

Tuesday, 2 December 2008

Registration

8:00 AM - 6:00 PM

Main Hotel Foyer

Opening Session and Keynote I

9:00 AM - 10:30 AM

Ballroom

9:00am

Robert Lamb

Australian Synchrotron annual review *abs#001*

9:30am

Ian Gentle

Probing liquid surfaces with synchrotron radiation *abs#002*

Morning Tea

10:30 AM - 11:00 AM

Conference Lobby

Australian Synchrotron Update

11:00 AM - 12:20 PM

Ballroom

11:00am

Rohan Dowd

Operations of the Australian Synchrotron Accelerator *abs#003*

11:20am

Christopher Myers

Virtual Beamline eResearch Environment at the Australian Synchrotron *abs#004*

11:40am

Richard Farnsworth

High performance computing at the Australian Synchrotron *abs#005*

12:00pm

Bridget Ingham

The New Zealand Synchrotron Support Programme: Activities and Progress in 2008 *abs#006*

Lunch

12:20 PM - 1:00 PM

Restaurant

Poster Session

1:00 PM - 2:25 PM

First Floor Poster Area

Patryck Allen

Structural Study of Modulated Fresnoite Compounds as Novel Pb-free Piezoceramic Materials *abs#101*

Abram Bishay

Synthesis of Nano TiO₂ from one-step processing of ilmenite sands *abs#102*

Marian Cholewa

Development of high resolution and high efficiency detectors for X-rays *abs#103*

Martin Donnelley

Non-invasive Monitoring of Airway Health: Synchrotron X-ray Tracking of Particle Motion *abs#104*

Katy Evans

XANES evidence for sulphur speciation in Mn-, Ni- and W-bearing silicate melts *abs#105*

Rong Fan

Synchrotron Microprobe Analysis of Nickel Laterites *abs#106*

Denise Fernando

The speciation of foliar Mn in hyperaccumulating plants. *abs#107*

Jack Glover

High-accuracy measurements of the X-ray mass-attenuation coefficient of copper *abs#108*

Ailar Hajimohammadi

One-part mix geopolymer from geothermal silica and sodium aluminate *abs#109*

Xiaojing Hao

XANES investigation of Si nanocrystals embedded in a SiO₂ matrix *abs#110*

Daryl Howard

Elemental Mapping of C. Elegans: The First Experiment at the Microspectroscopy Beamline *abs#111*

Sally Irvine

Measurement of hard-x-ray coherence in the presence of a diffuser *abs#112*

Peter Kappen

The structure of iron in multi-walled carbon nanotubes - Linking EXAFS data to growth parameters *abs#113*

Ben Kent

The role of sugars as protectants against dehydration and freezing damage in biological membranes. *abs#114*

Annie Nguyen

Investigating the Fate of Gallium Complexes in Biological Media Using X-ray Absorption Spectroscopy *abs#115*

Stephen Robinson

Uptake of the endogenous iron chelator, phytic acid, by astrocytes as revealed by synchrotron infrared microspectroscopy *abs#116*

Lalitha Selvam

Inner shell ionization of sugar modified cytidine nucleoside analogs *abs#117*

Withdrawn *abs#118*

Arthur Smith

Structure-Optical Investigation of Blue Phosphorescent Molecules for OLEDs *abs#119*

David Sprouster

Vibrational properties of Cobalt nanoparticles *abs#120*

Kevin Stevens

Synchrotron X-ray tomography characterisation of creep damage in HP stainless steel alloy *abs#121*

Nathan Webster

In situ studies of scale formation under Bayer processing conditions *abs#122*

Qingdi Zhou

Synchrotron Diffraction Studies on Perovskites LaMn_{1-x}Z_xO₃ (Z = Cr, Ga) *abs#123*

Quan Zhu

Substituent effects on structures and properties of model molecules of guanine *abs#124*

Life Sciences I

2:00 PM - 3:20 PM

Hampton Room

2:00pm

Peter Lay

Biomedical Synchrotron Applications of Metal Speciation in Biological Fluids, Tissues and Cells *abs#007*

2:20pm

Jeffrey Crosbie

Acute Cellular Response of Normal and Malignant Tissue to High Dose

- Synchrotron Microbeam Radiation Therapy *abs#008*
- 2:40pm **Anna Safitri**
Determination of Cr Speciation in Biological Fluids by Synchrotron-Based X-Ray Absorption Spectroscopy (XAS) *abs#009*
- 3:00pm **Philip Heraud**
Early stages of human embryonic stem cell (HESC) differentiation characterized by synchrotron FT-IR microspectroscopy *abs#010*

