

CHEMNEWS

School of Chemistry - University of Tasmania
21 September 2001 No. 04/01

WELCOME

Since the last issue of ChemNews on 20 July, the School welcomed:

- Dr Yan Zhu, an Honorary Research Associate, from Zhejiang University who will be working with the ACROSS group for a year. Dr Zhu is the recipient of a scholarship from the Chinese Government.
- Dr Shusheng Zhang, Postdoctoral Fellow, from Zhengzhou University who will be employed by the ACROSS Group for a year.
- Mr Daniel Southam, postgraduate student working with Dr Trevor Lewis on the minimisation of nutrient levels in waste streams.
- Mrs Yvette Kitchener, Administrative Assistant based in Launceston.

FAREWELL

- To Dr Jim Patel who has taken up a post-doctoral position in Melbourne at Monash University.
- To Mrs Anthea Rooney, Secretary for many years at the School of Applied Science in Launceston, who has moved to the School of Psychology.
- To Dr Pavel Nesterenko who returned to Moscow on 30 August 2001 following a 6 weeks visit with the ACROSS group.

CONGRATULATIONS

- To Horst and Dorka Stratemeier on the birth of their 10lb son, Julian Darios, born on Monday, 23 July.
- To Bonnie Atkinson, 3rd student in Chemistry studying at the Launceston campus and recipient of the Botanical Resources Australia (BRA) scholarship who was presented with a bonus cheque by Botanical Resources for excellent results in recent exams.
- To Dr Thomas Rodemann for the successful examination of his PhD Thesis.

ARC GRANTS 2002

Congratulations to staff members who have been awarded the following grants by the Australian Research Council for 2002:

- *Discovery Project Grant* for **\$750,000** (over 4 years) to **Prof Paul Haddad** and Prof Milton Hearn for "On-line Preconcentration in Capillary Electroseparations Using Segmented Capillaries".
- *Discovery Project Grant* for **\$245,000** (over 3 years) to **Dr Michael Gardiner, Dr Brian Yates** and Dr R Anwender for "New Look N-Heterocyclic Metallocenes of the Lanthanides Based on 4-Azapentalenyl Anions".
- Linkage Infrastructure Grant for **\$707,000** to Prof Milton Hearn, Prof P J Marriott and **Prof Paul Haddad** for "Hyphenated Separations/Mass Spectrometry Technology for Protein and Natural Product Characterisation".
- *Linkage Infrastructure Grant* for **\$675,000** to Prof Larry Forbes, **Dr Brian Yates**, Dr G Walker, Prof G Paltridge, Prof W Budd, Dr NL Bindoff and Dr R Warner for "High Performance computing for mathematics, chemistry, engineering and climate research".
- *Linkage Project Grant* for **\$67,635** (over 3 years) to Dr J C Ellison, **Dr Andrew Seen**, Mr P Hedge and Mr P Bradbury for "Assessment of the potential consequences of large-scale eradication of rice grass from the Tamar Estuary, Tasmania".

UNIVERSITY OPEN DAY



Open Day at the Launceston Campus on Sunday, 19th August went off extremely well - the combined Chemistry, Aquaculture, Geography, Ag Science and Faculty displays enticed a steady stream of interested visitors over the day. Tim Jordan, Daniel Southam and Nathan Newman, our student "volunteers", were kept busy running instruments and answering questions throughout. Many individuals and families went away convinced that their drinking/irrigation water is relatively safe, or that we could tell them if their cooking oil is off or their air is clean. Many also left with the knowledge that a sediment core sample is not what it first appears to be. One or two prospective students also went away considering UTas as a realistic option to a mainland university! A very successful and enjoyable day overall.

