## Welcome

Dear Members and Friends

Welcome to the sixteenth edition of the ARCNN News.

ICONN 2008 was a grand success! We had over 800 registrants from over 25 countries. Thanks to Paul and Abid and the entire ICONN team for their excellent efforts. Thank you to everyone who participated and helped out at the Conference. The manuscripts are in the process of being reviewed.

We have also completed the Annual Report for 2007. You will be able to view it on the ARCNN website in the next few days.

The Distinguished Lecturer Tour featuring Professor Horst Hahn from Germany went very well. Thank you to all the host Universities.

The ECR-PG symposium held on the weekend before ICONN 2008, at the Melbourne Business School was also a great success. Thank you to Adam Micolich and Tom Rufford, and all those that attended.

The deadline for the Young Nanotechnology Ambassador Awards has been extended to the end of this month. Make sure you get your applications in quickly!

Looking forward to your active participation in Network activities

C Jagadish, Convenor

# Update profiles, address changes etc

Please remember to advise address and email changes so that the ARCNN member database is kept up to date. Your current details can be checked on your online profile at <a href="http://www.ausnano.net/index.php?page=profiles">http://www.ausnano.net/index.php?page=profiles</a>.

If you have not submitted an online profile, we would encourage you to do so as this provides a valuable resource for researchers seeking collaboration with people who have experience or expertise in a particular nanotechnology area. A search facility is provided on the Members Profiles webpage. Researchers looking to fill postdoc positions may also use the member database to locate students with research interests and experience in particular fields.

#### **ARCNN Nanoforum**

The ARCNN nanoforum (http://forum.ausnano.net.au/) is now fully online and ready for use. It is intended to serve as a bulletin/discussion board for the nanotechnology community in Australia, so if you'd like to post notices there (e.g., positions open, confs/workshops, events, questions, discussion points, etc), please feel free to do so. You will need to register first, which you can do by clicking the register link at the top left corner of the website. When registering could you please ensure that your username is reflective of your actual name (e.g., surname, firstname\_surname or something similar), so that people can identify who is making postings. Adam Micolich is the current moderator for this forum, if you have problems, questions or suggestions for topics to be posted to the forum site, feel free to email him at mico@phys.unsw.edu.au

# **Student Representative**

We would like to thank Mr Thomas Rufford for serving as the ARCNN Student Representative over the last two years. As his term as the representative has come to an end we will be calling for nominations this month. An email will be sent around to all students with the procedure, so if the idea of representing your fellow students as part of our Management Committee and expanding your CV appeals to you, then make sure you check your emails!

#### **ARCNN Awards and Deadlines**

#### **ARCNN Long and Short Term Visits**

The ARCNN offers Long term and Short term funding for visits within Australia to successful applicants throughout the year. Further information about any of the funding available can be found at: <a href="http://www.ausnano.net/content/funding\_and\_sponsorship">http://www.ausnano.net/content/funding\_and\_sponsorship</a>

#### ARCNN Overseas Travel Fellowships

The ARCNN offers 5 Overseas Travel Fellowships every 6 months. The deadlines for this year are the 29th February and 31st October. Details can be found at:

http://www.ausnano.net/content/overseas travel

#### Young Nanotechnology Ambassador Awards 2008

The ARCNN will award selected students in each state/territory of up to \$2000 to present and facilitate interest in Nanotechnology at local schools.

The deadline for this year's round of applications for the Young Nanoscience Ambassador Awards the end of May. Further information about the Program can be found at:

http://www.ausnano.net/content/young ambass awards

# **ECR-PG Symposium Report**

ARCNN held its third Early Career Researcher and Postgraduate Student (ECR&PG) Symposium at the Melbourne Business School on the weekend of 23rd and 24th February 2008. The Symposium was held immediately before the ICONN Conference and coincided with the ARC/NSF International Forum on Sustainable Nanomanufacturing, which was held at the same venue.

