
CAREERS GUIDANCE & INSPIRATION FOR THOSE COMING TO THE END OF THEIR TIME AT OXFORD MATERIALS

In the early evening of Friday 24th October (5 to 7pm), with the support of our Alumnus Committee, we have arranged an informal ‘networking’ event to enable you to discuss career opportunities with several graduates of our Department. Wine, soft drinks and snacks will be provided. It is possible that conversation will continue after this in the Royal Oak. Those who attended in previous years found the event to be very useful.

The event will be held in the Holder Cafe to enable you to mingle with the alumni and to seek information & advice on careers for Materials graduates. A member of the University Careers Service and some staff of the Department will also be present. Overleaf are brief career summaries for each of the alumni who have agreed to attend – this should help you to decide in advance to whom you especially wish to talk.

If your commitments in the lab prevent you from attending at 5pm, do please feel free to join us a little later, but please note that at some point between 5pm and 5.30pm I anticipate asking the alumni present to each take one or two minutes to introduce themselves.

The following alumni and others will be available for one-to-one discussions:

David Armstrong. Independent Research Fellowships (and early steps towards an academic career)
John Aveson. Engineering Consultancy
Mike Burden. Aerospace, Technical Director
Claire Conway. OU Careers Service. Careers Advisor
Henry Dickinson. Company Owner, Metallurgical Industry
Barbara Gabrys. Academic Careers & Careers in University Academic Staff Development
Andrew Geddes. Metal Trading, International Commodities, Commerce
Chris Grovenor. Academic Careers
Christian Lang. Electronics Industry
Liz Moore (nee Rowles). Aerospace
Andrew Nugee. Media
Charles Purnell. Consultant. Powder Metallurgy
Mohinder Saran. Banking and Finance
Anne Smith. Business Analytics
Adrian Taylor. Academic Careers & Careers in University Administration
David Ward. Venture Capital
Stuart Wilkinson. Knowledge Exchange, IP, Licensing
ALUMNI & OTHERS WHO WILL BE AVAILABLE TO OFFER ADVICE  
(Oxford Materials Alumni shown by *)

*David Armstrong. RAE Fellow, Oxford Materials. Independent Research Fellowships (and early steps towards an academic career)

*John Aveson, Fraser-Nash Consultancy. Engineering Consultancy

John graduated in 2009 from St. Anne’s, having spent summers at UCSB and the Leibniz Institute for New Materials in Germany along the way. This was followed by a PhD at the University of Cambridge on the solidification of nickel-based superalloys, using synchrotron radiation to observe the growth and deformation of dendrites in single crystal alloys. Following this, John took up a position at Frazer-Nash Consultancy working in the Materials Performance Group, where he works on a wide variety of materials problems for customers in several industry sectors.

*Mike Burden. Aerospace, most recently Technical Director Dowty Propellers

1964-1967  BA  Natural Sciences Cambridge University
1967-1969  Research Assistant TI Central Research Laboratories
1969-1972  D.Phil Oxford University
1972-1977  Senior Research Scientist TI Central Research Laboratories
1977-1979  Foundry Manager Glow-worm Foundry
1979-1980  Manager Metallurgy Department TI Steel Tube Division Laboratory
1980-1982  Quality Assurance Executive TI Reynolds
1983-1985  Manufacturing Engineering Executive TI Reynolds
1986-1989  Technical Director TI Reynolds
1989-1995  Technical and Research Director TI Aerospace
1995-2007  Technical and New Product Director Dowty Propellers

Claire Conway, OU Careers Service. Careers Advisors

*Henry Dickinson. Company Owner, Metallurgical Industry

Acquired my first business in 1997. Now own and run Norton Aluminium, £20m t/o secondary smelter and sand caster. Establishing a factory in India.
Current President of the Aluminium Federation.

*Andrew Geddes. Metal Trading, International Commodities, Commerce

BA in Metallurgy (St Catz,1965). I started off with Rio Tinto in market development of Pb & Zn, then moved to Al & alumina covering the commercial aspects of their share of Angelsey Aluminium. After 5 years I moved to an international trading company and I have worked in this sector ever since having done business with about 70 countries around the world and regular visitor to 50. A lot of contact on trade finance with the banks, as well as with the London Metal Exchange for hedging of the physical position. Lived mostly in the UK but also in Switzerland for 16 years where I am still a regular visitor for another trading company. I also get appointed as an Expert Witness in commercial disputes on alumina or metals contracts. All extremely interesting and it is a pleasure to be active in this sector of business. It would not have been so easy if I had chosen a different subject to study.

