

# Weekly Bulletin

Research School of Physical Sciences & Engineering

Volume 34 Number 24  
20 – 26 June 2008

## SCHOOL COLLOQUIUM (JOINTLY WITH JCSMR)

**Tuesday 1 July**

4.00pm

“Advances in Cancer Detection and Diagnosis: The Revolution in Bioimaging and Micro-molecular analysis”

by Dr Thomas M Baer

Stanford Photonics Research Center, Dept of Applied Physics, Stanford University

Leonard Huxley Lecture Theatre

Drinks and Light Refreshments will be provided in the RSPSE Link Tea Room after the Colloquium

## SCHOOL SEMINARS

**CUDOS Seminar**

**(Correction) Thursday, 26 June**

11.00am

“Fiber research at DTU Fotonik in 2008”

by Assoc Professor Ole Bang

Fiber Sensors and Supercontinuum Group

DTU Fotonik, Technical University of Denmark

Link Building Seminar Room, Oliphant Building

All welcome

**CUDOS Seminar**

**Wednesday, 2 July**

2.00pm

“Gradient-Index Optics in Nature and Man Made”

by Duncan T Moore

Vice Provost of Entrepreneurship

Kingslake Professor of Optical Engineering

University of Rochester

Link Building Seminar Room, Oliphant Building

All welcome

## STAFF MOVEMENTS

Professor Vladimir Bazhanov, Department of Theoretical Physics, will be absent from 18 June - 9 July to give invited talks at the Liouville Field

Theory Conference in Moscow and at the Workshop on Probabilistic Methods in Mathematical Physics in Montreal.

Robert Robson is leaving his position as Chief Operations Officer for the Centre for Antimatter-Matter Studies on Friday, 20 June. He will be taking up a joint research appointment within the Centre, split between Atomic and Molecular Physics Laboratories at ANU and the School of Mathematics, Physics and IT at James Cook University, Townsville.

Dr Cormac Corr is attending the World Hydrogen Energy Conference in Brisbane from 15 -19 June and is presenting a paper titled “Plasma Technology Serving the Hydrogen Economy”.

Professor George Dracoulis, Department of Nuclear Physics, will be in the UK from 19 June - 3 July 2008. During this time he will attend, as a keynote speaker, the 50th anniversary on Nuclear Shapes and Sizes at the University of Surrey, followed by a visit to the University of Surrey for collaborative work and to present a colloquium on Nuclear Issues. Professor David Hinde will be acting Head of Department during this period.

## VISITORS

Drs Jessica Metcalf, Richard Gillestie and Nic Rawlence from the University of Adelaide and Dr Romain Rebiex from CEREGE, France, are visiting the School this week for research collaboration with members of the AMS group in the Department of Nuclear Physics.

## MECHANICAL WORKSHOP MANAGER

Please welcome Tom McGuinness back to the School after a stint at JSMCR. He has taken over the role of Mechanical Workshop Manager and can be contacted on 57193 or Tom.McGuinness@anu.edu.au .

## **TECHNICAL RESOURCES REVIEW**

A committee has been established to review the School's technical resources, both human and infrastructure, with a clear understanding that the primary goal is to make recommendations that maintain the outstanding level of technical support that presently exists. Its Terms of Reference are:

1. To conduct a skills audit of the expertise across the Schools technical officer base and review the projected School demands on technical expertise over the next 5 -10 years in order to identify areas of risk
2. To conduct an audit of the technical infrastructure resources, principally facilities and equipment within Central and Departmental workshops
3. To assess the effectiveness of the current model of technical support provision and recommend an appropriate model for the future
4. To assess prospects of better interactions and sharing of technical resources across the School, the College and the University.

The committee membership is:

Professor Stephen Buckman (Chair - AMPL/CAMS)

A/Prof Tim Senden (Appl. Maths)

A/Prof Boyd Blackwell (HoD, PRL - Toro)

Mr Tony Cullen (Electronics Unit)

Professor David McClelland (Head, Physics Faculty)

Mr Graeme Cornish (Acting School Services Manager)

Dr Nikolai Lobanov (NP)

Mr Mike Avent (Business Manager, RSES)

Mr Rob Tidy (School HR Manager - Secretary)

The Committee will be formally seeking submissions which broadly address the Terms of Reference from Heads of Departments, Head Technical Officers, Heads of Technical Units and Workshops and from other Research Schools within the College of Science.

