.uk/news/colloquia.html">http://www.materials.ox.ac.uk/news/colloquia.html</a>.

## 6. What access to research funds will be available?

You will find that limited Department funds are available to assist with attendance at conferences, in addition to any allocated funds via individual research groups/supervisors.

In the Department of Materials it is the responsibility of individual research groups to provide appropriate desktop or laptop computing facilities. They are allocated a budget for this purpose. Your supervisor will have a small budget to cover both day-to-day consumables used in your project and other minor costs.

## 7. What formal graduate skills training will be provided?

As appropriate to the different stages of your graduate career, you will have the opportunity to attend a variety of skills training sessions and specific research training offered by the Department, as described in the Department's 'Graduate Course Handbook' and 'Postgraduate Lecture & Training Course Synopses and Research Colloquia Details' booklet

(<u>https://www.materials.ox.ac.uk/teaching/pg/pghandbooks.html</u>). The slides from many of the generic skills training workshops are available at <u>http://www.materials.ox.ac.uk/teaching/pg/pgskills</u>, although these cannot fully substitute for engaging in discussion & group exercises at the live workshops.

The MPLS Division also organises courses and career planning events. Information about Divisional training and other courses offered across the University is available at

<u>https://www.mpls.ox.ac.uk/training</u>. This site provides information about academic courses, researchspecific skills training, and transferable careers skills development for research students and research staff at Oxford University, and includes a searchable database of all courses, links to articles on subjects such as project management, teaching and career planning, and a skills blog.

### 8. What opportunities will be available for developing and practising teaching skills?

The Materials Department, the MPLS Division and the <u>Oxford Centre for Teaching and Learning</u> provide resources to support the development of research students and post-docs who aspire to follow an academic career, including training in teaching skills. Information about teaching skills training and teaching opportunities provided by the Department of Materials, including opportunities to contribute to our Outreach to Schools programme, can be found in the three sources given in (7) above and in the General Scheme of Lectures and the Termly Lecture Lists found at <u>http://www.materials.ox.ac.uk/teaching/lecturelists.html</u>. These teaching opportunities are NOT restricted to those who declare a wish to follow an academic career. See also <u>https://www.mpls.ox.ac.uk/training/pgr</u>.

# 9. What arrangements for accommodation, meals and social facilities, will be made, on a year round basis?

#### Department:

Research students can use the Parks View Cafeteria in the Holder Building and the Café at the Begbroke Science Park. The former facility is shared by all staff and students of the Departments of Materials and of Engineering Science and facilitates interaction between different research groups and with support staff. Departmental seminars, colloquia, training workshops and the annual DPhil Poster Competition bring research students together with academic and other research staff in the Department to hear about on-going research and to develop new skills and provide an opportunity for networking and socialising. In addition to many ad hoc social events that take place, the Department's graduate student-staff liaison committee (the JCCG) organises a number of social events including free coffee once a week for all graduate students and final year undergraduates, a subsidised evening social event in Michaelmas Term and a subsidised summer barbeque.

#### College:

Many colleges will be able to provide you with at least one year's accommodation. Generally speaking your college will provide meals throughout the year, but provision will vary from college to college, especially during vacations, and you will need to familiarise yourself with your college's detailed arrangements. In addition there are usually self-catering facilities available in graduate accommodation. You will be a member of the Middle Common Room, or equivalent, of your college, which is the main social centre for

graduates. The MCR provides a common room and usually organises a programme of social events throughout the year. The college will also provide a bar, some computing facilities and a library, and often may have dedicated funds for research (conference and field grants). It also represents the interests of its members to the college through an elected Committee or through elected representatives to College Committees. Again, details will vary from college to college. Graduates are also welcome to participate in all other social and sporting activities of the college. Please see individual college websites for further details about all aspects of college provision.

## Central:

Graduate Research Students may become members of the University Club in Mansfield Road, and participate in the range of sporting activities provided by the University.

## 10. What arrangements are in place for pastoral and welfare support?

## **Department:**

Within the Department, your Supervisor(s), Director of Graduate Studies, Staff of the Materials Graduate Studies Office and your Departmental Advisor are all available to offer support. Through its weekly coffee event the Joint Consultative Committee for Graduates (JCCG) provides an informal forum for discussion and guidance. The JCCG also provides a channel through which graduate students' views and concerns can be brought to the attention of the Materials Graduate Studies Committee.

## College:

There is an extensive framework of support for graduates within each college. Your college will allocate to you a College Advisor from among its Senior Members, usually in a cognate subject, who normally will arrange to see you from time to time and whom you may contact for additional advice and support on academic and other matters. In college you may also approach the Tutor for Graduates and/or the Senior Tutor for advice. The Tutor for Graduates is a fellow of the college with particular responsibility for the interests and welfare of graduate students. In some colleges, the Senior Tutor will also have the role of Tutor for Graduates. Each college will also have other named individuals who can offer individual advice.

## Central:

The University provides:

- A professionally staffed confidential Student Counselling Service which offers assistance with personal, emotional, social and academic problems (<u>http://www.ox.ac.uk/students/welfare/counselling</u>)
- 2. A Careers Service (http://www.careers.ox.ac.uk/)
- 3. A Disability Advisory Service (http://www.ox.ac.uk/students/welfare/disability)
- 4. A Student Visa & Immigration Office (http://www.ox.ac.uk/students/visa)

5. Student-led peer support (together with the Oxford University Students Union) (<u>http://www.ox.ac.uk/students/welfare/peer</u>).

### B. <u>SUMMARY OF CORE SUPPORT & OVERSIGHT FOR MATERIALS PGR STUDENTS (2021/22)</u>

The Department of Materials is a medium-sized, cohesive unit in which you will find support as a graduate student from many quarters, not only from your own immediate research group and supervisor(s). In addition you have a second line of support from your College, not only for personal and academic matters, but also often for help with travel, conference attendance and hardship. Below we identify some of the key Oxford Materials people involved in support and/or oversight of our research students and degree programmes. There are many other Oxford Materials staff who will support you and they can be identified via the on-line Materials Information Centre.