*Chris Grovenor. Academic Careers

*Christian Lang, Oxford Instruments. Electronics Industry
1995 to 2000 Physics Degree (B.Sc. + M.Sc.) at the University of Vienna, Austria
1999-2000 Study grant at the University of Illinois, US
2000-2004 DPhil in Materials at Oxford
2004-2006 Post-doc in Materials at Oxford
2007 - 2010 Senior Scientist at SHARP Laboratories of Europe
2010 - present Product Manager at Oxford Instruments Nanoanalysis
(responsible for EDS, EBSD and WDS application specific solutions and new markets)

*Charles Purnell. Consultant, Powder Metallurgy

1962-1966 BA (Honours) Metallurgy, Oxford University
1966-1980 BNFMRA Research officer
1980-1987 BNFMRA Research services superintendent
1987-1992 Brico Engineering - Powder Metal Development manager
1995-1996 Brico Engineering - Technical Director
1996-1997 T&N Powder Metal Product Group R&D Director
1997-2000 Federal Mogul sintered products group R&D Director

*Liz Moore (née Rowles). Rolls Royce plc

Liz completed her MEng in Materials Science at St Anne’s in 2008 and subsequently did an MSc in Ultra Precision Technologies at Cranfield University. Following this, Liz joined the Rolls-Royce graduate scheme and completed six, three month placements around the business. Liz is currently a Materials Application Engineer based at the Derby site supporting the Civil Aerospace business. This involves supporting the design, manufacture and repair of components for aircraft engines.

*Andrew Nugee. Media Consultant

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*Mohinder Saran, RBS. Banking and Finance

Mohinder works for the Royal Bank of Scotland and prior to that he worked for Deloitte LLP in the Corporate Tax department specialising in Energy, Infrastructure and Utilities. He is a qualified Chartered Accountant and a member of the Institute of Chartered Accountants in England and Wales.

Mohinder recently completed his DPhil in Materials Science from Oxford. He has a BEng(H) in Mechanical Engineering from the University of Sunderland and is a qualified marine engineer with work experience onboard LNG carriers with Petronas Tankers Malaysia.

*Anne Smith. Business Analytics

1989 – 1993 : KPMG – qualified as a chartered accountant. I worked in Birmingham and audited many metal bashing customers amongst others. This provided a grounding in business and experience of vastly different management styles and cultures
1993-1994 : Birmingham University  MSc(Eng) Operational Research. This was the start of my career change to analytics and statistical modelling.
2000-2012: Dun & Bradstreet. D&B are a business information provider with a global database of over 150 million businesses. I built a team of analysts providing value add analysis for customers based upon this data held by D&B. Sales and Marketing solutions included customer profiling, targeted prospecting, demand estimation and market sizing. On the Risk Management side I worked on failure score/risk rating used to assess credit worthiness and set suggested credit limits for trading, and on more specific customer projects integrating risk and value assessments when setting business terms for new and upgrading telecoms customers.
2012-present: SAS software, Analytics Modeller in the new Analytics as a Service initiative. SAS are the world leader in providing software and solutions for Analytics (as well as providing related data integration and warehousing). With massive increases in data creation and availability over the last decade SAS is well placed to provide useful analysis of this ‘Big Data’ to enable the patterns and information it contains to be explored.

Adrian Taylor. Academic Careers & Careers in University Administration

1978 (Gap year), Lab Technician, Pharmaceutical Quality Control
1978-1985, BSc (Chemistry) & PhD (Physical Chemistry), Imperial College
1985-1987, SERC Research Fellow, Imperial Chemistry
1987-1989, Post-doc, Queen Mary Chemistry, Imperial Chem Eng
1989 – 2003: University Lecturer: Brunel (Physical Chemistry); Salford (Physical Chemistry)
Main Research Interests: UHV Surface Science, Chemisorption, and Heterogeneous Catalysis.
2004 – present: Director of Studies, Oxford Materials (a kind of hybrid academic/university administrator!)

*David Ward. Managing Partner, MTI Ventures, Waltham, MA

David is head of Cleantech investing for MTI, has an MA in Materials Science from The University of Oxford. His early career was with industrial materials group Cookson Plc followed by entrepreneurial activity with two MBOs and as CEO of a start-up.

David joined MTI in 2000 and has led many deals & exits in the materials/cleantech sectors. His additional role is to assist investee companies approaching the US market, a challenge often underestimated by European start-ups.

MTI has been early-stage investing from its UMIP Premier Fund. David’s current portfolio responsibilities include Arvia Technology, Exosect, Power Oasis and Oxford Photovoltaics.