High Energy X-rays

- 2:00 PM - 3:20 PM Brighton Room
- 2:00pm **Dimitrios Kostas**
Quantitative measurements of bio-oil sprays using time resolved x-radiography *abs#011*
- 2:20pm **T Welberry**
Diffuse Scattering as an aid to the understanding of polymorphism in pharmaceuticals. *abs#012*
- 2:40pm **Peter Lynch**
X-ray Laue Microspectroscopy *abs#013*
- 3:00pm **John Daniels**
High-energy x-ray scattering for multi-length scale materials analysis *abs#014*

Afternoon Tea

- 3:20 PM - 3:40 PM Conference Lobby

Imaging

- 3:40 PM - 5:00 PM Hampton Room
- 3:40pm **Martin de Jonge**
Differential phase contrast in the scanning transmission x-ray microscope *abs#015*
- 4:00pm **Marcus Kitchen**
Quantitative phase contrast x-ray imaging of the lung *in vivo* *abs#016*
- 4:20pm **Damian Myers**
Synchrotron tomography of mouse tibia utilising the Elettra synchrotron light source *abs#017*
- 4:40pm **David Paterson**
The Microspectroscopy Beamline at the Australian Synchrotron: design and capabilities *abs#018*

Materials & Condensed Matter

- 3:40 PM - 5:00 PM Brighton Room
- 3:40pm **Patrick Kluth**
Density fluctuations and ion tracks in swift heavy ion irradiated SiO₂ *abs#019*
- 4:00pm **Jimmy Ting**
A Strategy to Prepare Multiferroic Materials *abs#020*
- 4:20pm **Paolo Imperia**
XAS of TiO₂ Dispersed in a Glass Matrix and Ferromagnetic TiO₂ Thin Films Studied by XMCD *abs#021*
- 4:40pm **Ying Chen**
Wide Bandgap Determination of Boron Nitride Nanotubes Using Synchrotron VUV Photoluminescent Spectroscopy *abs#022*

Welcome Reception

- 5:00 PM - 6:30 PM Conference Lobby & Restaurant

Wednesday, 3 December 2008

Registration

8:00 AM - 3:30 PM

Conference Lobby

Keynote II

9:00 AM - 10:30 AM

Ballroom

9:00am

Peter Colman

Relenza revisited - designed drugs and drug resistance *abs#023*

9:50am

2008 Australian Synchrotron Thesis Medal Presentation

Morning Tea

10:30 AM - 11:00 AM

Conference Lobby

Life Science II

11:00 AM - 12:20 PM

Hampton Room

11:00am

Nathan Cowieson

Structural analysis of the HIV gag poly-protein during viral maturation using synchrotron light *abs#024*

11:20am

Xing Yu

RECOGNITION OF SIALIC ACID DERIVATIVES BY ROTAVIRUS CARBOHYDRATE-BINDING DOMAIN VP8* *abs#025*

11:40am

Leanne Dyksterhuis

Structural Characterisation of Basement Membranes *abs#026*

12:00pm

Mark Hackett

SR-FTIR-Mapping, FTIR-FPA-Imaging and PIXE mapping of Hypoxic Brain Tissue in Cerebral Malaria *abs#027*

Environmental & Minerals

11:00 AM - 12:20 PM

Brighton Room

11:00am

Richard Collins

Aluminium, iron and sulfur speciation in coastal lowland acid sulfate soil environments of north-eastern New South Wales *abs#028*

11:20am

Christopher Chantler

The X-ray Extended Range Technique for condensed matter research XAFS and biological sciences: Theoretical & Experimental Databases *abs#029*

11:40am

Adele Jones

The Effect of Si and Natural Organic Matter on the Fe(II)-catalysed Transformation and Reactivity of Fe(III) Minerals *abs#030*

11:40am

Weihua Liu

Concurrent determination of copper solubility and speciation in supercritical low-density water using XAS *abs#031*

Lunch and Poster Viewing

12:20 PM - 1:20 PM

Restaurant

Beamline Breakout - Imaging and Medical Therapy

1:20 PM - 3:00 PM

Hampton Room

Beamline Breakout 2 - XAFS

1:20 PM - 3:00 PM

Brighton Room

Beamline Breakout 3 - InfraRed

1:20 PM - 3:00 PM

Williamstown Room

Beamline Breakout 4 - SAXS

1:20 PM - 3:00 PM

Middle Park Room

Australian Synchrotron Tour

3:15 PM - 5:30 PM

Main Hotel Foyer

Buses will depart from the front of the hotel at 3.15pm so please gather in the main foyer of the hotel.