Director of Graduate Studies (DGS): Dr Adrian Taylor <u>adrian.taylor@materials.ox.ac.uk</u>

### Materials Graduate Studies and Undergraduate Studies Support Staff:

Materials Education Manager:	Ms. Philippa Moss	philippa.moss@materials.ox.ac.uk
Materials Education Support Team:	Mrs Marion Beckett Ms Sharmaine Ijada Ms Ellie Thornton	graduate.admissions@materials.ox.ac.uk graduate.studies@materials.ox.ac.uk graduate.studies@materials.ox.ac.uk
Materials Librarian:	Mrs Grace Sewell	library@materials.ox.ac.uk
Materials IT Support:		itsupport@materials.ox.ac.uk
Materials Department Safety Officer (D	<b>SO):</b> Mr Ian Bishop	ian.bishop@materials.ox.ac.uk

# For all other Materials support staff and key post-holders: Please see the relevant sections within the on-line <u>Materials Information Centre</u> (SSO needed)

### Materials Graduate Studies Committee (MGSC):

Chair (DGS):	Dr Adrian Taylor	adrian.taylor@materials.ox.ac.uk
Members of Academic Staff:	Prof Pete Nellist	peter.nellist@materials.ox.ac.uk
	Prof Nicole Grobert	nicole.grobert@materials.ox.ac.uk
	Prof Hazel Assender	hazel.assender@materials.ox.ac.uk
PGR Student Representative:	Jack Aspinall	jack.aspinall@materials.ox.ac.uk

# Joint Consultative Committee for Graduate Students (JCCG):

Chair: Deputy Chair: Secretary:	Jack Aspinall Marcus Williamson Ellie Thornton	jack.aspinall@materials.ox.ac.uk marcus.williamson@materials.ox.ac.uk graduate.studies@materials.ox.ac.uk
First-year representatives:	Shivansh Nauriyal Emily Milan Ping-Yuan Lee	nn <u>katharina.ungermann@materials.ox.ac.uk</u> <u>shivansh.nauriyal@materials.ox.ac.uk</u> <u>emily.milan@materials.ox.ac.uk</u> <u>ping-yuan.lee@materials.ox.ac.uk</u>
Second-year representatives:	Yvonne Chart Bianca Bauer Ziyue Shao Tongshan Liu	yvonne.chart@materials.ox.ac.uk bianca.bauer@materials.ox.ac.uk ziyue.shao@materials.ox.ac.uk tongshan.liu@materials.ox.ac.uk
Third-year representatives:	Jack Aspinall Marcus Williamson Emma Perry Cindy (Qingchuan)	jack.aspinall@materials.ox.ac.uk marcus.williamson@materials.ox.ac.uk emma.perry@materials.ox.ac.uk Lu gingchuan.lu@materials.ox.ac.uk
Fourth-year representatives:	Benjamin Evans Joseph Ghoussoub Megan Jones Shengda Pu	benjamin.evans@materials.ox.ac.uk joseph.ghoussoub@materials.ox.ac.uk megan.jones@materials.ox.ac.uk shengda.pu@materials.ox.ac.uk
Part II UG representative:	Charlotte Withymar	charlotte.withyman@mansfield.ox.ac.uk
Begbroke representative:	Emma Perry	emma.perry@materials.ox.ac.uk
Department Representatives:	Member of Graduat Part II Organiser: K	rials Graduate Studies Office

26.8 Appendix VIII: Code of Practice on PGR Supervision



# Code of Practice on the Supervision of Graduate Research Students

**Revised September 2019** 

# **Code of Practice on the Supervision of Graduate Research Students**

### The supervisory structure and sources of support

Patterns of supervision differ in the MPLS Division according to the nature of the subject. In some subjects there is typically a sole supervisor; others may typically have two or more supervisors, with one designated as the responsible supervisor; and others may have supervisory teams.

Where more than one supervisor is appointed, one of the supervisors shall clearly be designated the responsible supervisor.

In all cases, the department shall ensure that each graduate student has access to one or more named persons in addition to the supervisor to whom he/she can turn for support, such as the head of the research group, the Director of Graduate Studies, or where appropriate the Head of Department. Where there is a sole supervisor, these other sources of support, and the arrangements for providing cover during the absence of the supervisor (under 3 below), are especially crucial.

In all cases students should also expect to be able to approach a college advisor. The student's college will appoint a college advisor; receive termly supervision reports, and Transfer and Confirmation of Status reports. The Division asks colleges not to appoint a student's departmental supervisor as a college advisor. The college may also have procedures in place to monitor the overall well-being of the graduate research student, including a discussion of academic reports. If the college identifies any concerns which might impact on the academic progress of the student concerned, and which may not already have been recognised in departmental reports, it may refer these in confidence to the Director of Graduate Studies in the department concerned, who will initiate such action in the department as seems to him/her to be necessary in the individual circumstances.

### Who can supervise?

- 1. Someone of sufficient standing to be able to operate with credibility on behalf of the responsible body.
- 2. Someone who has sufficient experience to be able to provide appropriate guidance to the student about the necessary procedures and, in particular, the academic expectations associated with an Oxford doctorate in their subject area.
- 3. Someone who is able to undertake the tasks assigned to the supervisor in the Policy on Research Degrees<sup>1</sup> including integrating them into the national and international network in their subject.
- 4. Someone who has sufficient security of tenure to make it likely that they will see the student's research through to successful conclusion.

### The responsible supervisor

A student may have one, two or more supervisors, but there must be one who is responsible overall for academic progress and pastoral needs, and who is responsible for signing progression forms.

The responsible supervisor shall normally be:

• A member of staff of the department on a permanent contract and who is an associate professor, reader, professor or senior researcher (grade 8 or above, or RSIV), OR

<sup>&</sup>lt;sup>1</sup> <u>https://academic.admin.ox.ac.uk/research-degrees</u>

• A member of staff who is also a researcher with an independent fellowship that lasts for the duration of the student's degree.

The responsible supervisor will currently be engaged in research in the relevant discipline(s) so as to ensure that the direction and monitoring of the student's progress is informed by up to date subject knowledge and research developments.

Nobody should be appointed as responsible supervisor if it is known at the time of the appointment that he or she will not be in post at the time the student is due to complete the programme in question.

