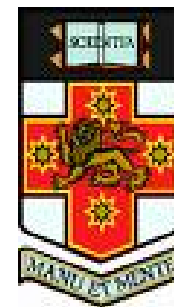


UNSW ANALYTICAL CENTRE OUTREACH GROUP PRESENTS :

HOW ANALYTICAL TOOLS AND SERVICES CAN HELP YOU GET THE BEST DATA FOR YOUR PROJECT NEEDS



November 12th 10:30am-12:00noon
Chemical Sciences Lecture Theatre M18
Tea Break courtesy of Analytical Centre

Topics: Nuclear Magnetic Resonance, Electron Microscopy, Solid State and Elemental Analysis, Mass Spectrometry, Biomedical Imaging

Who should come; All welcome

Hons, PhD students, Post-grads, ILP students, Post-Docs, Researchers

RSVP analytical@unsw.edu.au

Group/Facility	Time	Group representative	Talk Titles
NMR	10:30-10:50am	Dr Donald Thomas	NMR and you
SSEA	10:50-11:10am	Dr Yu Wang, Dr Mohan Bhadbhade, Dr Bill Gong	Crystallography and Surface Science
Tea break	11:10-11:20am	Analytical Centre Tea Room	cakes, tea, coffee and chat with staff about your project needs
EMU	11:25-11:40am	Dr Quadir Zakaria	Analytical capabilities of UNSW Electron Microscopy Facilities
BMSF	11:40-12:00noon	Dr Mark Raftery Dr Phoebe Phillips (invited speaker)	Overview of the BMSF Pancreatic Stellate Cells Stimulate Acinar Enzyme Secretion via the Production of Acetylcholine
Announcing BMIF		Grainne Moran	Introducing the new BMIF

12TH NOVEMBER 2009

OUTREACH SEMINAR PROGRAM

Group/Facility	Time	Group representative/s	Invited Speaker	Talk Titles
NMR Synopsis	10:30-10:50am	Dr Donald Thomas		NMR and you Using Nuclear Magnetic Resonance (NMR) materials in solution, as solids and even gases can all be studied. Investigation of polymers, minerals, biological materials and synthetic compounds can all be easily performed. And it is not just the humble proton that we can interrogate, most nuclei on the periodic table are in some way NMR active. The possibilities are endless.
SSEA Synopsis	10:50-11:10am	Dr Yu Wang, Dr Mohan Bhadbhade and Dr Bill Gong		Crystallography and Surface Science Dr Bill Gong: All solid materials interact with their surroundings through their surfaces. The chemical composition of these surfaces determines the nature of the interactions. XPS analysis tells about elements and their chemical environments in the surface layer of only 5 nm of any solid state material.
Tea break	11:10-11:20am	Analytical Centre Tea Room	cakes, tea, coffee, chat with analytical centre staff about your project needs, view posters	
EMU Synopsis	11:25-11:40am	Dr Quadir Zakaria		Analytical capabilities of UNSW Electron Microscopy Facilities The analytical capabilities of electron microscopy facilities in UNSW will be highlighted in the short talk. It will be an opportunity for the attendees to get insight into the diverse strengths of EMU in terms of instrumentations and their potential applications, and how these capabilities can be utilized to push the research boundaries in a wide variety of sectors.
BMSF Synopsis	11:40-12:00noon	Dr Mark Raftery		Overview of the BMSF The Bioanalytical Mass Spectrometry Facility (BMSF) at UNSW's upper (Wallace Wurth Building) and lower campus sites (Analytical Centre) provides a range of advanced mass spectrometric research capabilities including Proteomics and profiling and quantification of low molecular weight compounds. The BMSF maintains an up-to-date range of instruments, software and ancillary equipment for these types of analyses including FT ICR, QToF, triple and single quadrupole mass spectrometers interfaced with nano-LC or capillary-GC for separation of mixtures before analysis. Research project may be undertaken by staff or students from UNSW in close collaboration with BMSF staff. Researchers may be trained and encouraged to become more independent as their project progresses. A brief outline of the capabilities within the facility will be presented.
			Dr Phoebe Phillips	Pancreatic Stellate Cells Stimulate Acinar Enzyme Secretion via the Production of Acetylcholine This presentation will highlight the application of LC/MSMS to successfully measure acetylcholine produced by a resident cell of the pancreas – the pancreatic stellate cell (PSC). We postulated that PSCs may have a role in mediating digestive enzyme secretion in the pancreas by secreting the neurotransmitter acetylcholine (ACh) which, in turn, stimulates acinar cell enzyme secretion.
Announcing BMIF Synopsis		A/Prof Grainne Moran		Introducing the Biomedical Imaging Facility (new in 2010) The Biomedical Imaging Facility (BMIF) will be set up in November in the new Lowy Cancer Research building. It will offer training and research support in cutting-edge fluorescence microscopy and related imaging techniques. The facilities will initially be opened to experienced users and training of new users will start in 2010.