Combined User Meeting and AOFSSRR Banquet

7:30 PM - 11:00 PM

Eureka 89, Eureka Tower

Buses will depart from the front of the hotel at 7.00pm

Thursday, 4 December 2008

Registration

8:00 AM - 5:00 PM

Conference Lobby

Next Generation Science Keynote

9:00 AM - 10:30 AM

Ballroom

Welcome & Introduction - **Rob Lamb** (Australian Synchrotron)

Opening Address - **Y Amemiya** (AOFSSRR President)

Korean Science and Technology Policy Relating to Synchrotron Facilities and Research

- **Ah Young Kim**

Anton Barty

Femtosecond dynamic diffraction imaging with free electron lasers: X-ray snapshots of ultra-fast nanoscale phenomena *abs#032*

Morning Tea

10:30 AM - 11:00 AM

Conference Lobby

Next Generation Photon Science I

11:00 AM - 12:20 PM

Ballroom

11:00am

Keith Nugent

Prospects for very high resolution imaging using x-ray free electron lasers *abs#033*

11:20am

Shin-ichi Adachi

From picosecond toward femtosecond time-resolved X-ray science *abs#034*

11:40am

Zhen-tang Zhao

SXFEL - A Soft X-Ray Free Electron Laser Test Facility in China *abs#035*

12:00pm

Michael Grunze

Digital in-line soft X-ray holography *abs#036*

Lunch

12:20 PM - 1:00 PM

Restaurant

Poster Session

1:00 PM - 2:00 PM

First Floor Poster Area

Byungcheol Ahn

Nondestructive, Quantitative Synchrotron Grazing Incidence X-ray Scattering

Analysis of Cylindrical Nanostructure in Supported Thin Films *abs#131*

Byungcheol Ahn

Grazing Incidence X-ray Scattering Studies on Templating Nanopores in Networked Polymer Thin Films with a Multi-armed Porogen *abs#132*

S.A. Chen

Pressure-induced structural distortion of TbMnO₃: A combined XAS and XRD study *abs#133*

Sukmin Chung

Early stages of collapsing pentacene crystal by Au *abs#134*

Richard Clements

A Synchrotron Investigation Of The Electronic Structure Of Lanthanide Zirconates *abs#135*

Susan Graham

The electronic structure of bacterial s-layers *abs#136*

Suk Gyu Hahm

A Synchrotron X-ray Scattering Study on the Structure of Pepsin in Solution *abs#137*

Suk Gyu Hahm

Imprinting Nanopores in Spin-On Polymeric Dielectrics with Using Six-Armed Star Porogens *abs#138*

Yuying Huang

SSRF XAFS Beamline and its Preliminary Commissioning *abs#139*

Sangwoo Jin

Quantitative Analysis of Gyroid Structure in Block Copolymer with Synchrotron Grazing Incidence X-ray Scattering *abs#140*

Sangwoo Jin

Synchrotron X-Ray Scattering Studies on Molecular Structures of Star-Shape Polystyrenes with Various Arms *abs#141*

Kenichi Kato

The Next-Generation Debye-Scherrer Camera for Visualization of Bonding Electron in Kinetics *abs#142*

MunGyung Kim

Stored Beam Orbit Stability of the PLS *abs#143*

G Kim

Novel Brush Polymers Bearing Phosphorylcholine Bristle Ends: Synthesis, Structure, Properties and Biocompatibility *abs#144*

G. Kim

Molecular Fibers based on the Honeycomb-like Self-Assembly of an α -Helical Polypeptide *abs#145*

J Kim

Nonempirically-determined oxygen positions in a Prussian blue cyanide *abs#146*

Robin Kirkham

Maia Spectroscopy Detector System *abs#147*

J. Lee

BPM Low-level Control System Upgrade at the PLS Storage Ring *abs#148*

Zhong Li

Commissioning for XRD beam-line of SSRF *abs#149*

Saumitra Saha

Inner-shell ionization spectra of adenine imino tautomers *abs#150*

Bryan, BY. Shew

X-ray Micromachining of mm-Wave Mode Converter *abs#151*

Anton Stampfl

The adsorption of glycine on alumina: Surface complexation and polymerisation *abs#152*

Renzhong Tai

Observation of structural dynamics in materials by Photon Correlation Spectroscopy *abs#153*