A person appointed to supervise alongside the responsible supervisor shall normally be:

- An associate professor, reader or professor;
- A member of research staff who is grade 8 or above;
- An independent research fellow affiliated with the University, which is taken to be those with fellowships secured from an external learned society, research council or equivalent. The fellow should have at least three years' experience as a post-doctoral researcher before becoming a supervisor, and should be based at Oxford;
- A postdoctoral researcher with at least three years of experience of research at postdoctoral level or equivalent;
- A Department Lecturer at grade 8 or above who is research-active and has at least three years of experience of research';
- An employee of an external organisation such as a commercial company or national laboratory who has both a relevant doctorate and expertise in the subject of the student's DPhil, and who has at least three years of experience of working in research and development.

A postdoctoral researcher who has done less than three years' postdoctoral research should not normally be appointed as a supervisor; however he/she may be appointed as an associate supervisor.

It is important that independent research fellows or members of research staff who do supervise are formally recorded as a supervisor on the student record and the Graduate Supervision System to ensure that their contribution is recognised (as supervision experience is important on fellowship applications) and to record lines of accountability for the progression of the student in question.

Where specialist supervision is needed that is not available from a member of academic staff or college fellow, a senior member of research staff (Grade 8 or above) may be appointed as a subject specialist supervisor, OR, in appropriate cases, a supervisor may be appointed who is external to the University of Oxford. A person in the department holding a substantial external fellowship, e.g. a Royal Society Fellowship or equivalent on a fixed-term contract also may be appointed to act as a student's responsible supervisor. In these circumstances, an experienced member of academic staff shall always be appointed as joint supervisor. This must be a member of staff responsible to the Head of Department or Head of the Division.

In the case of a student following an interdisciplinary DPhil who has two equally senior supervisors in two different departments, there should still be a single 'responsible' supervisor, who would normally be in the department where the student is registered for administrative purposes. For the purposes for signing off Transfer, Confirmation and submission forms, the responsible supervisor should liaise with his/her counterpart in the other department, and where there is any disagreement between the two, the DGS in the department where the student is registered would make the final decision.

### New supervisors

Appropriate support and training will be given to new supervisors<sup>2</sup>.

For supervisors undertaking their first graduate student supervision, an experienced co-supervisor will be appointed to support the student and the supervisor.

For members of academic staff in their first period of office, the Divisional Board will appoint a mentor who will, amongst his/her other duties, provide confidential advice, support, and guidance on teaching, and supervision of research students. The supervision record of a new member of academic staff is included in the review prior to appointment to retiring age.

The Centre for Teaching and Learning offer a range of resources to support teaching at Oxford, available here: <a href="https://www.ctl.ox.ac.uk/teaching-resources">https://www.ctl.ox.ac.uk/teaching-resources</a>

When a supervisor is not a member of academic staff at the University, or a fellow of an Oxford college, or a person with previous supervisory experience,

- An experienced member of academic staff will be appointed by the department either as joint supervisor or as an advisor to the supervisor, and will be expected to act as mentor to the new supervisor;
- When the supervisor is a member of contract research staff, s/he will be expected to complete the online <u>DPhil Supervision at Oxford</u> course.

For the avoidance of doubt, a candidate should not be admitted if there is no suitable specialist supervision available in the University or its colleges.

### Ensuring the quality of supervision

Departments should put in place mechanisms to ensure that the quality of supervision is not put at risk as a result of the excessive volume and range of burdens assigned to individual supervisors. Although for an individual supervisor with a normal academic load, a supervisory load equivalent to six full-time students would be regarded as the normal maximum, it is recognised that there is a range of supervisory practice, in terms of supervisory teams, and the Division emphasizes the importance of adhering to the Quality Assurance Agency's indicators of sound practice in the provision of supervision, which state that higher education providers will:

- appoint supervisors with the appropriate skills and subject knowledge to support and encourage research students, and to monitor their progress effectively;
- ensure each research student has a supervisory team containing a main supervisor who is the clearly identified point of contact;
- ensure that the responsibilities of research student supervisors are readily available and clearly communicated to supervisors and students;
- ensure that individual supervisors have sufficient time to carry out their responsibilities effectively.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> <u>https://www.mpls.ox.ac.uk/graduate-school/information-and-resources-for-supervisors</u>

<sup>&</sup>lt;sup>3</sup> UK Quality Code for Higher Education, <u>https://www.qaa.ac.uk/docs/qaa/quality-code/chapter-b11\_-research-degrees</u>

### Frequency of meetings

Typically, a student should expect to have meetings with his/her supervisor or a member of the supervisory team with a frequency of at least once every two weeks averaged across the year. The regularity of these meetings may be subject to variations according to the time of the year, and the stage the student is at in his or her research programme. It follows that, alongside his/her other duties, a supervisor should be able to provide this typical level of support for each of his/her research students.

Departments should ensure that students are not disadvantaged by the appointment as a supervisor of someone who is about to go on leave, and shall make appropriate arrangements to cover for a supervisor's absence on leave or for other reasons.

# **Responsibilities of the Research Student**

(an extract from the University of Oxford's Education Committee's "Policy on Research Degrees")

### Section 5: Responsibilities of the student

### 5.1 Overriding responsibility

The University expects students to accept their obligation to act as responsible members of the University's academic community. Students are also expected to take ultimate responsibility for their research programme and to develop an appropriate working relationship with their supervisor(s).

### 5.2 The research programme

In relation to the research programme, it is important for the student:

- to programme and undertake work according to an agreed timetable, and to keep relevant records of all aspects of the work in such a way that they can be accessed and understood by anyone with a legitimate need to see them;
- to take responsibility for the development of subject-specific research training and personal and professional skills, and to make positive use of the University's teaching and learning facilities, and opportunities for this development;
- to seek out and follow the regulations applying to the research programme, and to seek clarification, where necessary; and to be familiar with other relevant regulations and policies, including health and safety, intellectual property, data handling, research integrity and conflicts of interest;
- to raise problems or difficulties with the relevant authority so that appropriate guidance may be offered;
- to carry out research with proper regard to good health and safety practices, and to be aware of the need for adequate health insurance and health precautions when travelling abroad;

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- to understand the demands of a research degree and to devote sufficient time to study to make satisfactory progress and to complete each stage of the degree by the deadlines set out in the Examination Regulations;
- to work towards a suitable standard of written and spoken English for transfer and confirmation and for the final submission of the thesis.

It is for the student to ensure that competing demands on their time are minimised and to ensure that their supervisor is aware of, and approves, commitments (e.g. paid work, conferences) or time away that might impinge on the student's work.

