

CHEMNEWS

School of Chemistry - University of Tasmania
1 March 2002 No. 01/02

INTRODUCTION

By Professor Allan Canty

A special welcome to all new students and visitors to the School. Our building is alive with the hum of enthusiasm and enterprise, reflected in the interesting contributions to the first edition of ChemNews for 2002. New structures for first and second year units commence this semester, and the School welcomes comments on these changes from students. We also urge students to join the Chem Club, and attend social functions during the year.

WELCOME TO

- **Bonnie Atkinson**, a BAppSc Launceston graduate undertaking Honours in Hobart with Dr Adrian Blackman
- **Margaret Dooley**, a BSc Hobart graduate undertaking Honours with Dr Jason Smith
- **Amanda Glover**, a BTech (For&Anal Chem) from Flinders University undertaking Honours with Professor Paul Haddad
- **Marion King** from Dublin City University, an Honorary Research Associate with the ACROSS Group.
- **Bronwyn Larner**, a BAppSc Hons Launceston graduate undertaking PhD with Dr Andrew Seen.
- **Nathan Newman**, a BAppSc Launceston graduate undertaking Honours with Dr Trevor Lewis. Nathan is a recipient of a Tasmanian Alkaloids Scholarship
- **Kathalinje Oudhoff** from the University of Amsterdam, an Honorary Research Associate with the ACROSS Group.
- **Alison Radford**, a BSc Hobart graduate undertaking Honours with Dr Jason.
- **Shane Robertson**, a BAppSc Launceston graduate undertaking Honours with Dr Trevor Lewis and a recipient of a Tasmanian Alkaloids Scholarship
- **Samra Tulumovic**, a BSc Hobart graduate undertaking Honours with Professor Paul Haddad and Dr Mirek Macka
- **David Vercoe**, a BTech(For & Anal Chem) and BSc Hons from Flinders University, undertaking PhD with Dr Karen Stack and Dr Adrian Blackman
- **Fang Wang**, a BSc (Hebei), undertaking a MSc with Professor Paul Haddad.

CONGRATULATIONS TO

- **Prof Paul Haddad** for his award of the 2002 A.J.P. Martin Gold Medal by the Chromatographic Society, a UK-based organisation with membership from over 40 countries. The medal is for outstanding contributions to the field of separation science.
- **Dr Mirek Macka** on his promotion to Senior Lecturer.
- **Associate Professor Don McWilliam** for the award of a Teaching Merit Certificate.
- **Dr Brian Yates** for the invitation to be on the Tasmanian Science and Technology Industry Council.

SIEMENS SCIENCE EXPERIENCE

15-17 January in Hobart and 22-24 January in Launceston

Forty-three high-school students visited the School of Chemistry Hobart Campus as part of the Siemens Science Experience organised by the Faculty of Science and Engineering. The students spent an enjoyable afternoon in the lab exploring the smelly (esters), slimy (polymers) and colourful (chromatography) sides of chemistry, as well as taking in a whirlwind tour of the instrument lab. We are extremely grateful to Dr Peter Traill who designed and prepared all the activities, and to Phil Zakaria, Joe Hutchinson, Mel Denney and Doug McLean who led the students through each exercise. You wouldn't believe how much fun you can have with a ball of slime..."



A further 30 Year 9 students spent three days on the Launceston Campus, with half day sessions in Computing, Geography and Environmental Studies,



Biomedical Science, Aquaculture and, of course, Chemistry, and an excursion to Seahorse World. During the Chemistry session, with Daniel Southam and Tim Jordan the "responsible adults", the students synthesised aspirin, made slime, failed to make rayon (due to a small design fault in the experiment) and chromatographed MM's (the brown ones work best). All in all a very successful and enjoyable three days and I expect to see some of the students back here in a few years.

The School would like to thank Dr Brian Yates (Hobart) and Dr Trevor Lewis (Launceston) for coordinating the Chemistry programme.

CONFERENCES, OVERSEAS VISITS & WORKSHOPS

CPC2002 was held in Christchurch in the first week of February. **Dr Brian Yates** presented a talk on theoretical modelling of catalysis. It is clear that our group in Hobart is one of the leaders in Australia in applying computational methods to practical problems in chemistry. The conference included an interesting session on teaching physical chemistry and on proposals for expanding the Australian Physical Chemistry Enhanced Laboratory Learning (APCELL) project to all of chemistry. (See the latest issue of the Australian Journal of Education in Chemistry for an article on this project and an accompanying article by Dr Barry O'Grady.) After much arm twisting and several beers it was decided that the next conference will be held in Hobart in February 2004 and will be chaired by Brian Yates.

Visit to Thailand

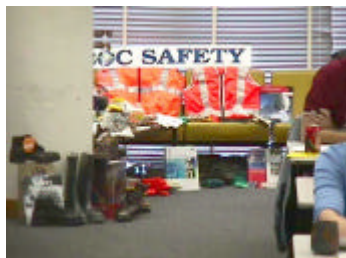
by Dr Mirek Macka

Early in January 2002 I accepted an invitation to the Thammasat University, Thailand, to give lectures in Electromigration Separation Methods for students at the Chemistry Department, Faculty of Science and Technology. It was quite an interesting experience, and although the topic was completely new to the students, they seemed to follow it well and I had a few questions to answer. During the breaks I enjoyed discussions with the staff, and later with the Dean, Prof. Prajot Thammakornbunjut, who said they were interested in partnerships with Australian universities. And not to forget - I should say hello from Narumol to everybody! (Narumol will be visiting us again this year in March).