Approximately 30 ECRs and postgraduate students registered and attended the event, with 25 of these participants giving 20 minute talks on their research. In addition to these contributed talks, spanning a wide range of nanotechnology research topics, there were two invited talks during the Symposium:

- On Saturday evening, Prof. Jonathon Manton, Executive Director of the ARC Mathematics, Information and Communication Sciences Program, presented a very informative talk about "Obtaining your first ARC grant", including an introduction to how the various ARC funding schemes fit together and some very useful tips for early career researchers on how to write better funding proposals.
- On the Sunday morning, Dr Andrew Harris from the University of Sydney and A/Prof. Mikel Duke from Victoria University, presented a session titled 'Tips for success after your Ph.D.', where each of these two young scientists reflected upon the path they took from the completion of their Ph.D. studies to where they are now, the various things that they had learned along the way and wish they had known before hand, and some salient advice for the present generation of students wishing to follow similar paths into academia.

On the Saturday night, a barbeque was held jointly with the nanomanufacturing forum, which provided an excellent opportunity for the ECRs and students to meet some of the World's leading nanotechnology researchers, and for these same researchers to meet some of Australia's brightest young researchers in the same area.

# **ICONN 2008 Report**

This year's International Conference on Nanoscience and Nanotechnology (ICONN 2008) was held in Melbourne, Victoria from Monday the 25th to Friday the 29th of February.

The conference, chaired by Paul Mulvaney and Abid Khan, attracted the interest of more than 800 registrants from over 25 countries. Of those that registered, 450 were presenters, both poster and oral. The exhibition aspect of the Conference was also impressive, with 23 exhibitors filling up all the available table tops and booths.

The week began with 4 Short courses presented by Michael Grätzel, William Ducker, Taeghwan Hyeon and Robert Lamb. Monday night also included a report on the US-Australia Workshop on Sustainable Nano-Manufacturing Outcomes. The Workshop had taken place during the weekend before ICONN2008 at the Melbourne Business School.

On Tuesday, the plenary sessions began. Some of the most respected Scientists in the field of Nanotechnology gave fascinating insights into their current research. The plenary speakers were Clayton Teague from the National Science and Technology Council, Don Eigler from the IBM Almaden Research Centre, Michael Grätzel from EPFL, Lars

Samuelson from the University of Lund, Vicki Colvin form Rice University, Taeghwan Hyeon from Seoul National University, Yicheng Lu, from Rutgers University and Samuel Stupp from Northwestern University.

The program for this year included 7 Symposia, one of which was an industry stream that focused on Nanoindustry and Health and Safety, a first for ICONN. The Health and Safety Symposium included a panel discussion on Thursday, made up of Paul Wright, Colin Raston, Brian Priestly, Vicki Colvin and Andrew Maynard.

The poster sessions, held on the Tuesday and Thursday nights, showcased the range of work that was being undertaken by students and ECRs from all over Australia and overseas. It also proved an excellent opportunity for students and ECRs to network with industry representatives and other well known researchers. Congratulations to all the poster prize winners.

The social activities were also a huge success, with the Conference dinner being an excellent culmination of the week's events. The food was great, the company fantastic and the music worth dancing all night to. The photos from the dinner will be available on the ICONN website very shortly.

The Australian Office of Nanotechnology ran a public forum on Nanotechnology, which was facilitated by ABC Science Journalist Robyn Williams. The forum was well attended and many issues were discussed.

Science teachers and school students also participated in ICONN 2008 and presented demonstrations about Nanotechnology.

The Australian Science Media Centre hosted a Media lunch for the industry leaders with presentations from nanotechnology experts on the potential of this technology for the industry, leading into active debate and discussions.

The week ended with a tour of the Australian Synchrotron. The full program containing all the details is still available on the ICONN website.

#### **NANOQ**

Our first publication - NanoQ has been completed and launched at ICONN2008. It contains articles about anything and everything Nano. It is a twice a year publication, and we are accepting contributions. The deadline for the next issue is the 31st August 2008. So if you have anything that you believe deserves to be published, please send us your contributions. Anyone interested in obtaining a copy of NanoQ, send an email to <a href="mailto:arcnn@ausnano.net">arcnn@ausnano.net</a> along with a mailing address.