Any member of staff who has an interest in these issues is invited to make a submission to the committee, or to bring their ideas and thoughts to the attention of any member of the committee in person.

The deadline for written submissions (to the Committee Secretary please) will be Friday June 20th, following which the committee will arrange to meet with interested parties.

## **GRANTS AND AWARDS**

### **Optical Society of America**

Program Number: 60413

Title: Leadership Award--New Focus/Bookham Prize

E-mail: awards@osa.org

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/newfocusbookham/default.aspx>

This award recognizes an individual or group of optic professionals who has made a significant impact on the field of optics and/or made a significant contribution to society.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?60413](http://australia.infoed.org/spin/spin_prog.asp?60413)

### **Optical Society of America**

Program Number: 60414

Title: Adolph Lomb Medal

E-mail: awards@osa.org

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/adolphlomb/default.aspx>

This award is presented to a person who has made a noteworthy contribution to optics at an early age.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?60414](http://australia.infoed.org/spin/spin_prog.asp?60414)

### **Optical Society of America**

Program Number: 60415

Title: David Richardson Medal

E-mail: awards@osa.org

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/davidrichardson/default.aspx>

This award recognizes those who have made significant contributions primarily to optical engineering, primarily in the commercial and industrial sector.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?60415](http://australia.infoed.org/spin/spin_prog.asp?60415)

### **Optical Society of America**

Program Number: 60416

Title: R. W. Wood Prize

E-mail: [awards@osa.org](mailto:awards@osa.org)

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/rwood/default.aspx>

This award recognizes an outstanding discovery, scientific or technical achievement, or invention in the field of optics.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?60416](http://australia.infoed.org/spin/spin_prog.asp?60416)

### **Optical Society of America**

Program Number: 60417

Title: Frederic Ives Medal/Jarus W. Quinn

Endowment

E-mail: [awards@osa.org](mailto:awards@osa.org)

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/ivesquinn/default.aspx>

This award recognizes overall distinction in optics.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?60417](http://australia.infoed.org/spin/spin_prog.asp?60417)

### **Optical Society of America**

Program Number: 60418

Title: Esther Hoffman Beller Medal

E-mail: [awards@osa.org](mailto:awards@osa.org)

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/estherbeller/default.aspx>

The award is presented for outstanding contributions of optical science and engineering education. Consideration is given to outstanding teaching and/or original work in optics education that enhances the understanding of optics.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?60418](http://australia.infoed.org/spin/spin_prog.asp?60418)

### **Optical Society of America**

Program Number: 60419

Title: Distinguished Service Award

E-mail: [awards@osa.org](mailto:awards@osa.org)

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/distinguishedservice/default.aspx>

An award is presented to individuals who, over an extended period of time, have served the Optical Society of America in an outstanding way, especially through volunteer participation in its management, operation or planning in such ways as editorship of a periodical, organization of meetings, or other service to the Society.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?60419](http://australia.infoed.org/spin/spin_prog.asp?60419)

### **Optical Society of America**

Program Number: 60420

Title: Edwin H. Land Medal

E-mail: [awards@osa.org](mailto:awards@osa.org)

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/edwinland/default.aspx>

The award recognizes individuals in one of the following areas: the science of optics; the mechanisms of vision; the properties and use of light; and the creation, manipulation and communication of images of all kinds. The individual must have demonstrated, from a base of scientific knowledge, pioneering entrepreneurial creativity that has had major public impact. The entrepreneurial activity can be carried on in an industrial or business setting, in academe, or in government.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?60420](http://australia.infoed.org/spin/spin_prog.asp?60420)

### **Optical Society of America**

Program Number: 60422

Title: Max Born Award

E-mail: [awards@osa.org](mailto:awards@osa.org)

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/maxborn/default.aspx>

The award is presented to a person who has made outstanding contributions to physics in general and to optics in particular.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?60422](http://australia.infoed.org/spin/spin_prog.asp?60422)

### **Optical Society of America**

Program Number: 60423

Title: Joseph Fraunhofer Award/Robert M. Burley Prize

E-mail: [awards@osa.org](mailto:awards@osa.org)