Computational Chemistry Workshops

Dr Brian Yates was invited last year to organise and conduct workshops in Melbourne and Sydney on the computational chemistry software package called Spartan. The workshops eventually took place in late February 2002 when he joined forces with the American founder of the software, Prof Warren Hehre, to demonstrate its use in teaching. This is a direct outcome of work that Brian carried out as part of his teaching development grant last year.

2002 CHEMISTRY BUILDING SAFETY TRAINING DAY - 22 February



Forty-eight staff members, postgraduates and honours students from Chemistry, CSL and AST attended Safety Training Day in Hobart, an annual event with compulsory attendance once every two years. A comprehensive programme included topics on OH&S legislation (Carolyn Langley of IPM), glass safety (Mike Brandon, CSL) and electrical safety (John Davis, CSL), material safety data sheets and hazardous risk assessments (Murray Frith), industrial OH&S (Dennis Turner, ex-OH&S Manager of Forest Tasmania), Gas Cylinder Safety (Michael Lovegrove and Ray Bresnehan of BOC Gases), chemical labelling and storage (Murray Frith), protective equipment (Peter Traill), workplace safety inspections (Greg Dicoski) and safety forms (Vicki-Anne Tolhurst). The School would like to thank Dr Greg Dicoski and Murray Frith for organising the event.

WINE AND CHEESE NIGHT-

A wine and cheese night for all School of Chemistry honours students, postgraduates and staff was held on Friday 22nd February in Hobart. The evening was a great success with around 40 staff and students mingling with a glass of wine in one hand and cheese and crackers in the other. Postgraduate coordinator Dr Adrian Blackman welcomed everyone to the event and presented the new School of Chemistry *Information for Candidates, Research Higher Degrees 2002* booklet, while Dr Brian Yates gave a quick account of the role of the Board of Graduate Studies by Research.

Thanks to everyone that came along and had a good time.

The School would like to thank Mel Denney, the Hobart Postgraduate representative, for her excellent organisation of the event.

Melanie Denney



REVITALISED AUSTJCHEM

The Australian Journal of Chemistry has recently undergone some dramatic changes which will lift its profile and enhance its standing. Under the leadership of its dynamic new editor, Alison Green, production schedules have been streamlined, internet submission has been improved, and Current Chemistry and Focus Articles have been added. Recent articles include those from Yuan Lee (Nobel prize winner) and other eminent chemists, and the journal is repositioning itself with a more international focus. If you have not looked at it for a while, take a look at <http://www.publish.csiro.au/journals/ajc>. As a new editorial board member, I would like to encourage you to submit some of your best work to AustJChem.

By Dr Brian Yates

BRIDGING COURSE

55 students enrolled in the Chemistry Bridging Course including fifteen students from the North and North-West. Approximately twelve dropped out on the first day when they realised the degree of commitment required (20 hours a week for eight weeks including a one week laboratory program) The teaching program was run through WebCT and included a detailed online study guide keyed to a

By Dr Barry O'Grady

textbook. The assessment of the course included six online assignments, the laboratory course and two written examinations. Contact with the students was maintained via email (approximately 500) and telephone calls (approximately 100). The teaching side of the course ran reasonably smoothly with only a couple of minor hiccups and students seem to have no problems accessing the material and the only difficulties encountered were ones involving student's work commitments. Informal comments from the twenty-five or so students who completed the course were that it was interesting and that the textbook was excellent. A more detailed evaluation of the course will be conducted shortly.

The School would like to thank Dr Barry O'Grady for organising and teaching the course.

CHEMISTRY CLUB NEWS

By Lauren Wise

At the end of last year the Chemistry Club organised the inaugural golf championships at Putters, Moonah. The competition was tight – well sort of – but Room 401 team practice paid off. The afternoon was capped off with a Christmas BBQ: chicken, snags, steak and cakes as well as the customary beers.

For this year the Chem Club will introduce some new activities and do all the old favourites such as BBQs – hopefully the weather will hold out. A watermelon eating challenge will be held in early March followed by a soccer match; the opposition is yet to be named but looks as if it may be Physics; and just before Easter, an Easter brunch. During the year, the ever-popular cocktail party will be held and don't forget the annual brew-off early in second semester – get your brews on now! The date for the RACI Chemistry Club quiz night has been set for Friday 17th May so keep this night free as it promises to be good fun.

Thanks to everyone who helped out in 2001. Finally, Societies Day is Wednesday 27th February so come over to the Union car park and join the Chemistry Club for 2002.

NEWS OF FORMER STUDENTS

After leaving science and working for several years running a nightclub in Cambridge, UK, former PhD student Katrina Frankcombe has moved back into the fold. Her PhD work in 1996 involved developing a unique understanding of catalytic processes and utilised high-level theoretical models under the supervision of Brian Yates. After a break of several years, in July 2001 she joined a company in Cambridge, Camitro - a small pharmaceutical modelling company looking at adsorption, metabolism, distribution, excretion and toxicity modelling (see <http://www.camitro.com>). She is now back doing quantum mechanics, and is focusing her attention on hydrogen abstraction reactions for a series of compounds. In a recent email she says: "Amazingly, my role here involves a lot of hats including consultancy and business development! The pay's not bad either, and has allowed my partner and I to buy a house in Cambridge slightly (but not much) bigger than a shoe box."

Thank you for your contributions for this issue of *ChemNews*.
The next *ChemNews* will be issued on 3 May 2002
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