



RACI Electrochemistry Division

Newsletter

No.4

June 1997

Editorial

The EDRACI Program is gaining momentum...see the information about workshops in this issue and start to think of ideas for workshops or and about hosting an event in your locality.

Remember that this newsletter distribution list can be used for circulating information about electrochemistry at any time...just send it to me. Remember also to tell your colleagues about the list; there are still a few Australasian electrochemists who appear to be unaware of its existence.

Annual Subscription/Membership of RACI Divisions

When you complete your RACI Annual Subscription form, please fill in your Divisional preferences carefully: RACI members are allocated as members of a Division based on the first preference they indicate on this form. The number of members in a Division impacts on its standing within the RACI (and its funding). **Thus it is imperative that you list the Division you are most active in as your first preference** (this will be the Electrochemistry Division for most people reading this list). To change your preferences at any time, contact the National Secretariat.

Request From National Executive

The annual salary survey was sent out with 1997-8 subscription forms. The National Executive has requested that you please make an effort to complete and return these forms as it helps the RACI produce more accurate information about employment conditions of chemists.

EDRACI Program

It has been suggested that we make the Electrochemistry workshops (see report on Monash workshop and details of Wollongong workshop below) a regular event. The EDRACI Committee will plan the Division program for the next few years at a meeting in September. We need ideas from you for topics to address and places to hold the workshops. We also need volunteers to host the events. Please contact any member of the committee with your ideas (contact details below) before then. It would be great to have an EDRACI event in each state in the next few years.

EDRACI Workshop on the Theory and Practice of Modern Electrochemical Techniques (Monash University, 9-10/4/97)

The Workshop was a great success with both the scientific lectures, the demonstrations and the social program going without a hitch. The heavily over-subscribed workshop was attended by 54 people, with about 10 participants from interstate, 1 from New Zealand and the rest from Monash, Melbourne and Latrobe Universities and Divisions of CSIRO.

The social program was aided by the Monash Chemical Society, with whom we shared a Wednesday afternoon lecture and the refreshments. The joint, high-tech, information packed DIGISIM lecture by Professor Stephen Feldberg proved very popular, while the Thursday Evening Happy Hour sponsored by Hart Analytical was also much appreciated.

Alan Bond and I, as the organisers, are extremely grateful to all the people who worked so hard to make all the details of the workshop run smoothly. The use of the EDRACI newsletter e-mail list allowed us to contact most relevant groups and gave rise to the overwhelming response

It is clear that there is a demand for such educational electrochemical activities and we would recommend that similar workshops become an annual event, rotated through various institutions around the states.

(Adrian van den Bergen)

**EDRACI Workshop on Electrochemical Processing
(University of Wollongong, 9-10/9/97)**

Your Hosts: The Intelligent Polymer Research Institute (IPRI)

Design and use of electrochemical processing systems impact on a number of well established as well as emerging industries. Improvements in cell design, the use of new electrode materials and the continuing developments of software controlled systems have resulted in increased process efficiency and products with superior properties.

This workshop will address recent advances in the design, development and utilisation of electrochemical processing systems.

On the first day Prof. Frank Walsh (University of Portsmouth) will lead a tutorial session addressing the fundamentals of electrochemical processing. Prof. Walsh is a world authority in this area.

Other speakers who have agreed to attend include Prof. Saji (Tokyo Institute of Technology), Prof. Greg Hope (Griffith University), Dr. Mike Newman (Pasminco), Prof. Sam Adeloju (University of Western Sydney, Nepean) and Prof. Gordon Wallace (Intelligent Polymer Research Institute).

A poster session will be held on the Tuesday evening.

On day two, researchers from industry and government research organisations will be invited to speak about recent work in this area.

The venue for the workshop is the University of Wollongong situated just 80 km south of Sydney on the beautiful South Coast. The University is well known for its tranquil surroundings. The format of this workshop will ensure ample time for both formal and informal discussion of this important topic.

Suggested accommodation:	The Novotel:	\$152 per night.	Ph: (042) 263555.
	The Boat Harbour:	\$72.90 per night.	Ph: (042) 289166.

For enquiries please contact Dr. Peter Innis Ph: (042) 213504.