*Stuart Wilkinson, Research Services Office, University of Oxford. Knowledge Exchange Manager

Stuart gained an M.Eng in Metallurgy and the Science of Materials at the University of Oxford prior to completing a DPhil in Biomaterials for artificial bone materials.
During the following 3 years Stuart was a Knowledge Transfer Enterprise Fellow and then an Advanced Technologies Programme Manager at Oxford University Begbroke Science Park. At Begbroke he: developed the interactive tools to explain the key concepts in emerging technologies to a general audience; managed the University's Knowledge Transfer Partnership (KTP) office; and developed the Universities part time post-graduate programme and MSc in Nanotechnology.
Stuart then joined Isis Innovation in May 2007 where he was responsible for: evaluating new invention disclosures; seeking intellectual property protection for new technologies; negotiating license agreements on intellectual property; and building new spin-out companies.
The following alumni/ae are unable to attend this year but are happy to be contacted by e-mail if you wish to ask for their advice:

*Annette Bramley, EPSRC. Research Administration & Policy

University of Oxford 1994 -1997 - D.Phil (High Tc Superconductors)

Following my D.Phil I spent 8months as a postdoc at the University of Cambridge working on a EU funded consortium project comprising a number of EU companies and universities. I then joined EPSRC as a portfolio manager in the Chemistry Programme, and have since worked in Engineering, Mathematical Sciences and Complexity Science, as the Head of Programme managing annual research budgets of up to £100M. I had a leadership role during the implementation of a centralised grants administration function for the 8 UK Research Councils, delivering the change management within EPSRC and our external stakeholders during deployment. I'm now in a role where I am leading the delivery of a key organisational strategic objective (Shaping Capability), ensuring that all EPSRC's research and training investments align to areas of UK strength and national importance.

*Graeme Cameron, Wood Group Integrity Management, Deputy Team Lead. Metallurgy and Welding

Graeme completed his MEng at Trinity in 2008 and subsequently took up a position as a Materials Engineer with the Wood Group (a service provider, supporting the oil and gas industry). Graeme has been based primarily in Aberdeen, with stints offshore and in Azerbaijan. Activities have included supporting new subsea development projects, failure investigations, reviewing condition of existing pipelines, and developing management and emergency procedures for subsea pipelines. Graeme currently works as part of the management team for the materials department and is pursuing management / accounting qualifications.

* Eleanor Clarke, Rolls Royce

Ellie completed her DPhil in Materials Science at Oxford in 2008. She then started the Rolls-Royce Marine Engineering Professional Excellence Graduate training programme during which she completed three month placements in Nuclear Materials and Chemistry Group (supporting submarines business), Bergen Diesel Engines Aftermarket Services, Graduate Design and Make Project (devising a testing method for understanding composite behaviour) and Fundamental of Materials. She currently works as a materials applications engineer at Rolls-Royce Bristol site supporting the Defence Aerospace and Marine Gas Turbine businesses.

*David Lee, Wood Group Integrity Management. Materials Engineer

David completed his MEng at Corpus Christi in 2008 and stayed on for an EPSRC-Airbus supported DPhil investigating corrosion protection coatings on aluminium alloys. On completion of his DPhil in 2012, David joined Wood Group (a service provider supporting the oil and gas industry) as a Graduate Materials Engineer. Primarily involved in BP projects, David has developed on condition monitoring integrity systems and is currently working on engineering criticality assessments (fracture mechanics) and materials qualifications for subsea equipment and pipelines.

Anthony Lipmann. Metal Trading

Anthony Lipmann, b 1957, studied English Literature and Language at Pembroke College, Oxford, before going into the metal trade. He has now been in the metals industry for 34 years, working first as a broker for a London Metal Exchange member company, then moving from brokerage into physical metal trading. Moving within this field he gained experience of noble ferro-alloys, bulk commodities including alumina and copper concentrates, and finally minor metals. He worked for several companies including M.C. Brackenbury & Co (one of the last partnerships on the LME), Brandeis, Gerald Metals, Possehl Erzkontor and Wogen Resources Ltd., before reviving the family business in 1993. Lipmann Walton & Co Ltd. is known today for its trade in a wide range of minor metals which include additions for super alloys such as Rhenium, Ruthenium, Tantalum, Niobium, Zirconium, Hafnium, Tungsten and Molybdenum in many forms. Additions for glass, such as Thallium and Indium. Electronic metals such as Gallium. Low-melting elements such as Cadmium.
and Tellurium for thin film solar and many others. Lipmann Walton also commissions production of specific master alloys such as Copper-Zirconium (now replacing Copper-Beryllium in certain applications) as well as Iron-Zirconium for additions in special steels, and trades numerous other forms of scrap containing minor metals. He was Chairman of the Minor Metals Trade Association 2003-06, which is the leading trade body governing the worldwide movement of minor metals, and writes widely on the subject of metals.

*James Minshull, Senior Engineer, Fraser-Nash Consultancy. Engineering Consultancy

After completing his MEng at Teddy Hall, James moved to Cambridge to undertake postgrad study sponsored by Rolls-Royce. His research there involved the characterisation of novel polycrystalline nickel superalloys for use in next generation of gas turbine discs.

