

Weekly Bulletin

Research School of Physical Sciences & Engineering

Volume 34 Number 29
25 – 31 July 2008

FROM THE DIRECTOR'S OFFICE

The Director will be chairing the IUMRS-ICEM2008 Conference in Sydney from 28 July - 1 August inclusive. During this time Professor Brenton Lewis will be Acting Director.

SCHOOL SEMINARS

EME Seminar

Friday 25 July 2008

11.00am-12.00 noon

“Possible and impossible combinations in III-V nanowires and nanotrees”

by Professor Reine Wallenberg, Director of nCHREM, Polymer and Materials Chemistry, Lund University, SE-221 00 Lund, Sweden.

Link Building Seminar Room, RSPHysSE

ALL WELCOME

EME Seminar

Friday 25 July 2008

3.30pm

“Geometric Patterns & Structure of Solids”

by Zbigniew H. Stachurski

Link Bldg Seminar Room

ALL WELCOME

PRL Seminar

Monday 28 July 2008

3:00-4:00pm

“Pulsed Laser Ablation and Deposition of Thin Films for Organic Light Emitting Diodes”

by Professor Teck-Yong Tou from the Faculty of Engineering, Multimedia University, Selangor, Malaysia

Seminar Room Link Building

STAFF MOVEMENTS

Professor Mukunda Das, Theoretical Physics, will participate and give an invited talk in the International Conference on Strongly Coupled Coulomb Systems to be held at Camerino, Italy from 29 July - 2 August. He will also visit and

give a seminar in the Physics Department of National University of Singapore on 4 August.

A recently completed PhD student Dr Santhosh Kumar, is leaving for a post Doctoral position at the University of Madison, Wisconsin, where he will apply charge exchange recombination spectroscopy to study plasma behaviour in the MST symmetric torus. PRL wishes him well in his new research endeavour.

VISITORS

Professor Teck-Yong Tou from the Faculty of Engineering, Multimedia University, Selangor, Malaysia will be visiting PRL on Monday, 28 July 2008 and will give a seminar on Pulsed Laser Ablation and Deposition of Thin Films for Organic Light Emitting Diodes.

PHOTONICS COURSES

Members of the School are welcome to participate in part or all of the following courses in photonics, including lectures and lab work, being offered this semester: **PHYS3059 - Optical Waveguide Materials** - covering various technologies and materials for fabricating planar optical waveguides and devices, together with non-linear waveguide phenomena presented by 5 researchers from RSPSE. This course starts 9.00am Monday, 28 July in PSYC G5, building 39, and runs all semester with additional lectures at 9am on Wednesdays and 12noon on Thursdays in the same place; **PHYS3051 - Microphotonics, Biophotonics & Nanophotonics** - covering the theory and use of optical fibres and waveguides in a diverse range of applications, including sensing, security, architecture, automobiles, medicine, astronomy, & nanotechnology. It includes a range of laboratory experiments. Lectures are at 12noon Mondays, 11am Wednesdays in BoZo B17 & 9am Fridays in Physics T. Contact John Love (John.D.Love@anu.edu.au) for further details.

OBITUARY

PROFESSOR ROWLAND SAMMUT

It is with sadness that we report the passing of Rowland Sammut on Thursday, 17 July, after a long battle with cancer. Rowland was an early researcher in optical fibres in Australia and came to the Dept of Applied Mathematics from UNSW in 1973 and completed a PhD in 1976. Thereafter he was a Research Fellow at Southampton University, then a Radio Research Board Fellow and Queen Elizabeth II Fellow back in Applied Mathematics. Subsequently he became a lecturer in Electrical Engineering and Computer Science at UNSW and after 1986 rose to be Professor of Mathematics at ADFA. He made valuable contributions in several areas of guided wave photonics. He is survived by his wife Margaret.

GRANTS & AWARDS

Australian Academy of Science

Program Number: 61281

Title: Dorothy Hill Award

E-mail: ac@science.org.au

Web Site: <http://www.science.org.au/>

Program URL: <http://www.science.org.au/awards/hill.htm>

The award will support research in the earth sciences including reef science, ocean drilling, marine science and taxonomy, by female researchers under 40 years at the closing date, except in the case of significant interruptions to a research career. An honorarium of \$5,000 will be awarded. The award will be made annually and will be restricted to candidates who are normally resident in Australia and for research conducted mainly in Australia.

Deadline(s): 30/08/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?61281

Australian Academy of Science

Program Number: 61282

Title: Fenner Medal

E-mail: ac@science.org.au

Web Site: <http://www.science.org.au/>

Program URL:

<http://www.science.org.au/awards/fenmed.htm>

The Fenner Medal recognises distinguished research in plants (excluding the biomedical sciences) by scientists under 40 years at the closing date. The award is made annually and is restricted to candidates who are normally resident in Australia and for research conducted mainly in

Australia. An honorarium of \$1000 is paid and in the case of a shared award it is divided.