Sunday, 26th August heralded the annual University Open Day in Hobart in which the School had many interesting displays. The main event was the AI Scientific-sponsored Chemistry Trivia Quiz in which approximately 65 people participated. The winner of the quiz was awarded \$100 and a silver antique glass trophy prepared by Peter Truill, while second and third were awarded smaller trophies and \$30 and \$20 cash prizes respectively. The winner of the audience competition received a \$50 cash prize. Visitors to the School were enthralled by the other events and attractions which included testing of water samples and sunglasses, computer-aided drug design, a saltwater aquarium, helium balloons for the young children and the young at heart, and mini-displays including temperature measurement, a lemon-powered clock and a methanol-powered heater.

The School would like to thank the School coordinators: Dr Trevor Lewis in Launceston and Dr Greg Dicoski in Hobart, and all students and staff who helped make Open Day at both campuses so successful.

TASMANIAN ALKALOIDS

On Tuesday, 24 July, Brian Hartnett, Managing Director of Tasmanian Alkaloids announced its intention to continue to sponsor the School of Chemistry through 2 scholarships for students enrolled in BAppSc (Hons)(\$5,000 each) paid work experience with the company, a Visiting Research Lectureship to support organic chemistry research (\$4,000) and stipends for undergraduate students to undertake vacation research with academic staff at the Launceston Campus. Professor Allan Canty congratulated Tasmanian Alkaloids on what he said is its "important initiatives to foster education and research opportunities in chemistry," which he expects "to have a significant role in developing Science at the University". He went on to say that the School is very appreciative of the support of the company over many years.

VISITING LECTURER

Dr Malcolm McLeod visited the School in Hobart from 3-21 September. Dr McLeod is from the University of Sydney where he lectures and carries out research in synthetic organic chemistry. Dr McLeod is the 2001 Tasmanian Alkaloids Visiting Lecturer and he presented a course on contemporary synthetic methods to our third-year students. He also presented a seminar on the synthesis of biologically active compounds in Hobart and Launceston, and held discussions with staff on the laboratory course and research issues. Dr McLeod included a visit to Tasmanian Alkaloids and the Launceston campus of the School during his time here. He also managed to look around the state a little and he enjoyed some time bushwalking.

PROFESSOR HARRY BLOOM MEMORIAL AWARD

On Monday, 30 July, Mr Todd Walsh was awarded the Professor Harry Bloom Memorial Award - presented annually for an outstanding contribution to the Tasmanian environment. Professor Harry Bloom was Head of the Chemistry Department from 1960-1981. Mr Walsh has been campaigning to save the remaining giant fresh-water lobster found only in northern Tasmania.

KOONYA CAMP FOR 2ND YEARS

A group of about twenty second year students and staff gathered for a weekend of study and social activities over the weekend of 1-2 September at the University Field Station at Koonya. After a Friday night spent marking 1st-year tests, Saturday morning was occupied with KRA200 tutorials, eating pikelets (thanks to Dr Michael Gardiner) and practicing golf. In the afternoon we enjoyed a bush walk to Waterfall Bay followed by a sumptuous meal of chicken risotto and cheesecake. Sunday morning was taken up by more tutorials for KRA203 students, followed by a barbecue. Thanks go to Vicki Tolhurst for doing such a good job with the catering, to all staff for their assistance with the weekend, and to all the students who came along. Altogether, it was a very successful event from both an academic and social point of view!



CONFERENCES

Baoguo Sun, PhD student with the ACROSS group, attended **ASIANALYSIS VI** (the sixth Asian Conference on Analytical Science) in Tokyo from 7-10 August. The conference concerned not only analytical chemistry but other related research fields including optics, electronics, applied mathematics, organic chemistry, and traditional Chinese medicine. Most participants were young scientists, PhD students and a few Masters. The much larger and more prestigious **ICAS 2001** (International Congress on Analytical Science) was held at the same time and place, so Sun was able to attend both. His conference presentation entitled "Arsenic speciation with capillary electrophoresis and its application" was well received.