### 5.3 Working with the supervisor

In order to make the most effective use of supervision, the student should endeavour to develop an appropriate working pattern, including an agreed and professional relationship with the supervisor(s). To facilitate this, the student should discuss with the supervisor the type of guidance and comment which they find most helpful, and agree a schedule of meetings. The student should also be aware of their joint responsibility with the supervisor to ensure that regular and frequent contact is maintained, and be encouraged to take the initiative to maintain contact when necessary.

In working with supervisors or other academic staff, students should also:

- recognise the demands made on a supervisor's time and the need to prepare adequately for meetings and to observe deadlines;
- accept the importance of constructive criticism within the supervisory relationship, and seek a full assessment of the strengths and weaknesses of any work;
- give full weight to any suggested guidance and corrective action proposed by the supervisor in the event of problems;
- co-operate with the supervisor to produce detailed parallel reports on progress at the end of each term via Graduate Supervision Reporting;
- discuss their skills training needs with the supervisor, both informally during regular supervisory contacts and formally at particular times as detailed in subject handbooks;
- make appropriate use of any guidance available relating to the student's career after successful completion of a research degree, for example, via the Careers Service;
- inform the supervisor as soon as possible of any circumstance which might lead to interruption of study;
- where the student feels that there are good grounds for contemplating a change of supervision arrangements, discuss this with the existing supervisor, or, if this presents a difficulty, discuss this with the DGS or other appropriate officer or adviser, or with a college adviser.

### 5.4 Submission and completion

The requirements in relation to submission are set out in full in the Examination Regulations; however in particular it is essential for the student:

- to ensure that their written English is of the necessary standard for the submission of a thesis;
- to be prepared to defend the subject of the thesis in fluent English at the viva;
- to allow sufficient time for writing up and to pay particular attention to final proof reading;
- to decide when they wish to submit the thesis for examination, having provided the supervisor with sufficient time to comment on the final draft and having taken account of the supervisor's opinion;
- to be aware of the necessary steps in the examination process and the timescales required.

See also <u>Section 4.1</u> on the 'Materials: PGR Progression' on-line site and <u>Section 4.2</u> on Graduate Studies Office Forms.

The University rules stipulate that you must be resident within a 25 mile radius of the city centre for at least 3 terms (1 academic year) before you can submit your MSc thesis. The rules also stipulate that the maximum time normally allowed for a student to complete the research and write the thesis is 9 terms (3 academic years). The Department, however, aims for MSc students to submit their thesis within 2 years. A schedule for keeping to this 2-year timetable is illustrated overleaf under the title A Two-Year MSc by Research Diary. We will now consider very briefly each of the two years in turn.

### THE FIRST YEAR

You have arrived at the start of your graduate degree as a Probationer Research Student (PRS). The University rules allow you to hold this status normally for up to 4 terms. PRS students who arrive intending to pursue a Materials MSc (by research) degree, are expected to transfer to MSc status towards the end of their fourth term. Permission to <u>apply</u> to transfer is subject to the approval of your Supervisor, College and Director of Graduate Studies, normally following the completion of three threshold requirements:

- (i) passes in two assessed courses (<u>see section 6</u>);
- (ii) attendance at a minimum of seven Colloquia during the first two terms (see section 9);
- (i) Completion of the University's mandatory on-line course on 'Research Integrity Training'.

Two members of staff, other than your supervisor, College Advisor or Departmental Advisor, will be appointed as the Assessors for your Transfer of Status application, which is normally submitted in your tenth month as a PRS.

In the period of weeks two to four of your third term you will meet with your Lead Assessor for an independent, informal discussion of your progress to date. Further information on this meeting, which **you** must arrange, is given in <u>Section 10</u>.

By the end of Trinity full-term of your first year or its equivalent if you started in HT or TT, you are required to have completed a substantial Literature Review (<u>Section 10.3</u>). This should ensure that you are familiar with the prior work in your area of study before you progress too far with your research. Your Literature Review must be submitted by Friday of week 10 of Trinity Term. After your

Transfer of Status interview you will receive written feedback on this Review from your Lead Assessor.

Having attended the Writing Skills workshop, completed your literature review, **ensured that you understand what is the new science it is anticipated your project will reveal**, engaged appropriately with your project management and held regular discussions with your supervisor, you should be beginning to have some sense of what are the requirements for a thesis (see also <u>Section 13</u>) and what <u>might be</u> the content of <u>your</u> thesis.

Once you have met the three threshold criteria and submitted your literature review: In your tenth month, and normally no later than the end of that month (usually 31July), you should complete and submit by email to the Materials Graduate Studies Office an 'Application Form for Transfer of a Graduate Student from One Status to Another' (form GSO.2.MPLS). In considering your application your Supervisor(s), College and Director of Graduate Studies will take into account your progress over the whole of your first year to date.

<u>Section 10</u> of this Handbook provides more detail on the transfer of status process and examination.

The purpose of the transfer of status process is to ensure that you have a convincing research proposal, that you are making satisfactory progress in its development, and to satisfy the assessors that the work is potentially of DPhil or MSc by Research quality. Satisfactory progress in this context includes not only your ability to generate an appropriate amount of good quality data, but also your ability to understand both these data and the broader project and your ability to begin to take ownership of the project.

Submission of the **GSO.2.MPLS** form will, if approved, initiate arrangements for your **transfer of status examination**, which will be conducted by two assessors (neither of whom may be your Supervisor, your Department Advisor or your College Advisor). This examination will include a 15 to 30 minute interview with the assessors, to be held within the period of weeks -3 to +1 of your 4<sup>th</sup> term.

At the time your Responsible Supervisor signs your GSO.2.MPLS form in July, it is important that you ask him or her to confirm that they wish **you** to contact your Assessors in order to agree a provisional date for your Transfer of Status interview. Alternatively, they might indicate that **they** will contact the Assessors about this. Either way, soon after your Responsible Supervisor has signed the GSO.2.MPLS form it is advisable to agree this provisional date so that it is in the diaries of you and your assessors. If **you** make the arrangements, do ensure your supervisor(s) are aware of your interview date too.

Further information about transfer of status and other 'progression' matters can be found in sections five to thirteen of the present Handbook and on the MPLS Graduate School webpages at <a href="http://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students/progression">http://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students/progression</a>.