Deadline(s): 30/08/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?61282

Australian Academy of Science

Program Number: 61283

Title: Gottschalk Medal

E-mail: ac@science.org.au

Web Site: <http://www.science.org.au/>

Program URL:

<http://www.science.org.au/awards/gottschalk.htm>

The Gottschalk medal is to recognise outstanding research in the medical sciences by scientists under 40 years at the closing date. The awardee may not be a Fellow of the Academy. The award is made annually and is restricted to candidates who are normally resident in Australia and for research conducted mainly in Australia. An honorarium of \$1,000 will be paid and in the case of a shared award it will be divided.

Deadline(s): 30/08/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?61283

Australian Academy of Science

Program Number: 61284

Title: Pawsey Medal

E-mail: ac@science.org.au

Web Site: <http://www.science.org.au/>

Program URL:

<http://www.science.org.au/awards/pawsey.htm>

The Pawsey Medal recognises outstanding research in physics by scientists under 40 years of age. The award is made annually and is restricted to candidates who are normally resident in Australia and for research conducted mainly in Australia.

Deadline(s): 30/08/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?61284

Australian Academy of Science

Program Number: 89259

Title: Moran Medal

E-mail: ac@science.org.au

Web Site: <http://www.science.org.au/>

Program URL:

<http://www.science.org.au/awards/moran.htm>

The sponsor provides an award to recognise outstanding research by scientists 40 years and under, except in the case of significant interruptions to a research career, in one or more of

the fields of applied probability, biometrics, mathematical genetics, psychometrics and statistics.

Deadline(s): 30/08/2008

DEADLINE NOTE

The award is normally made every two years.\

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?89259

Australian Academy of Science

Program Number: 89471

Title: Lyle Medal

E-mail: ac@science.org.au

Web Site: <http://www.science.org.au>

Program URL: <http://www.science.org.au/awards/lyle.htm>

The purpose of the medal is to recognise outstanding achievement by a scientist in Australia for research in mathematics or physics.

Deadline(s): 30/08/2008

DEADLINE NOTE

The award is normally made every two years.

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?89471

Australian Academy of Science

Program Number: 89472

Title: Jaeger

E-mail: ac@science.org.au

Web Site: <http://www.science.org.au>

Program URL:

<http://www.science.org.au/awards/jaeger.htm>

The award is made to a scientist for investigations of a high order into the solid Earth or its oceans carried out in Australia or having some connection with Australian Earth science.

Deadline(s): 30/08/2008

DEADLINE NOTE

The award is normally made every two years.

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?89472

Australian Academy of Science

Program Number: 89475

Title: Haddon King Medal

E-mail: ac@science.org.au

Program URL

<http://www.science.org.au/awards/haddon.htm>

The Haddon King Medal recognises the contributions of the late Haddon King to the application of the geological and related sciences to the search for mineral deposits in Australia.

Deadline(s): 30/08/2008

DEADLINE NOTE

The award is normally made every two years.

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?89475

American Institute of Aeronautics & Astronautics

Program Number: 76460

Title: Goddard Astronautics Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

The sponsor provides an award to recognize notable achievement in the field of astronautics.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76460

American Institute of Aeronautics & Astronautics

Program Number: 76461

Title: Reed Aeronautics Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

The sponsor provides an award to an individual for achievements in the field of aeronautical science and engineering.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76461

American Institute of Aeronautics & Astronautics

Program Number: 76462

Title: Dryden Lectureship in Research

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

The lecture emphasizes the great importance of basic research to the advancement in aeronautics and astronautics and is a salute to research scientists and engineers.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76462

American Institute of Aeronautics & Astronautics

Program Number: 76463

Title: Aeroacoustics Award

E-mail: carols@aiaa.org

Web Site:

<http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented for an outstanding technical or scientific achievement resulting from an individual's contribution to the field of aircraft community noise reduction.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76463

American Institute of Aeronautics & Astronautics

Program Number: 76464

Title: Aerodynamics Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented for meritorious achievement in the field of applied aerodynamics, recognizing notable contributions in the development, application and evaluation of aerodynamic concepts and methods.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76464

American Institute of Aeronautics & Astronautics

Program Number: 76465

Title: Aerodynamic Measurement Technology Award (Temporarily Suspended)

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=290>

Temporarily Suspended--An award is presented for continued contributions and achievements toward the advancement of advanced aerodynamic flowfield and surface measurement techniques for research in flight and ground test applications.

Deadline(s): 01/10/2007

DEADLINE NOTE

This award is offered biennially in even numbered years

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76465

American Institute of Aeronautics & Astronautics

Program Number: 76466

Title: Aerospace Design Engineering Award (Temporarily Suspended)

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=290>

Temporarily Suspended--An award is presented to recognize design engineers who have made outstanding technical, educational or creative achievements that exemplifies the quality and elements of design engineering.

Deadline(s): 01/10/2007

DEADLINE NOTE

This award is offered biennially in even numbered years.