# **Upcoming ARCNN Supported Events**

2008 Asia-Pacific Symposium on Nanobionics

22nd - 26th June 2008

Held at: ARC Centre of Excellence for Electromaterials Science Intelligent Polymer Research Institute, Innovations Campus University of Wollongong

Details: http://www.uow.edu.au/conferences/2008.html

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#### International Conference on Electronic Materials 2008

#### **IUMRS-ICEM 2008**

28th July - 1st August 2008

Held at: Hilton Sydney, Sydney Australia

Abstract deadline: extended until the 29th February

More details: www.aumrs.com.au/ICEM-08/

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17th International Conference on Photochemical Conversion and Solar Energy 2008

27 July - 1st August 2008

Held at: Sydney Convention and Exhibition Centre, Sydney

Details: http://www.ips17.com/

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Workshop on Bio/Micro/nanofluidics, Complex Flows and Rheology

1-2 September 2008

Held at Monash University, Victoria

Contact: Dr Leslie Yeo

Email: leslie.yeo@eng.monash.edu.au

#### Other Nano events

EU 7th Framework Programme (FP7)

Further information including brochures and presentations can be found at

http://www.ausnano.net/index.php?page=links

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IEEE-Nano 2008

18-21 August 2008

Held at: Arlington, TEXAS USA

Further information: <a href="http://ewh.ieee.org/tc/nanotech/nano2008/">http://ewh.ieee.org/tc/nanotech/nano2008/</a>

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The Nanowerk website lists all the International Nano events that you will ever need to know about: http://www.nanowerk.com/phpscripts/n\_events.php

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# **Nanotechnology Facilities Database**

ARCNN has added a Nanotechnology Research Facilities and Capabilities database onto our site. The aim of this database is to be a first access site to all the Nanotechnology Infrastructure facilities and capabilities available to nanotechnology researchers. All group leaders who are interested in adding their facilities onto the ARCNN site are asked to add facilities/equipment/Infrastructure. NCRIS people have been using the Network web page to get information about activities in various institutions in the country.

#### Other Nano News

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David Gallagher has stepped down from his position as the Head of the Australian Office of of Nanotechnology. All the best for his retirement from the Australian Office of Nanotechnology (AON). The new head of the AON is Jonathan Chamarette, and we wish them both luck in their respective futures.

#### **The Australian National Fabrication Facility Limited**

Since its inception under the National Collaborative Research Infrastructure Strategy in 2007, the Australian National Fabrication Facility (ANFF) has established a national network offering micro and nano fabrication facilities to all Australian publicly funded and industry based researchers.

In April, ANFF signed an agreement with Monash University which will see a \$45 million purpose-built facility known as the Melbourne Centre for Nanofabrication developed next to the Synchrotron. Monash University is the lead agency for the project, which is a collaborative initiative between the Commonwealth and Victorian Governments, the CSIRO and Victorian universities: Deakin, La Trobe, Swinburne, RMIT and the University of Melbourne.

In February, ANFF participated at ICONN 2008, which attracted over 800 delegates, and launched the new website <a href="www.anff.org.au">www.anff.org.au</a>. The website includes a comprehensive and up-to-date listing of ANFF capabilities and access mechanisms. The website launch was supported by sponsorship of the poster session happy hour and prize, and CEO Rosie Hicks also gave a presentation "Supporting Industry and Innovation, Establishing Australia's Fabrication Facilities", in the industry stream, which was very well attended. The poster prize was won by Mr Benjamin Mashford from the University of Melbourne. The initial response to the ANFF has been extremely positive, with potential users and employees making contact.

Apart from there new developments, access to the ANFF facilities has already commenced and bookings are now available. So, to discuss how the ANFF can meet your fabrication needs, contact Rosie Hicks on rosie.hicks@anff.org.au or call 0438 454 077.

### **Bandwidth Foundry International Commences NCRIS Program**

Bandwidth Foundry International (BFI), your Sydney-based photomask manufacturer and micro-fabrication facility, would like to bring to your attention that it has commenced offering subsidized services and facility access to Australian institutions through the National Collaborative Research Infrastructure Strategy (NCRIS), <a href="www.ncris.dest.gov">www.ncris.dest.gov</a>.au program. If you would like to access BFI's facilities or services under the NCRIS program please contact David O'Connor on

bfi.info@bwfoundry.com, or phone (02) 8374 5300.

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# **ARCNN Admin Contacts**

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For further information on ARCNN events, contact Liz or Ilonka, or go to: www.ausnano.net