# THE SECOND YEAR

Your MSc project should now be coming together nicely and you will be asked to give a short talk on your research during Week 7 of Hilary Term (<u>see Section 11</u>). Allow yourself three months to writeup and finish the final version of your thesis (<u>see Section 13</u>). A month or so <u>BEFORE</u> you are ready to submit your thesis you should apply for the 'Appointment of Examiners' (form GSO.3). Again, this form can be downloaded from the website

<u>http://www.ox.ac.uk/students/academic/guidance/graduate/progression</u>. Once two copies of your thesis and abstract have been submitted to the Graduate Studies Office, your Internal Examiner will arrange the date for your oral examination (*viva voce*) (<u>see Section 13</u>).

# CAVEAT

A hard and fast timetable for the successful completion of a MSc by Research project is, of course, not possible, given the unpredictability of creative research. The 'Two-Year MSc by Research Diary' shown below should be seen as a guide illustrating what is required in order to submit within two years. Part of the purpose of the Project Management structure is to enable students themselves to monitor their own progress and to flag-up to their supervisor the Department a warning signal as soon as possible if they feel that their two year MSc schedule is slipping (see Section 5). If you are not devoting most of your effort to thesis writing at the 21 month milestone, you should arrange to meet with the Director of Graduate Studies to discuss your progress.

# A Two-Year MSc by Research Diary

	1st Year						
Michaelmas Ter	Michaelmas Term, October - January						
Week 0							
	Assignment of Deputy Supervisor, Department Advisor and propose Lead Assessor						
	Department Newcomers' Party						
Week 1	Safety Lecture						
Week 2	Information Skills workshop						
Week 2							
Week 3	Latest date for submission of Personal Registration and Risk Assessment Form and DSE Form						
Week 4	Deadline for completed on-line 'New Graduate Student' Questionnaire Project Management workshop						
Week 6	Looking to the Future workshop						
Week 7-9	GSR Report						
Week 7	Institute of Materials, Minerals & Mining Talk						
Week 7	Training Workshop on for prospective Teaching Assistants on 'Junior Demonstrating' in the						
	UG Teaching Laboratory)						
Week 9	Poster Presentation Skills workshop						
МТ	Attend Workshop Induction						
MT	Owning a Successful DPhil Workshop						
Weeks 1-8							
	Thursday Departmental Colloquia						
Hilary Term, Jai							
Week 0-1	Upload Project Management Form 1 (with Gantt chart) to 'Materials: PGR Progression'						
HT	Presentation Skills and Powerpoint workshops						
HT Writing Skills, Lab Notebooks, IPR and Patents workshop							
Week 7-9	GSR Report						
HT	Managing your References Workshop						
HT	Research Impact and Open Access (Chemistry and Materials)						
HT	Patent Information Workshop						
HT	Intensive one-week Academic Writing Course (for non-UK students)						
Weeks 1-8	Attend graduate lecture courses (including 2 assessed)						
	Thursday Departmental Colloquia						
Trinity Term (in	cluding the Long Vacation), April - October						
Weeks 1-4	Thursday Departmental Colloquia						
Weeks 2-4	Arrange informal meeting with your Lead Assessor						
Week 7-9	Submit 'Preparing for Transfer of Status' form to GSR and submit GSR Report						
Week 8	Upload Literature Review to 'Materials: PGR Progression'						
Before July	Complete on-line course on Research Integrity Training						
July	Upload Project Management Form 2 (with Gantt chart) to 'Materials: PGR Progression'						
, 	Apply for Transfer of Status						
Mid-September	GSR Report						
	XXXXXXX						

	2nd Year				
Michaelmas Te	Michaelmas Term, October - January				
Friday, Week 1	Friday, Week 1 Normal latest date for Transfer of Status Interview				
Week 1	Active Job Hunting – Introduction to Oxford University Careers Service				
Week 1	Careers and Networking Evening with Alumni				
Weeks 1-8	Thursday Departmental Colloquia				
Weeks 7-9	GSR Report				
Hilary Term, Ja	nuary - April				
Week 0-1	Week 0-1 Upload Project Management Form 3a (with Gantt chart) to 'Materials: PGR Progression'				
Weeks 7-9	Weeks 7-9 GSR Report				
Week 7	Week 7 2nd Year Talks, Monday to Friday, 9.00 am – 6.00 pm,				
	KEEP ALL DATES FREE! Hetherington Prize				
HT	HT Academic Writing Course (for non-UK students)				
Weeks 1-8	Thursday Departmental Colloquia				
Trinity Term (in	cluding the Long Vacation), April - October				
Weeks 1-4	Thursday Departmental Colloquia				
Week 5	<sup>a</sup> Upload Project Management Form 4 (with Gantt chart) to 'Materials: PGR Progression' (to				
	include thesis outline)				
Weeks 7-9	GSR Report				
July-August	<sup>a</sup> Application for appointment of examiners (on-line form GSO.3)				
September	<sup>a</sup> Submission of thesis				
Mid-Sept	GSR Report				
	XXXXXXX				

<sup>a</sup>MSc (Research) in Materials students follow the same pattern as years 1 and 2 for DPhil in Materials students, except that (i) in week 5 of Trinity Term in their second year they submit Project Management Form 4 (instead of Project Management Form 3b in July), (ii) in Week 1 of MT of their final year they attend the two careers events, and (iii) they aim to submit their thesis no later than the end of their second year.

Note: The JCCG Committee will meet every term at 12.00 noon on Wednesday of Week 1.

# 26.10 Appendix X: Sample copy of the assessors' report form used for a first attempt at the Transfer of Status Examination

### MATHEMATICAL, PHYSICAL AND LIFE SCIENCES DIVISION

### Transfer of status form and guidance for assessors

### Transfer of Status from PRS to DPhil Status (1<sup>st</sup> Attempt)

### The assessment panel should complete this report form immediately following the assessment.

Student name:	Start Date:
Research Title:	
Date report received:	Date Interviewed:
Funded period:	Max submission:

# Assessors are reminded that this is a formal examination of the University of Oxford. In order for transfer of status to be conferred, assessors must be satisfied that:

1. The student has proposed a viable DPhil project that can be completed within the proposed timeframe and funded period or within 12 terms.

