

National and International Links

Outreach Activities

Australian Academy of Science (AAS)

Professor J.W. White is the AAS's spokesperson on stem cell research and contributed to the national debate on the potential scientific value of embryonic stem cell research in Australia. He also contributes to policy development for major national research facilities for the Academy of Science.

Fourth National Summer School for Secondary Science Teachers

Professors Rickards, Wild, Mander, Bennett, and White provided this School's contribution to the Fourth National Science Teachers' Summer School, held at the ANU from 13 – 19 January. Forty-two teachers representing schools across Australia attended the Summer School, the theme of which was "Australian Science: the Cutting Edge", and were informed and updated in specific areas of organic, organometallic and physical chemistry.

National Youth Science Forum

In January, Professor A.F. Hill, Mr H. Neumann, and members of inorganic research groups hosted the National Youth Science Forum. After attending a short introductory lecture by either Professor Hill or Dr M. Schultz, four groups each of sixteen students prepared various transition metal complexes and characterized them by infrared spectroscopy. As usual, the students appeared to enjoy the opportunity to do hands-on chemistry and gave the RSC good to excellent evaluations.



Horst Neumann demonstrates infrared spectroscopy to NYSF students, using samples they have themselves prepared

Symposium on Organometallic Chemistry

Dr M. Schultz, initiated and coordinated what is to be a continuing six monthly symposium on organometallic chemistry, hosted on a rotation basis between the RSC, the University of New South Wales and the University of Sydney. Two meetings were held (UNSW: 14.03.02; RSC: 29.11.02) providing a forum for post-graduates and post-doctoral fellows from the groups of Professors A.F. Hill, M.A. Bennett, S.B. Wild, L. Field (U. Sydney), and Dr B. Messerle (U. NSW), to present their work.

Visiting Student – University of Leipzig

Robert Wolf, postgraduate student from the University of Leipzig worked with Professor S.B. Wild and Mr P.A. Guggler in the *Inorganic Stereochemistry and Asymmetric Synthesis Group* during July – August, funded by the DAAD.

Collaboration with RMIT University, Melbourne

In the course of this collaboration between Professor M.A. Bennett and Professor S. Bhargava (RMIT University), a PhD student, Mr Steven Privér, has spent a period working at the School. He has prepared novel dinuclear platinum complexes containing $C_6H_3-5-Me-2-AsPh_2$ as a bridging ligand and is currently writing his thesis.

Royal Australian Chemical Institute (RACI)

- The second and final year of Professor J.W. White's presidency of the RACI focussed on five objectives:
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 - To create a vision of what the RACI stands for in the community and through that, to benefit members and the Chemical Industry in Australia.
 - To structure the membership categories and benefits so as to broaden the membership base and at the same time show the worth of the credential of the "Chartered Chemist" to employers and government.
 - To bring into operation the new committee structure decided in 2001 and ensure an integrated operation between the Board and these new committees.
 - To bring together the financial structures of the Institute so as to provide more funds for Institute outreach activities.
 - To increase the contribution of the RACI to industrial, environmental and higher education policy formation at both Commonwealth and State levels.
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The newly formed Policy Committee along with the Professors and Heads of Departments (PHODS) have been active in the development of RACI and national policy options, including the following submissions and activities:

- "Policy Options for Australian Higher Education" (February 2002)
- Submission to the Commonwealth Government Review of Higher Education (June 2002)
- Submission to Commonwealth Government on "National Research Priorities" (August 2002)
- Submissions to Commonwealth Government on immigration and business commitment to R & D in Australia. (September 2002)
- Links with NATA on accreditation (March 2002)
- Submission on the draft report on International Comparisons of Australian Universities by the Productivity Commission
- Proposal for an annual "Grassmere" type conference for young chemists to mirror PHODS

National and International Links

Professor White also visited RACI branches around Australia including SA, NT and Central Queensland where he spoke on RACI business and developments in stem cell research. He contributed a monthly column to the RACI journal *Chemistry in Australia* on current issues and trends in chemistry internationally and in Australia.

UniChe (Universities, Industry, Chemistry)

In collaboration with the Departments of Chemistry at the Universities of Melbourne, Newcastle, and the ANU, and the industrial partner Orica Ltd, the UniChe program, financed by DEST and Orica, coordinated by Dr P.A. Reynolds and chaired by Professor J.W. White, completed another successful year. This program aims to enhance chemistry training and thus retention rates of high-achieving students from schools through undergraduates up to postgraduate study. We hope to accomplish this by exposing students to business practices and facilities so that they may gain a real insight into the variety of careers chemistry can offer.



February 2002
UniChe Summer
School participants

This year Ms Leharne Fountain coordinated the ANU UniChe school outreach program and distributed promotional materials to chemistry students in their final year at high school and visited five hundred students in the ACT and surrounding NSW with a variety of presentations involving three RSC staff members (Professor M. Collins, Professor C.J. Easton, Dr P. Reynolds).

The undergraduate program continued with lectures, visits and field trips for selected elite students from each of the three University departments. These included a Summer School (10-22 February) in both Canberra and Melbourne in which 36 students learnt about business and business practice in the classroom and followed this up in practice by visiting Orica sites. This was augmented by two two-day winter field trips in July and October to Newcastle for forty students to see for themselves the 'ammonium nitrate trail' from synthesis by Incitec Ltd to the final end use in open cut mining via the Orica explosives facilities.

Finally, UniChe organised and financed seven honours students and their projects, and five PhD students, selected on fundamental scientific merit, but also of interest to five of Orica's business areas. The students also presented their

results to a joint Orica–University “Emerging Science” symposium with sixty participants, which was held in Melbourne in November to facilitate technology transfer to and within the company. All these strands will be further developed in the coming year.

An external review of UniChe was held in November which highly commended the project and recommended the continuation and expansion of Uniche to other universities and business partners.

Dr E. Sevick presented four UniChe Seminars to students from the following ACT colleges: Daramalan College - 25, 26 March, 3 May; Merici College – 5 April.



UniChe
Winter Field Trip,
Rix's Creek Coalmine

Workshop on Biomolecular NMR, Wollongong, 9–13 December.

G. Otting initiated and organized the workshop, including scientific programme, course material and student admission, and gave two of the lectures.

CSIRO Student Research Scheme

The following year 11 and 12 students undertook research projects under the CSIRO student scheme:

- Ms Chamishou (Chami) Rathmolgoda (Year 12) Canberra Girls Grammar School, with Ms Penny Lilley/Dr Pasha Prosselkov/Dr Nick Dixon.
- Ms Rachel Hocking (Year 11) Narrabundah College, with Ms Penny Lilley/Dr Pasha Prosselkov/Dr Nick Dixon.
- Ms Melissa Asanin, (Year 12) Narrabundah College, with Ms Viki Withers.
- Ms Alexandra Pavli (Year 12) Narrabundah College, with Dr Graham Heath/Mr Stephen Lee.
- Mr Paul Bonato (Year 12) Marist College, Pearce, and Ms Naomi Raabe (Year 12) Erindale College, Wanniassa, with Professor Bruce Wild/Mr P. Gugger.