Yoshifumi Takashima

Present Status of Central Japan Synchrotron Radiation Research Facility Project *abs#154*

Feng Wang

Inner-shell ionization spectroscopy of nucleic acid purine bases *abs#155*

Jie Wang

SSRF BL16B1 for small-angle x-ray scattering *abs#156*

Shiqiang Wei

Experimental and theoretical investigations on room temperature ferromagnetism of dilute magnetic semiconductors *abs#157*

Yanqing Wu

Designing a new EUV beamline for X-ray interference Lithography *abs#158*

Shao Xia

Development of Cryogenically Cooled Double Crystal Monochromator in SSRF *abs#159*

Masaki Yamamoto

Protein micro-crystallography with a new micro-beam beamline at SPring-8 *abs#160*

Next Generation Photon Science II

2:00 PM - 3:00 PM

Ballroom

2:00pm

Takaki Hatsui

Recent progress of the X-ray Free Electron Laser Project at SPring-8 *abs#037*

2:20pm

TBC

2:40pm

Harry Quiney

The use of X-ray free-electron laser sources in molecular structure determination: theoretical challenges *abs#039*

Afternoon Tea

3:00 PM - 3:30 PM

Conference Lobby

Industrial Research at AOFSSR Facilities

3:30 PM - 5:00 PM

Hampton Room

3:30pm

Akira Kira

Growing Industrial Research Activities in SPring-8 *abs#040*

3:50pm

Moonhor Ree

Demands of Industrial utilization in PLS *abs#041*

4:10pm

Herbert Moser

Nano science and technology at SSSL *abs#042*

4:30pm

Soichi Wakatsuki

Industrial applications and the PX/Pharmaceutical contract beamline project at the Photon Factory *abs#043*

Beamline Breakout - Soft X-Ray

3:30 PM - 5:00 PM

Brighton Room

Beamline Breakout - Microspectroscopy

3:30 PM - 5:00 PM

Williamstown Room

Beamline Breakout - Powder Diffraction

3:30 PM - 5:00 PM

Middle Park Room

Beamline Breakout - Protein Crystallography

3:30 PM - 5:00 PM

Port Melbourne Room

Reception

5:00 PM - 6:00 PM

Conference Lobby & Restaurant

Phillip Island Tour

5:00 PM - 10:30 PM

Main Hotel Foyer

Buses will depart from the front of the hotel

Friday, 5 December 2008

Registration

8:00 AM - 4:00 PM

Conference Lobby

AOF Facility Updates

9:00 AM - 10:40 AM

Ballroom

9:00am

John Murray GibsonUS Light Sources - today and in future *abs#044*

9:40am

Ken LiangTaiwan Photon Source *abs#045*

10:00am

Hongjie XuCommissioning Status of Shanghai Synchrotron Radiation Facility *abs#046*

10:20am

Rob LambThe Australian Synchrotron *abs#047***Morning Tea**

10:40 AM - 11:00 AM

Conference Lobby

AOFSRR Science Highlights

11:00 AM - 12:45 PM

Ballroom

11:00am

Alfred BaronmeV-Resolution IXS: Recent Results and Future Prospects *abs#048*

11:30am

Yaw-Wen YangIn-plane-aligned growth of pentacene thin films on rubbed polymethylene surface *abs#049*

11:45am

Jianhua HeProtein Science Facility Program at SSRF *abs#050*

12:00pm

Chris RyanHigh performance X-ray fluorescence imaging using a massively parallel detector array and real-time spectral deconvolution: a catalyst for new applications in geology *abs#051*

12:15pm

Hyun SongOrientation-induced crystallization of poly(ethylene terephthalate) fibers with controlled microstructure *abs#052*

12:30pm

Yang Ping

From atoms to layers - structural characterization of crystalline amorphous semiconductor and functional materials *abs#053*

Lunch & Poster Viewing

12:00 PM - 1:40 PM

Conference Lobby & Restaurant

AOFSRR Science Highlights II

1:40 PM - 2:00 PM

Ballroom

Masaharu Oshima

Recent advances in Synchrotron PEEM and new project of 3D-nano-ESCA *abs#054*

AOF Council Report & Discussion Forum

2:00 PM - 3:30 PM

Ballroom

Report from AOG Council Meeting by Yoshiyuki Amemiya and Keng Liang Discussion Session
Announcement and presentation of the host of the next AOFSRR meeting

Meeting Close and Afternoon Tea

3:30 PM - 4:00 PM

Conference Lobby