- 2. The work undertaken to date provides an appropriate background and platform for progress.
- 3. The student has developed a critical understanding of the relevant literature.
- 4. The student understands, can justify and defend their research project, its objectives and rationale.
- 5. The student has a clear plan for the future direction of the project.
- 6. The student has begun to take intellectual ownership of the project.

In making your assessments (and in judging the level of the viva) it is important that your expectations of the student are moderated by (a) the student's previous academic background and (b) the point they have reached in their DPhil studies as this is still an early stage.

On the basis of the student's transfer report/submitted work and the transfer interview, please indicate your assessment of the following, ticking as appropriate:

Excellent = has excellent knowledge/ work. Has convincing research proposal and is making outstanding progress in its development.

Satisfactory = has sufficient knowledge/work and feasible plans for future work, and is making satisfactory progress in development of research proposal.

Not Satisfactory = has lack of knowledge/work and/or poor or unfeasible plans for future work, and/or is not making satisfactory progress.

Assessment of verbal and written work	Excellent	Satisfactory	Not Satisfactory
Familiarity with and knowledge of background literature			
Amount of work completed			
Quality of work completed			
Potential contribution to field of proposed work			
Coherence and organization of work			
Content of presentation			
Delivery of presentation			
Ability to defend work			

Ideas and plans for future work including a timescale for ongoing work					
Ability to work independently					
Compared to other students at this stage, this student's Research competency appears to be					
Student's competence in written and spoken English			<u> </u>		
Likelihood of timely submission	Very likely	Probably	Possible	Unlikely	None
Prospect of the student submitting by their current maximum submission date					
Training and professional development	Yes – very well	Yes – but areas requ attention	uiring	Yes – but inadequately	No
Has the student appropriately engaged with academic skills training?	$\langle \rangle$				
Has the student appropriately engaged with career focussed and professional development activities?					
G					
Would the student benefit from additional supervi	ision to facilita	ate his/her	studies?	Yes / No	
Please tick to confirm that you, the assessors, ha Transfer of Status form and that the DGS has sig					

### Assessors are required to provide further comments in the box below on the student's work and interview. If

transfer is being recommended and everything is satisfactory only a <u>brief report</u> is required, but sufficient verbal feedback must have been provided to the candidate during the transfer interview. If transfer is not recommended, it is critical that detailed reasons for this are given along with instructions for any specific work that must be done prior to reassessment. A timescale for a subsequent meeting with the assessment panel (usually 3 months later) should be given. Assessors should also include a comment on the student's acquisition of career skills (and plans to develop such skills) as outlined in the GSO.2/ departmental template form. This information will be reviewed by the DGS, and students and their supervisor(s) will receive a copy of the report once agreed. (Please continue on a separate page if required)

### **Overall Recommendation:**

Pass:

- □ Transfer to DPhil status without reservations
- □ Transfer to DPhil status if a satisfactory written response to this report is obtained, signed by both the student and supervisor (to be returned within 2 weeks)\*
- Transfer to DPhil status but follow-up action required (Please state clearly in your report above what follow-up action is being requested. The requested action should be completed normally within the next 2 months and submitted to the DGS for review.)) \*\*

Fail:

□ Student should make a 2<sup>nd</sup> and final attempt to transfer to DPhil status in 1 term

	$\sim$	
Signed:		Signed:
(Assessor 1)		(Assessor 2)
Print Name:		Print Name:
Date:		Date:
DGS Signature:		Date:

\* Department to obtain written response and a copy should be attached to the report before it is returned to the MPLS Graduate Office.

\*\* In selecting this recommendation assessors are confirming that the student has just reached the required standard for DPhil status, and that they are happy for the student to be transferred. However, the assessors may feel that the student needs to do some additional work to strengthen and support their on-going research, and this should be clearly set out in the report, which will allow the department to review with the student. **Note:** Any follow-up action being requested <u>will not</u> prevent the transfer from being processed.

(version at 2/10/20)

# 26.11 Appendix XI: Summary of and brief rationale for the compulsory requirements for Materials Research Students

### A. Introductory Note

The Oxford Materials 'DPhil in Materials' programme includes a small number of compulsory programme requirements, which are summarised below and included in the checklist on the very first page of this Handbook. More details are given in the main body of the Handbook.

It may be helpful to understand that some of these compulsory requirements serve more than one purpose, and to be aware of the rationale behind their inclusion. For this reason the summary below is provided. In particular, certain items are designed to meet some of the University & MPLS Division's requirements for **transfer** and **confirmation** of status – in the 'concise timelines' (see Appendix XII of Materials Graduate Student Handbook or the 'Materials: PGR Progression' site) these requirement are identified by the green and blue colour coding indicated here. The assessed lecture courses and the items directly associated with transfer and confirmation of status are normally independently assessed/judged/reviewed by one or more members of staff other than your supervisor(s). Transfer and Confirmation of status are formal points of examination and assessment respectively of your fitness to continue on the research programme, normally occurring at the end of your first year and towards the end of your third year respectively. The independent input is an important part of these assessment processes, complementing that of your supervisor(s). Most students find it very helpful to receive this complementary, independent feedback on their progress.

In addition to the Materials requirement of a student-led six-monthly project management exercise, there is a University requirement of four formal progress reports each year, written by the supervisor(s) and with which the student is expected to engage. The purpose of these 'GSR' reports is self-evident: clearly it is important that you, your college and the Department have a regular brief update on your progress, not least so that steps can be taken to remedy any problems as soon as possible. It is compulsory for you to record your own entry as part of your quarterly report; you will be prompted each term and in the Long Vacation to do this, the time window being weeks seven to nine of term and mid-September in the Long Vacation. If you have concerns it is essential that you raise these either verbally or through the quarterly report. If you wish to raise concerns in confidence you may do so directly with the Director of Graduate Studies (DGS) and/or with your college or Departmental Advisor and/or with the JCCG (the Department's Staff-Student Liaison Committee).

Project Management is itself a useful transferable skill, but our purpose in making it a compulsory requirement is to enable and encourage you to take responsibility for the progress of your research, providing a tool for regular, but not too onerous, review of progress, identification of potential major bottlenecks and appropriate action to mitigate these, planning for the next six months and, in less detail, planning beyond the next six months right up to thesis submission. The ultimate aim is to maximize your chances of submitting a good thesis within your funded period.