Registration costs (including lunches, morning teas, dinner for Wednesday evening): Full registration \$300, RACI members \$250 and students \$150.

Please make cheques payable to the University of Wollongong and return them to the address given below.

REGISTRATION SLIP

Name:

Address:

Affiliation:

Phone:

Fax:

E-mail:

I am interested in delivering a paper ☐ poster ☐ attending ☐

Return to Louisa Willdin at:

Intelligent Polymer Research Institute, University of Wollongong
Northfields Avenue, WOLLONGONG, NSW 2522, Australia
Fax: (042) 213114

May Full Council Meeting

The RACI Full Council meets in May and November each year. It consists of a representative of each Branch and Division plus elected officers of the Institute. Between these meetings, Executive Council (EC) carries out RACI Business. Relevant points discussed at the May meeting are below; for more information on any of them, contact the Editor.

IUPAC 2001

A bid for Australia to host the IUPAC 38th Scientific Congress (1-6/7/2001) and 41st General Assembly (7-14/7/2001) in Brisbane has been made; the outcome will be known by September. The 9th Asian Chemical Congress (9ACC) has already been allocated to Australia; it will be held in conjunction with IUPAC 2001 if successful, else probably in Darwin.

Green Chemistry

A forum on this will be held in Canberra on January 28-29, 1998 (back-to-back with PHODs).

By-Laws Changes

These were made to introduce a procedure for dealing with breaches of the code of ethics. A proposal to require each Division to have a minimum percentage of RACI members was deferred.

CPChem (Certified Practising Chemist)

The draft document (circulated by email earlier) was approved and will soon be implemented.

Special Projects

Branches and Divisions have made available funds to be used for any part of the Institute to support Special Projects which would advance the RACI. A call for submissions for projects will soon be made.

National Science Week

Dates are May 2-10, 1998. A call for activities was distributed.

Treasurer's Report

Subscription income is approx. constant but Chem.Aust. advertising income has fallen (largely due to turnover of staff). NS expenditure and allocations to Branches have been decreased substantially. Divisions currently receive no funding from the RACI but this situation is being redressed. A decision had been made previously to fund Chem.Aust. at 25% of subscriptions.

Chemistry in Australia

The future of Chem.Aust. was secured and confidence expressed in the current Editorial team.

Office-Bearers

Graeme George has been nominated as President-Elect.

Other Business

The President asked that Divisions avoid using "National" in conferences since this apparently discourages attendance by Asian chemists, e.g. use "Australian".

Upcoming Electrochemical Society meetings:

192nd Meeting of The Electrochemical Society, and 48th Annual Meeting of the International Society of Electrochemistry, 31/8-5/9/97, Paris, France

193rd Meeting of The Electrochemical Society, 3-8/5/98, San Diego USA

Information/registration forms can be obtained from the Electrochemical Society web site below.

SPIE 97 Far East & Pacific Rim Symposium on Smart Materials, Structures, and MEMs, 10-13/12/97

This Symposium in Adelaide will focus on materials or devices that have the capability of sensing the environment and reacting to the ensuing stimulus.

The program includes: Smart Materials, Smart Sensors and Actuators, MEMS and Smart Electronics, Mathematics and Control, Smart Structures and Systems, Organic Electronic Materials, and Flat Panel Displays. An exhibition will accompany the program. Papers will be published in a Proceedings Volume. Register by November 14, 1997 to take advantage of pre-registration fees.

For more information, visit the website: <http://www.unisa.edu.au/eng/eon/smart.htm> or contact the Conference Convenor: Dr Ahsan Hariz, Phone: (08) 8302 3874, Fax: (08) 8302 3384, email: a.hariz@unisa.edu.au

7th International Beijing Conference and Exhibition on Instrumental Analysis

October 14-17, 1997 in Shanghai. Section F of the program covers electroanalytical chemistry with subgroupings of Fundamentals of Electroanalytical Chemistry; New Techniques and Methods in Electroanalysis; Surface Modification and Characterization; Electrochemical Sensors; Combined Techniques of Electroanalytical Chemistry with Others; Electroanalysis in Biology and Medicine; Organic Electroanalytical Chemistry. Other Sections cover Electron Microscopy, Mass Spectrometry, Spectroscopy, Chromatography and Magnetic Resonance.

