Were you published Jan-Dec 2008? Have you considered applying for the Olle’ Prize

Nominations for this year’s award are drawing to a close. This prize is run by the NSW and has a long history. We would encourage our members to consider submitting a journal article, book or book chapter for this year’s award. For more details see page 10.

Seminar - "Interesting moments in the life of an electrochemist"

Associate Professor Dieter Britz from the Department of Chemistry, University of Aarhus, Denmark, will present a seminar entitled "Interesting moments in the life of an electrochemist" on Tuesday, 17th March at Macquarie University. Associate Professor Britz obtained his PhD from Sydney University in 1967 and has since been working on a number of electrochemical topics, starting with ac polarography, impedance measurements, instrumentation and, the last 20 years or so, digital simulation. The seminar will briefly outline some of the highlights (as seen by the presenter) of this research.

Venue: Room 322, Building F7B, Macquarie University (please refer to the campus map at http://www.ofm.mq.edu.au/maps_regional.htm; parking information is available at http://www.ofm.mq.edu.au/parking_intro.htm)

Date: Tuesday, March 17, 2009

Time: 6 pm for 6:30 pm

Cost: Free

All attendees are welcomed to join the speaker at a dinner at their own cost after the seminar.

Seminar supported by RACI NSW Analytical Chemistry Group and Electrochemistry Division
**Calling all (available) on hands on deck**

As you may know the Crystal comp and Nyholm Season is well underway - all schools from last years competition have been contacted - some have already signed up for this year. We purchased the database of all public school addresses in NSW in excel format and have collected an assortment of addresses from the independent schools. The flyers have been completed and are ready for mail out

I understand that it is quite a busy time for many of you - however next Thursday (19th March) there will be an envelope stuffing production line for our mail out set up in the Seminar Room, Ground Floor, Dalton Building, School of Chemistry, UNSW from 6pm. For anybody who may have an hour or two to spare we are calling for "all (available) hands on deck". We do plan to supply an evening meal (most likely Pizza) for willing participants. ( if you know of any students who may be interested in this venture we would welcome them along)

Even if you can spare only one hour it will be of great assistance ( contact racinsw@chem.unsw.edu.au for more details)

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**Position wanted**

Experienced university lecturer and project manager requires position related to waste water and/or microbiology. For further information please contact guyohandja@yahoo.fr

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**Website of the Week**

How clean is your power plant?

[http://carma.org/](http://carma.org/)
Seminar – hosted by NSW RACI Young Chemists

Date Thursday March 26th

Time 6pm Drinks and nibbles

6.30pm Presentation begins

Venue Seminar Room, Ground Floor, Dalton Building, School of Chemistry, UNSW

“A history of platinum metal- from the Conquistadors to Chemotherapy and Chemical Catalysis”

Guest Speaker Emeritus Professor Stanley Livingstone

In addition to his presentation on Platinum, Prof Livingstone has kindly agreed to make some observations on the notable changes he has seen and experienced throughout his career in chemistry (from the 1950’s through to today)

The NSW RACI Young Chemists is inviting anybody who wishes to attend. We especially welcome chemistry students, but we would also welcome anyone within the chemistry community- as it would be great for our younger audience to network and meet with a broad spectrum people working within the chemistry profession.

This is a free seminar (you don’t need to be an RACI member). It will include pizzas at the conclusion. Please RSVP racinsw@chem.unsw.edu.au so we can appropriately cater
Request for Proposal

Chemistry or Technology to Stabilize Fat-soluble Vitamins

Opportunity  Licensing, consultancy, contract research, joint development, supplier agreement

Timeline
Phase 1 – Technology evaluation, proof of concept development / demonstration (6-8 months)
Phase 2 – Scale up to manufacturing

Financials
Phase 1 – Funding up to $100,000 may be available to develop promising technologies; all terms to be negotiated as warranted

The successful technology will:
• Stabilize vitamins A, D, and / or K
• Provide stabilization for 24 months under typical global storage conditions
• Be GRAS
• Not diminish the bioavailability of vitamins or minerals
• Apply to daily / dietary supplement products
• Be compatible with pharmaceutical dosage forms
• Not appreciably increase supplement size
• Be easy to handle in a manufacturing environment (high flowability, low dusting, low hygroscopicity, low caking, minimum segregation, etc.)

More Information  john@anotec.com.au

Other Chemistry News

Thank you to John Zavras for providing the information

Latest Chemists without Borders Newsletter.

Current Intelligence Bulletin 60: Interim Guidance for Medical Screening and Hazard Surveillance for Workers Potentially Exposed to Engineered Nanoparticles (NIOSH Publication No. 2009-116) This document provides interim guidance about whether specific medical screening, including performing medical tests on asymptomatic workers, is appropriate for workers exposed to engineered nanoparticles.
http://www.cdc.gov/niosh/docs/2009-116/
The University of Sydney will be holding an introductory course that examines the theoretical and practical aspects of Vibrational Spectroscopy.

