Postdoc Induction 2013

• Department IT facilities (e.g. Fileserver, Printing)
• IT procedures in Materials (e.g. Getting help)
• Online literature (e.g. Web of Knowledge, Oxlip+ )

Dr Paul J Warren – Senior IT Officer
Department IT facilities

- Research Group Computers
- Network Infrastructure
- Department Computer Room (TL)
- Materials Modelling Laboratory (MML)
- Department Library
- Meeting Rooms and Lecture Theatres
- IT support area and Digital Printroom
- Department Website
Research Group Computers

• Research groups provide computing facilities for their own group members.

• Variable provision depending on size of group, type of work and funding!

• Users/groups are responsible for group computers!

• IT staff keep stock of standard equipment for quick deployment
  – memory sticks, cables, disks
  – Stock Desktop  Dell 9020 i7-4770/8Gb/500Gb with 23”(1920x1080)
  – Example printer:  HP LaserJet Pro 400 M401dn
  – Example laptops:  Dell Latitudes, Macbooks etc. - lots of alternatives!
Network Infrastructure

Network connectivity - essential for email, web, filesharing, printing, backup etc…

- Department network – (local IT staff)
  - 100Mbit and 1Gbit to desks
  - 1Gbit between all department buildings
  - 1Gbit firewall (registered devices only)
- University network (IT Services staff)
  - 10Gbit university backbone
  - [http://www.it.ox.ac.uk/status/](http://www.it.ox.ac.uk/status/)
  - university firewall
- Joint Academic Network (JANET)
  - 1Gbit link to the world
Department Computer Room

- The Teaching Laboratory in Holder Building has a computer room open during working hours.
- Priority is given for teaching undergraduates but postgraduates can use it if there are free workstations, which there usually are!
- 12 workstations connecting to department fileserver
- Colour printer, Mono printer, scanner
- (also 6 optical microscopes and 6 laptops)
Materials Modelling Laboratory

- The department has its own High Performance Computation facilities running Linux

- 4 HPC Clusters
  - Zener 13xDualQuadCore (104 cores) ethernet
  - Landau 10xDualQuadCore (80 cores) ethernet
  - Kittel 36xDualQuadCore (288 cores) InfiniBand
  - Ironman 36xDualQuadCore (288 cores) InfiniBand

- Further information about modelling in the MML
  - [http://mml.materials.ox.ac.uk/](http://mml.materials.ox.ac.uk/)
Department Library

• On-line catalogues, on-line resources
  – [http://www.materials.ox.ac.uk/library](http://www.materials.ox.ac.uk/library)
  – Two desktops, but no printing
  – login using your own departmental login account and save files to your own directory space.

• Please use computers for library purposes, not just email etc.

• Wireless signal for personal devices

• Self-service book loan system
Meeting Rooms and Lecture Theatres

- Lecture theatres and meeting rooms all have permanent audio visual facilities (computers, projectors, visualizer etc).

- Room bookings should be made via Reception 73777 / 73680 but bookings can be checked at [http://internal.materials.ox.ac.uk/roombookings](http://internal.materials.ox.ac.uk/roombookings).

- Portable equipment which can also be borrowed:
  - Laptop plus webcam (from IT support)
  - Portable data projectors (from IT support or PSG’s PA at Begbroke)
  - Polycom conference phone (available from reception)

- Video conference facilities – fixed locations:
  - Skype – HR Meeting Room (also most computer devices)
  - Tandberg video conference equipment – BR lecture theatre
  - Webex – similar to skype – departmental account – desktop sharing
IT Support area

- Engineering Technology Building Room 10.14
- Helpdesk open weekdays 8.30am to 5.30pm
- Hardware maintenance area
- itsupport@materials.ox.ac.uk

- Chris Akinola tel.73667
  - Photography - mugshots, publicity, research support
  - Presentations - posters, specialist artwork, publications
  - Meetings support – audio visual, poster-boards, signs
Digital Printroom

Open-access printroom for use by all members of Department when group printing facilities are insufficient. Printroom door is open 9-5pm plus after-hours swipecard access available upon request to IT staff.

- 2 low-end computers
- 1 A4 flatbed scanner (documents and film negatives)
- 1 A4 document scanner (doublesided, autofeed, 30 ppm)
- 1 mono laserprinter (doublesided 30ppm)
- 1 colour laserprinter (capable of A3 and doublesided 15ppm)
Department Website

There is lots of department information available on our website http://www.materials.ox.ac.uk

- People contact details
- Teaching information
- Research information
- Internal
- IT
- Sitemap

Report any errors or send any suggestions to webmaster@materials
Research Group Websites

- Most research groups operate their own websites
  - Hosting: Department webserver or University webserver
  - Department preferred technologies: pmwiki, cmsmadessimple
  - Security updates: IT staff
  - Content updates: group members
  - Contact: Paul Warren

Research Groups
Research within the Department of Materials can usually be divided according to research group, each group being led by one or more senior academic staff. Note however that due to the interdisciplinary nature of many areas of research it is sometimes difficult to decide under which research group a particular research project may lie.