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/fraunhoferburley/default.aspx>

The award was established to recognize significant accomplishments in the field of optical engineering.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?60423](http://australia.infoed.org/spin/spin_prog.asp?60423)

### **Optical Society of America**

Program Number: 60424

Title: Nick Holonyak, Jr. Award

E-mail: [awards@osa.org](mailto:awards@osa.org)

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/nickholonyak/default.aspx>

The award is presented to an individual who has made significant contributions to optics through the development of semiconductor-based light-emitting diodes and semiconductor lasers.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?60424](http://australia.infoed.org/spin/spin_prog.asp?60424)

### **Optical Society of America**

Program Number: 60426

Title: Ellis R. Lippincott Award

E-mail: [awards@osa.org](mailto:awards@osa.org)

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/ellislippincott/default.aspx>

The award is presented to an individual who has

made significant contributions to vibrational spectroscopy as judged by his or her influence on other scientists.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?60426](http://australia.infoed.org/spin/spin_prog.asp?60426)

### **Optical Society of America**

Program Number: 60427

Title: William F. Meggers Award

E-mail: [awards@osa.org](mailto:awards@osa.org)

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/meggersaward/default.aspx>

The award is presented for outstanding work in spectroscopy.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?60427](http://australia.infoed.org/spin/spin_prog.asp?60427)

### **Optical Society of America**

Program Number: 60433

Title: Charles Hard Townes Award

E-mail: [awards@osa.org](mailto:awards@osa.org)

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/charlestownes/default.aspx>

The award is given to an individual or group of individuals for outstanding experimental or theoretical work, discovery, or invention in the field of quantum electronics.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?60433](http://australia.infoed.org/spin/spin_prog.asp?60433)

### **Optical Society of America**

Program Number: 67681

Title: C.E.K. Mees Medal

E-mail: [awards@osa.org](mailto:awards@osa.org)

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/meesmedal/default.aspx>

This award is presented to a recipient who exemplifies the thought that "optics transcends all boundaries," interdisciplinary and international

alike.

**Deadline(s): 01/10/2008**

DEADLINE NOTE

This award is presented biennially, in odd-numbered years.

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?67681](http://australia.infoed.org/spin/spin_prog.asp?67681)

### **Human Frontier Science Program Organization**

Program Number: 79560

Title: Cross-Disciplinary Fellowships

E-mail: fellow@hfsp.org

Web Site:

[http://www.hfsp.org/how/appl\\_forms\\_CDF.php](http://www.hfsp.org/how/appl_forms_CDF.php)

Program URL:

[http://www.hfsp.org/how/PDFs/Fellowship\\_App\\_Guidelines\\_2009.pdf](http://www.hfsp.org/how/PDFs/Fellowship_App_Guidelines_2009.pdf)

The sponsor provides a fellowship intended for applicants with a Ph.D. degree in physics, chemistry, mathematics, engineering, material sciences or computer sciences who want to train in a biological research environment or work in a team of scientists that investigates a fundamental biological question.

**Deadline(s): 28/08/2008**

DEADLINE NOTE

The deadline for pre-registering on the HFSP web site in order to receive a password to access the online application documents is 28 August 2008.

The deadline for submitting applications for award year 2009 is 11 September 2008 at 16:00 Strasbourg time.

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?79560](http://australia.infoed.org/spin/spin_prog.asp?79560)

### **Optical Society of America**

Program Number: 93539

Title: Emmett N. Leith Medal

E-mail: awards@osa.org

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/leith/default.aspx>

The sponsor provides an award to recognize seminal contributions to the field of optical information processing.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?93539](http://australia.infoed.org/spin/spin_prog.asp?93539)

### **Optical Society of America**

Program Number: 97411

Title: Herbert Walther Award

E-mail: awards@osa.org

Web Site:

[http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom\\_form.asp](http://www.osa.org/aboutosa/awards/osaawards/nominationform/nom_form.asp)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/Walther/default.aspx>

An award is given to recognize distinguished contributions in quantum optics and atomic physics as well as leadership in the international scientific community.

**Deadline(s): 01/10/2008**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?97411](http://australia.infoed.org/spin/spin_prog.asp?97411)