**Venue:** School of Chemistry, The University of Sydney  
**Date:** 6th – 9th of April, 2009

The aim of this course is to introduce participants to the capabilities and limitations of Vibrational Spectroscopy. A variety of spectrometers and accessories, in addition to those located within the Vibrational Spectroscopy Facility, will be available for use for hands-on instruction.

**The course will cover the following topics:**

- Fundamentals of Vibrational Spectroscopy
- Introduction to Spectrometers
- Sample Presentation and Preparation
- Data Manipulation
- Sampling Techniques for Infrared & Raman Spectroscopy
- Applications of Vibrational Spectroscopy
- Specialised Techniques
- Near Infrared Spectroscopy
- Multivariate Analysis

**Course Registration Fee**

The registration fee includes all course lecture notes, morning/afternoon tea, lunch and refreshments. The number of participants per course is *limited* to 16.

<table>
<thead>
<tr>
<th>Course</th>
<th>Registration Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Vibrational Spectroscopy</td>
<td>$1000</td>
</tr>
<tr>
<td>Near Infrared Spectroscopy</td>
<td>$500</td>
</tr>
<tr>
<td>Multivariate Analysis</td>
<td>$500</td>
</tr>
<tr>
<td>All 3 Courses</td>
<td>$2000</td>
</tr>
</tbody>
</table>

(GST Inclusive)

To register online for the Vibrational Spectroscopy workshop please go to  
Chemistry Training from the National Measurement Institute

The National Measurement Institute (NMI) will be running the following training courses for analytical chemists in Sydney in March.

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
<th>Location</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytical method validation</td>
<td>17 – 18 March</td>
<td>Lindfield, NSW</td>
<td>$1410</td>
</tr>
<tr>
<td>Estimating Measurement Uncertainty for Chemists Part 1</td>
<td>19 March</td>
<td>Lindfield, NSW</td>
<td>$610</td>
</tr>
<tr>
<td>Estimating Measurement Uncertainty for Chemists Part 2</td>
<td>20 March</td>
<td>Lindfield, NSW</td>
<td>$800</td>
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</tbody>
</table>

The two-day Analytical method validation course introduces chemists to the many facets of method validation and allows the chemists to practice their skills in a number of workshops throughout the course. The following topics are covered:

- The why’s and when’s of method validations
- An overview of the validation process and the performance characteristics
- The design of validation studies and the use of interlaboratory validation studies
- Further uses of validation data and basic statistics required for method validation

The Estimating Measurement Uncertainty for Chemists has been revised for 2009. The course is now in two parts. Part 1 provides a basic understanding of the concepts of measurement uncertainty and is recommended for all analysts. Part 2 goes into further detail and evaluates the measurement uncertainty for real methods using real analytical data and is prefect for those who need to prepare uncertainty budgets and use uncertainty on a day to day basis.

For more information and registration forms for the training courses please contact NMI: by phone on (02) 8467 3796; by email training@measurement.gov.au; or visit our website http://www.measurement.gov.au/training

Nominations for RACI Awards are now open

Like last year we will feature a detailed description of one award each week during the nominations period. This week we feature **Rennie Memorial Medal**

**Rennie Memorial Medal**

Nominations of candidates for the award of the Rennie Memorial Medal will be made to the Board of the RACI by the Branch Committees in each State. The conditions of the award of the Medal are:

*The Rennie Memorial Medal is awarded annually to a financial member of the RACI with less than 8 years of professional experience since completing their most recent relevant qualification of a BSc, BSc (Hons), MSc or PhD, or the equivalent, who in the opinion of the Board of the RACI, has contributed most towards the development of some branch of chemical science. Such contribution is judged by the research work published during the ten (10) years immediately preceding the award.*

*Candidates must have been a financial member of the RACI for at least 3 years.*

*Four (4) copies of the nomination must be submitted to the Secretary of the respective State Branch prior to the closing date, who will on-forward nominations to the National Office, 1/21 Vale Street, North Melbourne, Victoria 3051, by the closing date of applications.*

Applications (4 copies) close 30 April.
**Prime Minister’s Prizes for Science**

The Prime Minister’s Prizes for Science recognise excellent and dedicated work in Australian science and science teaching. As well as the major prize, the Prime Minister’s Prize for Science, two of the prizes are particularly relevant to physicists: the Malcolm McIntosh Prize for Physical Scientist of the Year, which recognises early-career research, and the Prime Minister’s Prize for Excellence in Science Teaching in Secondary School.

More info:


**Fresh Science**

Fresh Science is a national competition that promotes the work of early-career scientists to the media and public. It serves as a communication boot camp, getting their stories out to local, national and international media, and giving them essential communication skills.