Many research groups have their own webpages which are separate from the department website. Links to research group webpages are arranged alphabetically below.

- Advanced Nanoscale Engineering Group
- Agglomerate Cleanroom
- Biomaterials Group
- Defect Dynamics Group
- Electron Image Analysis Group
- Field Ion Microscopy Group
- Fullerene, Nanotubes and Graphene Group
- Nanomaterials by Design Group
- High Temperature Superconductivity Group
- Materials for Fusion & Fission Power
- Materials Modelling Laboratory
- Micromechanics Group
- Microscopy and Microanalysis Groups
- NanoSIMS Group
- Nanoanalysis Group
- Photonic Nanomaterials Group
- Polymers Group
- Quantum Information Processing IRC
- Quantum and NanoTechnology Group
- Quantum Spin Dynamics Group
- Scanning Tunneling Microscopy Group
- Semiconductor and Silicon Photovoltaics Group
- Solar Energy Materials Initiative
- Scanning Transmission Electron Microscopy Group
- Processing of Advanced Materials
IT Procedures

• Getting Support
• Communicating via Email
• Connecting to the Network
• Computer usage
• Making the most of your computer
• Department services
• IT Training
• Purchasing
Getting IT Support - Department

itsupport@materials.ox.ac.uk

• Dr Paul J Warren - Senior IT Officer
  – paul.warren@materials ; 73727; ETB Room 10.12

• Robert Saunders– IT support / Servers / Desktops
  – robert.saunders@materials ; 73727 ; ETB Room 10.15

• Khalid Schofield – IT support / Networking / Mac
  – khalid.schofield@materials ; 73728 ; ETB Room 10.28

• Chris Akinola- IT support / General / Audio Visuals
  – chris.akinola@materials ; 73667 ; ETB Room 10.14
Getting IT Support – IT Services

• IT Services [http://www.it.ox.ac.uk](http://www.it.ox.ac.uk)
  – (new name of merged OUCS/BSP/ICTST)

• Physical location is very convenient
  – 13 Banbury Road (beside 21BR)

• Help Centre 08.30 - 20.30 Weekdays
  – Advisory, Registration, Help, Training etc.
  – Lots of hardware available for use
  – [help@it.ox.ac.uk](mailto:help@it.ox.ac.uk)
Communicating via Email

- Nexus email and calendars are provided by IT services
  - firstname.lastname@materials.ox.ac.uk
  - Outlook web access http://nexus.ox.ac.uk
  - Local email client e.g. Outlook, Thunderbird+DavMail, MacMail
  - Some mailbox settings on https://register.oucs.ox.ac.uk/self/nexus
  - Lots of guidance and instructions on http://www.oucs.ox.ac.uk/nexus

- Departmental mailing lists are operated by IT staff
  - Everyone should receive notices@materials.ox.ac.uk
  - Other lists as appropriate : e.g. fellows@materials.ox.ac.uk

- Using email
  - Write messages clearly, concisely, preferably in plaintext
  - Most junk should just be deleted. If you are unsure IT staff can advise. e.g. phishing, viruses, hoax viruses, viagra, chainmail, etc.
  - Think about what you write http://www.oucs.ox.ac.uk/email/netiquette/
  - Consider adding your phone contact details to your signature
Connecting to the Network

• The departmental hard-wired ethernet is available to all but computers **must be registered** with IT staff who check systems before adding them to the network
  – Need up-to-date anti-virus software
  – Need fully patched operating system

• The Oxford Wireless Lan is available in most general access areas of the department. Eduroam and OWL are provided by OUCS and can be accessed by any member of the university (**without registration**) by using your remote access account. [http://www.oucs.ox.ac.uk/network/wireless/](http://www.oucs.ox.ac.uk/network/wireless/)

• Network problem?
  – check [http://www.it.ox.ac.uk/status](http://www.it.ox.ac.uk/status) for university-wide problem
  – email itsupport@materials or phone 73728 / 73667 / 73727
Computer Registration

• Pre-registration security checks for personal devices
  – Install Sophos [https://register.ox.ac.uk/software](https://register.ox.ac.uk/software) and perform full scan.
  – Install all operating system updates
    • Microsoft updates [http://update.microsoft.com](http://update.microsoft.com) for Windows
    • Apple Software Updates [http://support.apple.com/kb/HT1338](http://support.apple.com/kb/HT1338) for MacOS
    • Software package updates for Linux
  – Install updates for any additional software packages such as Java, Acrobat Reader, Adobe Flashplayer (ActiveX for Internet Explorer and Plugin for Firefox), Apple Software Updates, Firefox, Chrome etc.