International Ion-Chromatography Symposium 2001 Oak Brook, Chicago, USA 9-12th September

by John O'Reilly

The annual conference for ion-chromatography and related techniques was held this year in Oak Brook, a suburb of Chicago about 20 miles west of the city centre (or "downtown" if you prefer!). A wide variety of interesting fundamental and applied research in ion-chromatography and capillary electrophoresis for ion analysis was presented in 14 oral and 2 poster sessions. There were two keynote lectures "The Membrane Suppressor: A
mothy Stevens, one of the founders of the technology and "Ion-Chromatography: The Widest Expression of Analytical Chemistry" given by Professor Corrado Sarzanini, this years winner of the award for contributions to ion-chromatography. The session titles included, IC separation selectivity, CE methods for ion analysis, emerging technologies, and many others devoted to analysis of particular samples such as drinking water and pharmaceuticals. ACROSS was represented by 6 people, **Paul Haddad, Greg Dicinowski, Helmy Cook, Cameron Johns, Philip Zakaria** and I who presented a total of 7 orals and 8 posters. One whole session actually turned out to contain only speakers from ACROSS! Our work was well received with many requests for further information.

Unfortunately the second half of the conference was somewhat overshadowed by the horrific events that occurred in the US on the 11th of September. Attendances to some of the later sessions were down a little as people tried to find out the latest news from New York and Washington and work out how they were going to get home with all airports closed. Some speakers on the Wednesday morning were unable to attend because of the closures. Out of the ACROSS attendees only three have returned thus far, Paul, Greg and I. Getting back was quite an effort with US commercial flights still not back to normal, and the collapse of Ansett. Hopefully things will be simpler for Cam, Phil and Helmy (and Perran) by the time they are due to come home after extended holidays in the US.

Finally, congratulations to Phil who won a scholarship to attend the conference.

TITRATIONS AWAY!!!

by Vicki Tolhurst



The annual Titration Competition this year involved 55 teams from a total of 17 schools and colleges throughout Tasmania. There were two sessions held in Hobart with the 1st year lab being full on both occasions. There were two divisions, High School (years 7-10) and Senior Secondary (years 11-12). The top three teams from each section were:

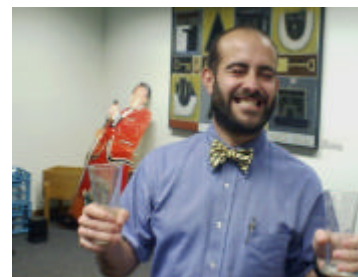
High School:	1 st Riverside High School (Launceston)
	2 nd Launceston Church Grammar (Launceston)
	3 rd Ogilvie High School (Hobart)
Senior	1 st Marist Regional College (Burnie)
Secondary:	2 nd St Mary's College (Hobart)
	3 rd The Hutchins School (Hobart)

The top 10% of teams overall have been invited to participate in the National Finals, to be held on the 10th October. Individual certificates were awarded to competitors who were within 1% accuracy of the state-wide median. This year, 34 students were within this margin. Thanks to all who helped out during the various stages of the competition. It was very much appreciated

CHEMISTRY CLUB NEWS

by Lauren Wise

Since the last Chem News the Chem Club has held three successful events, the Chem Club Brew Off, the Banana eating competition and the Gangster Cocktail Party. The Brew Off for the Bayler memorial trophy on Friday, 27th July saw a wide variety of entries ranging from stouts, ciders, wines to the ye ol' ginger ale. The guest judges were Pos and Ben from the Home brew shop and Chem Club Past President Emily Hilder. The award for best overall entry went to Peter Traill for his Ol' Stinky Ginger Beer, which he warned everybody about at the beginning of the evening, mustn't have been that bad though. You can find the winners of other categories plus some photos on the Chem Club web page <http://www.chem.utas.edu.au/chemclub/index.html>.



The next crazy Club idea, thanks to Traill for this one, was the Banana eating competition, for some reason he has a fascination with watching people eat bananas???? Any way the banana competition was held on a very sunny, warm Wednesday the 15th of August. Many gathered to watch those adventurous enough to enter the games. First was the banana boat race won by the third years by a very and I mean very small margin over the postgrads! Second event the banana relay, jumping with a banana between your knees proved quite difficult and messy. Next was eating a banana with feeling, which Peter gave a demonstration for, next ... the how many bananas can you fit in your mouth, that went to Simon Tyler, how many was that Simon??? And finally how many bananas can one consume in a minute and half that title went to Jarvier de Salas.