Nominations look for:

- early-career researchers with an upper limit of five years post-doc and no lower limit
- a peer-reviewed result which has had no media coverage
- some ability to present ideas in plain English.

Nominations close on 23rd March 2009. (this has been extended)

More info and online nomination: www.freshscience.org <http://www.freshscience.org>

**L’Oréal For Women in Science fellowships: Australian and international**

Applications for the 2009 L’Oréal Australia For Women in Science Fellowships will open on 1 April 2009. The Fellowships are open to female scientists no more than five years past their PhD, excluding periods of maternity leave.

Further details including instructions and full eligibility criteria, and a link to the online application form (from 1 April) can be found at: www.scienceinpublic.com/loreal <http://www.scienceinpublic.com/loreal>

Nominations for the 2010 UNESCO- L’ORÉAL International Fellowships will open in March. The International Fellowships are worth US$40,000 over two years and are
available to female doctoral and post-doctoral scientists under 35 years old with a focus on Life Sciences to study at an institution outside Australia. Three of the 15 International Fellowships will be awarded in the Asia-Pacific Region, which includes Australia.

Applications close on 30 June 2009.


**The Australian Museum Eureka Prizes**

The Eureka Prizes reward excellence in the fields of scientific research & innovation, science leadership, school science and science journalism & communication.

Nominations are now open. Entries close on Friday 1 May.


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**Pollock Memorial Lecture**

Thursday 30 April, 6.30pm, University of Sydney and the Royal Society of NSW

**TITLE:** Pollock Memorial Lecture: *The universe from beginning to end*  
**SPEAKER:** Brian Schmidt, Mt Stromlo Observatory, Australian National University  
**VENUE:** Eastern Avenue Auditorium, University of Sydney, Camperdown campus  
Brian will talk about dark matter and dark energy, two mysterious substances which make up 96% of the universe. New experiments at Mt Stromlo should give us a better understanding of these dark forms, and predict the ultimate fate of the cosmos.

RSVP to: (02) 9351 3383 or outreach@physics.usyd.edu.au

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**Upcoming RACI Meetings**

**March 17th**  
**Seminar supported by RACI NSW Analytical Chemistry Group and Electrochemistry Division**  
Associate Professor Dieter Britz from the Department of Chemistry, University of Aarhus, Denmark, will present a seminar entitled "Interesting moments in the life of an electrochemist" at Macquarie University.

**March 26th:**  
**Young Chemists Meeting** – “A history of platinum metal from the Conquistadors to Chemotherapy and Chemical Catalysis” held at UNSW
The 2009 Honours prize (RACI Western Sydney Section)

YOUR HONOURS STUDENTS have had a break since finishing their thesis - NOW is a good time to consider their eligibility for the 2009 Honours prize (Western Sydney Section) if they reside, or have done their research, in Western Sydney. ALL WE NEED IS AN EXTRA COPY OF THEIR THESIS. NO NEED to wait for examiners' reports. Deadline 31st March, 2009; earlier submissions encouraged. Contact Deidre Tronson, deidre@bowtie.com.au **Please pass this information on to any colleagues in other departments who have Hons students who may be eligible**

The 2009 Honours prize (RACI Western Sydney Section) will be awarded for the best Honours thesis produced in 2008 by a student who is resident and/or has studied or undertaken research in western Sydney[1] throughout the year. The RACI Western Sydney Section Honours Prize is now open to ...... eligible applicants enrolled in ANY University, within ANY department/school/faculty. The project must include either 'pure' or 'applied' chemistry. This could be applied to fields such as agriculture, horticulture material science, nanotechnology, pharmacy, neuroscience, medicine, biochemistry, biology, environmental analysis, forensics, or any other discipline.

The winner will give an oral presentation at a meeting of the Royal Australian Chemical Institute Western Sydney Section during 2009 (date to be determined). This is an opportunity to showcase the research to a range of RACI members and other students. The prize will be awarded to a project that demonstrates a high level of innovation, creativity and contribution to chemical knowledge. If more convenient, the thesis may be spiral- or 'perfect'-bound and may be submitted prior to examination because the final grade is not a determining factor.

Students should forward a copy of the thesis plus a covering letter containing personal details (including student's email address) to one of the contacts below. The thesis will be returned.

DEADLINE: MARCH 31ST 2009. Earlier submission is encouraged

Enquiries and submission to:
Dr Deidre Tronson (FRACI), 21 Eagle Creek Rd, Werombi, 2570.
Ph 02 4653 1430; email: deidre@bowtie.com.au.
OR leave the thesis, clearly marked "WSS Honours Prize", at the RACI office, UNSW.