Following his PhD, James moved into the nuclear industry. Working first at Sellafield on the post-irradiation examination of nuclear fuel, he then moved to Harwell where he researched metallurgical issues in both civilian and defence reactors. In 2012 James moved to Frazer-Nash Consultancy where he now undertakes a wide portfolio of work in the Nuclear, Aerospace and Oil & Gas Industries.

*Greg Moldovan, Oxford Instruments. Electronics Industry

Greg left his native Transylvania after a degree in Physics to explore solid state devices and scientific instrumentation at Nottingham, Cambridge and now Oxford. After gaining a Ph.D. on materials science and electronic engineering from University of Nottingham on optimisation of GaN-based devices, he then researched reliability of solid state lighting at University of Cambridge, followed by development of direct electron imaging detectors at University of Oxford. Greg has founded and then became R&D Director of Oxford Imaging Detectors, then moved to Oxford Instruments NanoAnalysis where he continues to develop new instrumentation. Whilst now free of vampires, Greg still remains to learn how to play a guitar properly and still gets easily excited about innovation and scientific instruments.

* Katherine Noon, Rolls Royce.

2004 – 2008 MEng in Materials Science from Oxford University (St Anne's College).
2006 Summer Internship with Morgan Advanced Ceramics Stourport on Severn).
2007 Summer Internship with Leoben Laser Centre, Austria through IAESTE; project evaluating DLC deposition onto steels.
2008 - 2010 Rolls-Royce Engineering Graduate Scheme. Placements in Nickel Disc R&D, Failure Investigation, Submarines, Repair & Overhaul (Montreal) and Stress analysis

*Kevin Fisher. General Management

1970-77 BA & DPhil @ Oxford
1977-85 Industrial Research with GKN & Qualcast
1985-87 Project & Commercial Management with Woodville Polymer (UK)
1988-95 General Business Management with Woodville & Dowty Seals (UK)
1995-2003 Managing Director of Woodville, Dowty Seals & Dowty Automotive (Europe)
2003-2006 Marketing Director Europe with Trelleborg Sealing Solutions.

My career has been in manufacturing industries (mainly plastics & elastomers). I began in research, moved through technical & commercial management into general management roles & finally to Board Level. In my last role I controlled a turnover of 380 million euros with a staff of 850 employees in 18 european markets selling ptfe & elastomers seals to a wide range of technical industrial applications.

*Kat Shawyer (née Smart). School teaching

On completion of her DPhil Kat set up a one day science event called Serious about Science with the Ironmongers. The aim of Serious about Science is to raise the profile of science as a viable career option for children from deprived backgrounds. Four successful events have been held over the last four years and
over 1000 children have attended the event. After setting up Serious about Science Kat went on to complete Teach First the teacher training program at an academy in west London. After qualifying as a teacher Kat moved to teach Maths and Physics at a comprehensive school in Kensington.

*Simon Stokes, Partner, Blake Lapthorn (Solicitors), London. Commercial & IP Law

I graduated from St Anne's in MEM in 1986, spent two years at MIT gaining an SM in Technology & Policy and undertaking research in the Materials Systems Laboratory there; I then returned to the UK and trained as a solicitor with a leading patent law firm, Bristows. I have practised commercial and intellectual property (IP) law in London and Oxford since qualification in 1992. My law firm Blake Lapthorn is a major regional and London commercial law firm and we have had an office in Oxford since the early 1900s - the Oxford office is well known in college and university circles. I currently head the firm's London commercial, technology and IP practice. In addition I practice publishing and art law, lecture on copyright and IP law and have written several law books. I am also an Anglican priest, a trustee of charitable publisher SPCK, and Club Counsel of the MIT Club of Great Britain.

*Robert Strawson.  Physics Teacher

When I left the department of materials after a part 2 under Dr. Booker in 1967 I trained as a teacher at Makerere University in Kampala. I went on to teach in Kampala and Fort Portal and lastly at Kyambogo teachers' training college. I returned to England to teach at Malvern College and then became head of Physics at Cranleigh school. This was followed by 5 years teaching in Zimbabwe. I returned from Zimbabwe to join Abingdon School where I was head of Physics for 15 years. When I retired I started working for the Institute of Physics running Inset courses and also am an A level physics examiner.

*Gill Wheeler, Airbus. Aerospace

1982 MSOM St Catz. 1986 joined Airbus (was British Aerospace) in the Materials Laboratory in Weybridge. Moved in Jan 87 to Filton site Materials & Processes Group. Here I specialised in Composites & Adhesives - compiling specifications, qualification programmes, advice to designers on materials properties etc and was involved in the Composite Wing R&T programme. In 1997, I moved into Project Management and Project reporting and have had a range of roles across many aircraft (A340, A400M, A350).