Friday the 17th of August saw the Chem tearoom overrun by gangsters and flashing blue lights as well as one bear, Sooty. The tearoom was transformed with streamers, balloons, flashing lights and music into a gangster



lair for the evening. The night was a huge success with over 80 people attending nearly all in gangster attire, this ranged from your old style gangster to the new hip Ali G style gangster. There were gun fights, martinis, colourful cocktails, feather boas and not too mention lots of fun. Helmy's idea of little saveloys in rolls with mustard and sauce was a huge success. A big thank you to all the committee members and those not on the committee (Matt, Andrew, Cornel, my friends from Melbourne) who helped during the night and those who helped beforehand to set up, go shopping and organize the night. A very big thank you to Helmy for all her help in organizing behind the scenes, she worked very hard to make the night a success! There are more photos on the Chem Club web page from the night.

Finally two things: 1. The Chem Club RACI quiz night is Friday the 21st of September and it promises to be fun and 2. The Chem Club Web site has been updated, a big thank you to Doug McLean for updating it and giving it a face lift.

Oh I forgot one thing, thanks to everyone who has supported the Chem Club by attending events this year I hope you have had fun. **Cheers, Lauren.**

NEW WEB SITE

Faculty of Science & Engineering's new web site came on line on 14 September. The address for the Faculty is <http://www.scieng.utas.edu.au/scieng/> and the address of the new School of Chemistry web page is <http://www.scieng.utas.edu.au/chem>

NEWS OF PAST & ABSENT STUDENTS

Dr Sam Bailey and Mrs Lindy Bailey were pictured in the UNITAS 3/9/01 issue attending the Foundation Dinner in Launceston. Both were Chemistry students at the University. Sam Bailey, who is now the Chemical Research & Development Manager at Tasmanian Alkaloids, completed his honours course in 1989 and undertook his PhD 1990-94 with Dr John Bremner.

Jackie Handley misses Tassie and sends her best to everyone. Jackie had surgery for a breast lump in April and is having follow-up treatment until the end of February in Melbourne. She is involved in a clinical trial of taxol derivative, a natural product from the Pacific yew tree and her prognosis is good (chances of a cure are better than 80%). Jackie can be contacted by email.

SEMINARS

The School would like to thank recent seminar speakers including: Prof Paul Worsfold, Dr Pavel Nesterenko, Dr Malcolm McLeod, Dr George Britosvek, Dr David Nichols and Dr Kevin Sanderson, Tim Jordan, Baoguo Sun and Dr Thomas Rodemann, and School of Chemistry staff for their Introduction to Research Seminars. Forthcoming seminars are listed below:

- 3/10 Dr Miroslav Macka**, School of Chemistry, "To Buffer or Not To Buffer, That Was The Question"
10/10 Honours final seminars
Tell Tuttle $\sqrt{3}$ Integrin Antagonists"
Bjorn Lunstedt, "Bioactive Compounds in Marine Chemistry"
Jeff Mason, "Rapid Capillary Electrophoretic Separation of Opiate Alkaloids"
17/10 Dr Barry O'Grady, School of Chemistry (Farewell Seminar),
"My Fortunate Career – 51 Years of Chemistry"
24/10 Michael Batten, School of Chemistry (PhD Final Seminar), "Chelating Imidazole Ligands in Catalysis"
19/11 Prof Tony Haymet, Department of Chemistry, University of Houston, "Nucleation: Experiment and Theory".

Thank you for your contributions for this issue of *ChemNews*.
The next *ChemNews* will be issued on 23 November 2001.
Please e-mail all contributions (as and when you think of them) to
[**Secretary@chem.utas.edu.au**](mailto:Secretary@chem.utas.edu.au)