You take the lead on the project management, but it is essential that your supervisor engages with you in this exercise. If you raise any serious concerns in your project management forms it is expected that you flag these by e-mail to the DGS. You upload your Project Management Forms to our 'Materials: Progression' on-line site.

Finally, as part of the six-monthly project management process you and your supervisor are asked to review your training needs at least annually (academic training, research-specific skills training, generic transferable skills training & development). There is a Divisional expectation of a regular 'Training Needs Analysis'.

The University, and some sponsors, including the EPSRC, also expect each student to engage with roughly 100 hours per year of transferable 'career skills' training and the University requires you to report on this in your formal applications for transfer of status and confirmation of status.

### B. Observations by DGS (AOT)

1. Why require the informal meeting with your Lead Transfer of Status Assessor early in Trinity full term of Year one?

So that any problems can be identified in good time for remedial action to be taken prior to the formal assessment for transfer of status. Please note that not all projects are expected to have delivered substantial results by this stage.

2. What about giving a presentation in year one?

A short presentation to your assessors **is** incorporated in your Year One Transfer of Status interview - indeed, it is a Divisional requirement that a presentation be given at some point during your period as a Probationer Research student.

3. Why not ask for the Literature Review earlier in year one?

The Lit Review is a substantial piece of work, and requires the completion of a comprehensive consideration of all relevant publications on your research topic. Given the other course requirements that **have** to be timetabled in MT & HT, plus the technical training that many are engaged with, it would be very onerous to **require** the Lit Review sooner than the end of TT full term. Of course you are not prohibited from completing your review in advance of Week 8 of TT if this suits you and your supervisor! It is also helpful for supervisors to have had the opportunity to identify in mid TT, during the drafting of this substantial literature review, any

student who needs additional support and/or training in writing a scientific report and/or in writing in English.

4. Why not schedule the poster session in year two and the research talk in year three?

It is quite common for a student to give an oral presentation and or offer a poster at a conference by the two-year point in their DPhil project. We offer guidance on poster presentation in an annual two-part workshop held in MT and HT, but there is limited value in practising actually showing a poster in advance of a conference. In contrast for an oral presentation it is really helpful to have had an opportunity to practise in front of an audience other than your own research group before you speak at a conference, and to receive feedback on your oral presentation skills in good time for you to work on improving these if this is necessary.

The Senior member of staff who chairs the session in which you give your talk and the Convenor of the 'Y2 talks theme' in which your talk takes place will give collective written feedback to all speakers within a week of the talks and in any cases where significant improvement is needed will write individually to the students concerned. These staff are also able to take an informal view of your progress to date and if they have concerns to raise these with your supervisor in good time for remedial action to be taken in advance of your formal application for Confirmation of Status. For most students, at this eighteen-month stage a short individual research talk followed by some questions is a better means by which to gauge your progress than a poster.

[If a poster session were used for this purpose we would need single author posters and a senior member of staff would have to ask you questions about your poster. Furthermore including an, albeit informal, assessment of progress would detract from the convivial social event that forms part of the Year 3 poster session.]

You are better placed to write a proper A0 research poster when you have a project that is well on the way to completion, with plenty of results and analysis, and having to do so is a good way to focus you and your supervisor's minds on what will be the key results in your thesis.

## 26.12 Appendix XII: Concise Timelines for Materials Research Degrees

In the Resources section of our 'Materials: PGR Progression' on-line site, in the folder entitled "Concise Timelines for Materials PGR Progression Requirements", you will find timelines for the following:

3.5y DPhil in Materials
4y DPhil in Materials (includes EPSRC iCASE, and Faraday Institution studentships)
3y DPhil in Materials
4y Fusion CDT programme DPhil
2y MSc (Research) in Materials

The majority of our research students follow the 3.5y DPhil in Materials programme, for which the timeline is reproduced overleaf.

### Materials PGR <u>Student</u> Requirements and Timeline for Transfer & Confirmation of Status

Illustrated for a Michaelmas Term starter, on the DPhil in Materials programme, with a 3.5-year studentship

### For completeness also showing:

Project management form (PMF) submissions. Mandatory GSR submissions. Whole-cohort events.

\* Indicates Mandatory Divisional Requirement or University Requirement by Regulation

Y1	MT+I	HT	Pass two assessed lecture courses and attend a minimum of seven colloquia plus the three compulsory workshops
	МТ	Wk0	Induction
		Wk4	SUBMIT 'NEW GRADUATE STUDENT' ON-LINE QUESTIONNAIRE
		Wk7-9	*Student report to GSR
	нт	Wk0-1	PMF1 to the 'Materials: PGR Progression' on-line site
		Wk6-7	*Student report to GSR
	тт	Wk2-4	<b>Informal meeting with Lead Assessor</b> (arranged by student) [In advance upload to 'Materials: PGR Progression' a single pdf comprising: project title, Gantt chart, and a 100-word summary of the new science to which it is anticipated the project will lead]
		Wk7-9	*Student report to GSR (inc *Preparing for Transfer of Status form)
		Wk8	Lit Review to 'Materials: PGR Progression' (5,000 to 6,000 words) [* Assessors are required to judge a candidate's understanding of the literature]
	LV	July	PMF2 to 'Materials: PGR Progression'
		July	*Apply to be considered for transfer of status (before applying you must have completed the University's on-line course on *Research Integrity Training) Submit by email to the Materials Graduate Studies Office a Word version of your fully completed <b>GSO.2.</b> <u>MPLS</u> together with 2,500 word summary of progress to date + Gantt Chart for DGS approval [Supervisor's report is within GSO.2.MPLS]
		mid-Sept	*Student report to GSR
Y2	МТ	Wks -3 to +1	*Transfer of Status Interview with Assessors (If authorised to do so by supervisor, arranged by student liaising with assessors) Two to three weeks prior to interview upload to 'Materials: PGR Progression' a <b>single</b> <b>pdf</b> comprising GSO.2.MPLS + Summary of Progress report + Gantt chart + a copy of the Preparing for Transfer of Status form you submitted to GSR in TT.
		Wk7-9	*Student report to GSR
	HT	Wk0-1	PMF3a to 'Materials: PGR Progression'
		Wk7-9	*Student report to GSR
		Wk7	<b>Research Talk</b> (Upload abstract and slides to 'Materials: PGR Progression') -127-