[1] 'Western Sydney" is defined by the following postcodes: 2076-2077; 2111-2126; 2128; 2133; 2140-2168; 2170;2171; 2173; 2174; 2176; 2177; 2190-2200; 2205-2214; 2216-2234; 2558-2560; 2563-2579; 2745; 2747-2768; 2770; 2773-2787; 2790
**Olle’ Prize**

The NSW Branch invites nominations for the **Archibald D Ollé Prize**.

Archibald Ollé was very active in the chemical and scientific life of NSW in the first 40 years of the twentieth century, and his wife, who outlived him, left a bequest to the RACI NSW Branch to his name with an annual prize. It is awarded to a member of the Institute who submits the “best treatise, writing or paper” on any subject relevant to the Institute’s interests. Examples of previous winners include books and book chapters on key areas of chemistry, as well as critical scientific and technical reviews.

The NSW Branch Committee controls the Prize and has established the following conditions:

1. Nominations are invited from candidates themselves or from persons knowing suitable candidates and must be members of the RACI.

2. Each nominee shall submit a single scientific work published during the period 1st January 2008 until December 2008.

3. Nominations must be in writing, setting out the name, address, academic qualifications and present position of the nominee and be signed by the nominee and nominator.

4. Where the work involves more than one author, the nominator should arrange for all the other authors to send an indication of the contribution of the nominee. Though submission of multi-authored works is not discouraged, authors should be aware that in the past the adjudicators have found it very difficult to establish the relative merits of single and multi-authored works in terms of making an award to an individual.

5. Nominations should be addressed to:
   
   The President
   The Royal Australian Chemical Institute Inc. NSW Branch
   School of Chemistry
   UNSW
   Sydney 2052

   **And must be lodged on or before Friday 27th March 2009**

6. In all matters relating to this Prize, the decision of the NSW Branch Committee shall be final, and the Committee may not make an award if, in the opinion of the assessors, the submissions are not of a sufficiently high standard.

   *The result will be communicated to all entrants and will be published in “Chemistry in Australia”*
13
b. 1733 Joseph Priestley discovered oxygen (O, 8) 1774, ammonia, hydrochloric acid gas, carbon monoxide, sulfur dioxide & oxides of nitrogen; Priestley Medal, named in his honor is one of ACS highest honors.

14
b.1854 Paul Ehrlich, researcher in immunity & chemotherapy; discovered Salvarsan (No. 606) & neosalvarsan; improved laboratory staining methods; Nobel Prize in Medicine (1908) with Ilya Ilyich Mechnikov in recognition of their work on immunity.
b. 1860 Thomas L. Willson developed the electrothermal furnace; pioneer manufacturer of calcium carbide.
b. 1879 Albert Einstein, researcher on photochemical effect & theory of relativity; Nobel Prize Physics (1921) for his services to Theoretical Physics, and especially for his discovery of the law of the photoelectric effect.
b. 1931 Ronald C. D. Breslow, demonstrated antiaromaticity; invented artificial enzymes and electrochemical methods for carbon cation; President of the ACS.
  ➢ Observation of first atom of element of hassium (Hs, 108) at GSI Laboratory, Darmstadt, 1984.

15
b. 1821 Johann Joseph Loschmidt, developer of the Loschmidt Number, the number of molecules in a cubic centimeter of gas and space-filling formulas of numerous organic compounds.

16
b. 1666 Johann Conrad Barchusen, chemical lecturer at Utrecht University; analysis using fire interpreted alchemical transmutation as metallic substitution reactions.
b. 1834 Hermann W. Vogel invented the orthochromatic photographic plate, 1873; designed a photometer; researcher in spectroscopic photography.

17
b. 1803 Carl Löwig, one discoverer of bromine (Br, 35) 1826, "but because of exams did not publish a report, thereby allowing A. Balard to receive precedence of discovery".

18
b. 1900 Laueren B. Hitchcock, expert in chemistry of the environment.

19
b. 1883 Walter N. Haworth, synthesized ascorbic acid (Vitamin C), 1933; researcher on sugars & dextran as blood plasma substitute; Nobel Prize (1937) for vitamin synthesis, with Paul Karrer.
b. 1900 Frédéric J. Joliot (Joliot-Curie), Nobel Prize, (1935) with wife Irène Joliot-Curie, for production of artificial radioisotopes, in 1934; proved experimentally that neutron emission occurs in nuclear fission with H. Halban & L. W. Kowarski.
b. 1943 Mario Molino, researcher in air pollution, particularly formation & destruction of ozone; Nobel Prize (1995) with Paul Crutzen & F. Sherwood Rowland for their work in atmospheric chemistry, particularly concerning the formation and decomposition of ozone.
  ➢ The ten millionth CA Abstract was published in volume 100, issue number 12 of Chemical Abstracts, 1984.

Ref: Monthly Historical Events In Chemistry by Leopold May, The Catholic University of America
http://faculty.cua.edu/may/Chemistrycalendar.htm