### **Outreach Activities**

## Australian Academy of Science (AAS)

Professor J W White is the AAS spokesperson on stem cell research and contributed to the national debate on the potential scientific value of embryonic stem cell research in Australia. He will be the convenor of a national conference on stem cell research to be held in May 2005. He also contributes to policy development for major national research facilities for the Academy of Science. Professor White was also the convenor of a symposium – *Science at the Shine Dome*, to celebrate the 50<sup>th</sup> anniversary of the Australian Academy of Science.

#### Australian Institute of Nuclear Science and Engineering (AINSE)

Professor J W White was Vice-President of AINSE in 2004 and, as part of strategic planning processes for the Institute, prepared a benchmarking report for AINSE science with Dr Rob Robinson (ANSTO).

#### CSIRO Student Research Scheme

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

- Ms Grace Daley, Dickson College, with Drs N E Dixon/M J Headlam
- Mr Daniel Garcia, Marist College, with Professor S B Wild
- Mr Hans Gurleen, Canberra High School, with Mr J Hughes/Professor E Krausz
- Mr Francisco Silva, Marist College, with Drs N E Dixon/M J Headlam
- Mr Michael Taylor, Canberra Grammar School, with Professor S B Wild
- Mr Andrew Tuckwell, Canberra High School with Mr J Hughes/Professor E Krausz

### Collaboration with RMIT University, Melbourne

As part of this collaboration between Professor M A Bennett and Professor S Bhargava (RMIT University), a PhD student, Kunihiko Kitadai, from the group of Professor Takahashi, Toho University, Japan, spent three weeks at the School carrying out experiments on gold-tertiary arsine complexes.

### **NMR Facility**

On 17–19 March, the ANU's 800 MHz NMR Facility and Workshop, under the headship of Professor Gottfried Otting, was officially opened by Dr A Bax, NIH, USA. The particular features of this facility were presented at the Future Materials Workshop, ANU, on 24 August.

#### National Science Summer School

Emeritus Professor R W Rickards continued to serve on the Council and Executive Council of the National Science Summer School. This organisation runs the National Youth Science Forum, a two-week program held in Canberra in January for each of two groups of 144 year 12 school students from all over Australia who are considering careers in science, engineering and technology. The Council this year appointed a Director-elect to succeed the Foundation Director, Professor R Jory, who has served for 22 years.

# Royal Australian Chemical Institute (RACI)

Professor J W White is a member of the RACI Steering Committee for the forthcoming review: *Future of Chemistry: Review of the Pathway to Chemists – from education to employment.* He is also a long-standing member of the policy and nominations committees.

#### Symposia on Organometallic Chemistry

During November, Professor A F Hill, in collaboration with the Department of Chemistry, The Faculties, hosted a successful one-day symposium (MC<sub>2</sub>RO4), bringing together chemists from Canberra, Adelaide, and Rennes, France, to highlight recent advances in alkynyl chemistry.

#### UnIChe (Universities, Industry, Chemistry)

The UnIChe project is an industry-linked chemistry outreach program from schools to PhDs. Funded by DEST, Orica Pty Ltd, and the Departments of Chemistry and Chemical Engineering at the Universities of Queensland, Melbourne, Newcastle, and the ANU, the project is coordinated by Dr P A Reynolds and chaired by Professor J W White. This project includes an undergraduate enrichment program for the ablest students to increase the flow of high quality chemistry graduates to industry; a school outreach program to raise awareness and value of the many interesting career options in chemistry; an industry relevant research PhD and Honours program; and a staff exchange program to strengthen the links between industry and university increasing the capacity of business to exploit and acquire university knowledge.

The undergraduate program continued with field trips for selected elite students from each of the four university departments. These included a Summer School (1-14 February) in both Canberra and Melbourne in which 35 students learnt about business and business practice in the classroom and followed this up in practice by visiting Orica industrial sites in Melbourne. This was augmented by two winter field trips in July and September to Newcastle for 40 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, UnlChe organised and financed two honours students and seven 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 48 participants, which was held in Melbourne on the 12 November to facilitate technology transfer to, and within the company.