TT Wk7-9 \*Student report to GSR

LV July PMF3b to 'Materials: PGR Progression'

> mid-Sept \*Student report to GSR

Y3 Wk6HT to Wk6TT \*Apply for Confirmation of DPhil Status – upload as a single pdf your GSO.14.MPLS + Gantt Chart + Preparing for Confirmation of Status form to 'Materials: PGR Progression' Prior to upload: At least four weeks before the date set for your confirmation interview and no later than Wk6TT you must submit by email to the Materials Graduate Studies Office a Word version of your fully completed GSO.14.MPLS & Gantt Chart for DGS approval. [Supervisor's report is within GSO.14.MPLS]

МТ	Wk7-9	*Student report to GSR
нт	Wk0-1	PMF3c to 'Materials: PGR Progression'
	Wk3	Submit A3 version of Poster if entering competition
	Wk6	Poster Session (Upload A3 version to 'Materials: PGR Progression')
	Wk7-9	*Student report to GSR (inc *Preparing for Confirmation of Status form)
тт	Wks 0 to 10	*Confirmation of Status Interview with Assessors (If authorised to do so by supervisor, arranged by student liaising with assessors) [*Assessors' report will include comment(s) on the proposed thesis structure]
	Wk7-9	*Student report to GSR
LV	July	PMF3d to 'Materials: PGR Progression'
	mid-Sept	*Student report to GSR
мт	Wk0-1	PMF4 to 'Materials: PGR Progression' (includes thesis outline)
	Wk7-9	*Student report to GSR
нт	Jan-Feb	Apply for appointment of examiners – on-line GSO.3 form
	Wk7-9	*Student report to GSR
	March	SUBMIT THESIS VIA ON-LINE RTDS PORTAL
тт		dphil VIVA

PTO for a note on the Project Management Scheme and the quarterly GSR Reports

**Y4** 

# A note on the Project Management Scheme and the quarterly Graduate Supervision Reporting (GSR) Reports for the 3.5y DPhil in Materials

The quarterly GSR Reports by student and supervisor(s) are a mandatory requirement of the University.

The project management scheme is intended as a tool to enable and encourage the student to take ownership of their project and to maximise their chances of submission within their funded period. It also enables the development of a valuable 'career skill'.

Other than requiring a project management review by student and supervisor at six-monthly intervals the Department is not prescriptive in exactly how student and supervisor make best use of the project management scheme.

However, one model that can be effective and efficient is:

Student inputs their quarterly GSR report to the on-line GSR system in weeks 7-9 of each term and by mid-September in the Long Vac.

Following this submission, and **prior** to submission of the **supervisor's**\*\* GSR report, it is best practice for the supervisor(s) to meet with the student to discuss the student's progress and GSR report. We shall call this the 'GSR Meeting'.

\*\* From 2018/19 onwards the University has set a **strict four-week window** for this supervisor's submission; for example, week 10 of MT to week -1 of HT.

At the two such GSR meetings in each of years one to three that will **precede** a PMF submission<sup>#</sup> it is logical to review the student's project management and Gantt chart (that is, in advance of the next formal PMF update by the student).

By means of a single sentence in their GSR report the supervisor can confirm that this project management review has taken place. Since our PMF includes a section on training needs, this will meet the Divisional steer that the GSR process includes 'Training Needs Analysis'.

Having read the supervisor's formal GSR report, and in the light of the discussion at the most recent GSR meeting with their supervisor(s), the student is well-placed to capture by means of the PMF a review of their project management (including training needs) and revision of their Gantt chart ready for the imminent PMF submission<sup>#</sup> to 'Materials: PGR Progression'.

For the two quarterly GSR reports per year that do **not** precede a Materials six-monthly project management review the Department will **not** expect a training needs analysis to take place. Unless student or supervisor(s) need to raise concerns, typically these two quarterly GSR reports will be very light-touch and even may not involve a GSR meeting.

<sup>#</sup> For a student following the 3.5 year DPhil in Materials programme, the two occasions in each of years one to three when the GSR meeting will precede a PMF submission are the Weeks 0-1 HT and July PMF submissions. The same approach could be taken for the PMF4 submission in Weeks 0-1 of MT Y4.

## 26.13 Appendix XIII: Research Integrity

### **Research integrity**

Research integrity is a commitment to creating an environment that promotes responsible conduct by embracing standards of excellence, trustworthiness and lawfulness. The University expects its students to maintain the highest standards of integrity in their research.

For individual researchers, research integrity entails a commitment to a range of practices including:

- intellectual honesty in proposing, performing, and reporting research;
- accuracy in representing contributions to research proposals and reports;
- transparency in handling conflicts of interest or potential conflicts of interest;
- protection of human participants in the conduct of research;
- humane care of animals in the conduct of research.

There are no universally correct ways to do research. There are, however, standards of practice which apply generally. Researchers should:

- be aware of the legislation, codes of practice and University policies relevant to their field;
- have the necessary skills and training for their field;
- comply with University and funder policies relating to research data management;
- be aware of the publication rules for the journals they want to publish in;
- ask if they feel something isn't quite right;
- not ignore problems;
- be accountable to the University and their peers for the conduct of their research.

All researchers are expected to be committed to ethical principles and professional standards. Not upholding such standards, either intentionally or through lack of knowledge, damages the scientific process and may harm research participants, colleagues, the University and society as a whole.

### **Policies and resources**

All those involved with research at Oxford are expected to read and abide by the University's <u>Code of</u> <u>Practice and Procedure for Academic Integrity in Research</u>.

Students in the MPLS Division are required to complete the <u>online Research Integrity</u> course by the time they apply for Transfer of Status.

The University's <u>Research Integrity website</u> contains a number of additional resources, including links to information on authorship, conflicts of interest, research data management, health and safety, human participations in research, intellectual property, research involving animals, and research misconduct.

Your supervisor will play an important role in helping you to develop skills for good practice in research, and is the first person you should ask if you have queries about any aspect of research integrity. Other sources of support and advice include your Director of Graduate Studies, other academics in your department, and the ethics advisors in University <u>Research Services</u>.

# The Oxford Week numbering system for Michaelmas, Hilary and Trinity Terms

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