Conference fees are US\$250 (US\$150 for students) due before 31 July. For more details contact:

General Service Office, BCEIA '97

Room 585, Chinese Academy of Sciences Building

54 Sanlihe Road

PO Box 2143

Beijing 100045, China

Phone: +86 10 6851 1133, Ext. 1585

Fax: + 86 10 6851 1814

email: bceia@aphy01.iphy.ac.cn

<http://www.kspress.com/cheminet/news/bceia.htm>

Resource Utilisation

With the budgetary pressure on industry and universities alike, we have much to gain by sharing resources. It is especially important that the specialist skills of people who leave paid employment are not lost to the Australasian electrochemistry community. If you know of any skilled person or service which is underutilised and which other electrochemists may like to use, please send details to the Newsletter. An example is...

Glassblowing and Microelectrode Services

The scientific glassblower in the Chemistry Dept at La Trobe University since 1981 will be providing glass blowing services on a commercial basis from July 1 under the name, Micro Glass Instruments. Part of these services is the supply of micro disc electrodes for use in obtaining reproducible voltammograms. These electrodes were developed some years ago, and are now sold worldwide (American Laboratory, July 94, pp.25-29); all electrodes are provided with a certificate and can safely be sonicated to minimise the need for polishing (which can easily destroy the characteristics of micro disc electrodes).

Products and services available include: micro disc electrodes from 500 to 0.6 microns diam. in Pt and Au; 5, 7 and 11 μ m carbon electrodes; 7 μ m copper electrodes; various types of cells (incl. jacketed versions); reference and counter electrodes, bubblers, etc.; polishing tools (to ensure a fixed angle between the electrode and the polishing pad), advice on polishing/cleaning of electrodes, ESR electrodes, vacuum manifolds for the preparation of samples for use in ESR experiments, jacketed membrane cells for ion exchange experiments, and glass instruments made to your specifications.

Contact: Michael Koppenol, Micro Glass Instruments, 12 Hebden Street, Greensborough, Victoria, 3088.

Tel/Fax: 03 94341312 or at La Trobe, Tel: 03 94792511, e-mail: chemk@lure.latrobe.edu.au

MacLab EChem Software

ADInstruments is currently updating their MacLab EChem software (to version 1.4) which should be available mid to late this year. If you have any suggestions for improvement of the software, or would like to see new features added, then send your ideas to maclab@adi.com.au, or free fax on 1800 245 847. If you would like to be a "beta" software tester for the new software then contact ADInstruments.

Committee

The contact details of the current Electrochemistry Division Committee are:

Chair

Prof. Gordon Wallace (042) 213 127 (042) 213 114 Gordon_Wallace@uow.edu.au

Secretary

Dr. Bruce Verity (08) 8302 3153 (08) 8302 3668 bruce.verity@unisa.edu.au

Treasurer

Dr. Richard John (07) 5594 8260 (07) 5594 8679 R.John@eas.gu.edu.au

Past Chair

A.Prof. Sam Adeloju (047) 360 811 (047) 360 742 s.adeloju@st.nepean.uws.edu.au

Committee

Dr. Stuart Bailey (09) 351 7808 (09) 351 2300 s.bailey@cc.curtin.edu.au

Dr. David Davey (08) 8302 3265 (08) 8302 2668 david.davey@unisa.edu.au

Dr. Carol Davis (074) 30 1221 (074) 30 1231 davis@scuc.edu.au

Dr. Tony Hollenkamp (03) 9647 0315 (03) 9646 3223 afh@dmp.csiro.au

Dr. Rodney Williams (049) 510 638 (049) 518 137 williams.rodney.r.p@bhp.com.au

Dr. Danny Wong (02) 9850 8300 (02) 9850 8313 Danny.Wong@mq.edu.au

NZIC Contact

Dr. Alison Downard +64 3 364 2501 +64 3 364 2110 a.downard@chem.canterbury.ac.nz

Next Issue (September, 1997).

Deadline for material: August 31, 1997.

Editor:

Dr. Bruce Verity

School of Chemical Technology Tel: 08 8302 3153

University of South Australia Fax: 08 8302 3668

THE LEVELS SA 5095 email: bruce.verity@unisa.edu.au