• Registration tasks for IT staff
  – Network registration (DHCP,DNS)
  – Check system configuration /security (see above)
  – Help set/reset departmental account password
  – Help setup access to departmental fileserver (ssh/netstorage/netshare)
  – Help setup access to departmental printers (iprint client)
  – Help register for and install TSM backup software
  – Help setup wirless access to Eduroam with Remote Access account
  – Offer general advice on software and hardware
Computer Usage

• Security is your responsibility
  – Never allow open access, always set a password, never share a password
  – Set passwords to be difficult to guess e.g. iwbiJ1969cheltenhaM

• Antivirus software is essential. Antispyware is useful too.
  – IT support staff manage the department’s anti-virus protection (Sophos)
  – Contact itsupport@materials if you think you have a virus or malware

• Backup and archive
  – Formalise your weekly backup procedure (also archive regularly)
  – Register for OUCS’s weekly backup service HFS / TSM
    Part II students should ask Paul Warren to register their backups

• Rules and regulations
  – You have already agreed to the University Rules
  – Department does not allow P2P file sharing e.g. iPlayer, BitTorrent.
Making the most of your computer

• Read the Departmental advice about software [http://www.materials.ox.ac.uk/it/itsoftware.html](http://www.materials.ox.ac.uk/it/itsoftware.html)

• Software licenses distinguish between department-owned and personal-owned computers.

• General software is available from the OUCS on-line shop
  – see both pricelist and site licensing information (SLS)
  – purchase orders avoid paying VAT and help keep records
  – pay for ALL software licenses (including downloaded shareware etc.)

• Some site-licensed scientific software available from IT staff
  – Mathematica – mathematical programming
  – Matlab – data analysis and graphing
  – Origin - graphing and data analysis
  – Other specialist software e.g. ABAQUS, COMSOL, LabVIEW etc.
Departmental Online Services

- Departmental Account
  - Username same as university but password different
  - Reset password via [http://pwm.materials.ox.ac.uk/pwm](http://pwm.materials.ox.ac.uk/pwm)

- File storage (secure, backed up, accessible)
  - 1Gb per user. More available on request via itsupport@materials
  - [http://www.materials.ox.ac.uk/local/it/materials-fileserver.html](http://www.materials.ox.ac.uk/local/it/materials-fileserver.html)
  - Novell client32 from Teaching Laboratory and elsewhere
  - file sharing \FILES_STAFF\STAFF from department
  - ssh oums1234@materials2.materials.ox.ac.uk from anywhere
  - [https://netstorage.materials.ox.ac.uk/netstorage](https://netstorage.materials.ox.ac.uk/netstorage) from anywhere

- Printing – all departmental network printers
  - [http://www.materials.ox.ac.uk/local/it/materials-printing.html](http://www.materials.ox.ac.uk/local/it/materials-printing.html)
  - [http://iprint.materials.ox.ac.uk/ipp](http://iprint.materials.ox.ac.uk/ipp) for automatic driver installation
IT Training

• IT services run an extensive range of training courses which are FREE to all members of department
  – Byte-sized 1hr lunchtime sessions
  – 1/2 day and full day courses
  – ECDL qualification
    – [http://www.it.ox.ac.uk/courses/](http://www.it.ox.ac.uk/courses/)
    – [http://www.oucs.ox.ac.uk/itlp](http://www.oucs.ox.ac.uk/itlp)
    – [http://portfolio.it.ox.ac.uk/](http://portfolio.it.ox.ac.uk/)

• Look to your future
  – what additional skills will you employer want?
  – where else will you get free IT training?
Personal Purchases

• Software entitlements
  – University software licenses for personal hardware
    http://www.oucs.ox.ac.uk/shop
    http://www.oucs.ox.ac.uk/shop/downloads.xml
  – Microsoft OS+Office and Adobe via http://e5.onthehub.com/

• Hardware entitlements
  – NDNA http://ndna.procurerweb.ac.uk lists suppliers/resellers
    • Dell, HP, Samsung, Toshiba, Stone, Viglen, Acer, Lenovo
  – Example of Dell procedure
    • view pricing via iProcurement/Premier pages – restricted login
    • contact account manager to arrange payment (creditcard)

• Purchasing advice from IT staff (Paul Warren)
Literature Searching

• How to find on-line resources
  – [http://www.materials.ox.ac.uk/library](http://www.materials.ox.ac.uk/library)

• Searching using Web of Knowledge
  – [http://wok.mimas.ac.uk](http://wok.mimas.ac.uk)

• Reading journals on-line
  – access from Oxford or via VPN or via Shibboleth
  – [http://oxlip-plus.bodleian.ox.ac.uk](http://oxlip-plus.bodleian.ox.ac.uk)

• Bibliographic software for managing references
  – [Endnote](http://www.endnotex.com), [Refworks](http://refworks.com), [Mendelay](http://www.mendelay.com) or [Zotero](http://www.zotero.org)

*Demonstration time!*
The End

Send all IT queries to

itsupport@materials.ox.ac.uk

Also see OUCS induction presentation at

http://www.oucs.ox.ac.uk/its3/resources/induction.xml