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76466

American Institute of Aeronautics & Astronautics

Program Number: 76468

Title: Air Breathing Propulsion Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented for meritorious accomplishment in the science of air breathing propulsion, including turbo-machinery or any other technical approach dependent upon atmospheric air to develop thrust, or other aerodynamic forces for propulsion, or other purposes for aircraft or other vehicles in the atmosphere or on land or sea.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76468

American Institute of Aeronautics & Astronautics

Program Number: 76469

Title: Distinguished Service Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

The award gives unique recognition to an individual member of AIAA who has distinguished himself or herself over a period of years by service to the Institute.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76469

American Institute of Aeronautics & Astronautics

Program Number: 76470

Title: Engineer of the Year Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is given to an individual member of AIAA who has made a recent significant contribution that is worthy of national or international recognition.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76470

American Institute of Aeronautics & Astronautics

Program Number: 76471

Title: Fluid Dynamics Award

E-mail: carols@aiaa.org

Web Site:

<http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented for outstanding contributions to the understanding of the behavior of liquids and gases in motion as related to need in aeronautics and astronautics.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76471

American Institute of Aeronautics & Astronautics

Program Number: 76472

Title: Ground Testing Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented for outstanding achievement in the development or effective utilization of technology, procedures, facilities, or modeling techniques or flight simulation, space simulation, propulsion testing, aerodynamic testing or other ground testing associated with aeronautics and astronautics.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76472

American Institute of Aeronautics & Astronautics

Program Number: 76473

Title: International Cooperation Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented to recognize individuals who have made significant contributions to the initiation, organization, implementation and/or management of activities with significant United States involvement that includes extensive international cooperative activities in space, aeronautics or both.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76473

American Institute of Aeronautics & Astronautics

Program Number: 76475

Title: Jeffries Aerospace Medicine and Life Sciences Research Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented for outstanding research accomplishments in aerospace medicine and space life sciences.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76475

American Institute of Aeronautics & Astronautics

Program Number: 76476

Title: Plasmadynamics and Lasers Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented for outstanding contributions to the understanding of the physical properties and dynamical behavior of matter in the plasma state and lasers as related to need in aeronautics and astronautics.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76476

American Institute of Aeronautics & Astronautics

Program Number: 76477

Title: Propellants and Combustion Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented for outstanding technical contributions to aeronautical or astronautical combustion engineering.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76477

American Institute of Aeronautics & Astronautics

Program Number: 76478

Title: Public Service Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award honors a person outside the aerospace community who has shown consistent and visible support for national aviation and space goals.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76478

American Institute of Aeronautics & Astronautics

Program Number: 76479

Title: Structures, Structural Dynamics and Materials Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented to an individual who has been responsible for an outstanding recent technical or scientific contribution in aerospace structures, structural dynamics or materials.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76479

American Institute of Aeronautics & Astronautics

Program Number: 76480

Title: Survivability Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented to recognize outstanding achievement or contribution in design, analysis implementation and/or education of survivability in an aerospace system.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76480

American Institute of Aeronautics & Astronautics

Program Number: 76481

Title: Sustained Service Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented to recognize sustained, significant service and contributions to AIAA by members of the Institute.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76481

American Institute of Aeronautics & Astronautics

Program Number: 76482

Title: Theodore W. Knacke Aerodynamic Decelerator Systems Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented to recognize significant contributions to the effectiveness and/or safety of aeronautical or aerospace systems through development or application of the art and science of aerodynamic decelerator technology.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76482

American Institute of Aeronautics & Astronautics

Program Number: 76483

Title: Thermophysics Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented for an outstanding singular or sustained technical or scientific contribution by an individual in thermophysics, specifically as related to the study and application of the properties and mechanisms involved in thermal energy transfer and the study of environmental effects on such properties and mechanisms.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76483

American Institute of Aeronautics & Astronautics

Program Number: 76484

Title: von K Lectureship in Astronautics

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

The award recognizes an individual who has performed notably and distinguished himself/herself technically in the field of astronautics.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76484

American Institute of Aeronautics & Astronautics

Program Number: 76486

Title: Wyld Propulsion Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented for outstanding achievement in the development or application of rocket propulsion systems.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?76486

American Institute of Aeronautics & Astronautics

Program Number: 80272

Title: Durand Lectureship for Public Service

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

An award is presented for notable achievements by a scientific or technical leader whose contributions have led directly to the understanding and application of the science and technology of aeronautics and astronautics for the betterment of mankind.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?80272

American Institute of Aeronautics & Astronautics

Program Number: 91148

Title: Aerospace Communications Award

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401>

The Aerospace Communications Award is presented for an outstanding contribution in the field of aerospace communications.

Deadline(s): 01/10/2008

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?91148

American Institute of Aeronautics & Astronautics

Program Number: 93803

Title: Wright Brothers Lectureship in Aeronautics

E-mail: carols@aiaa.org

Web Site: <http://www.aiaa.org/content.cfm?pageid=289>

Program URL:

<http://www.aiaa.org/content.cfm?pageid=401&AwardView=Award&sortX=datestart&lsearch=1>

The sponsor provides funding for a lectureship emphasizing significant advances in aeronautics by recognizing major leaders and contributors.

Deadline(s): 01/10/2008

DEADLINE NOTE

This lectureship is presented biennially (in odd numbered years) at the AIAA Aerospace Sciences Meeting.

Link to full program description:

http://australia.infoed.org/spin/spin_prog.asp?93803