

## CONGRATULATIONS TO:

- **Greg and Ashleigh Dicoski** on the birth of their daughter, Giuliana Maree, on Sunday, 1<sup>st</sup> September 2002.
- **Dr David Shane McGuinness**, who has been placed on the 2001 Dean's Commendation List for Outstanding Doctoral Theses.
- **Doug McLean** who won first prize (\$500 weekend getaway sponsored by ORICA) at the Southern Tasmanian APPITA Young Speakers Night and went on to compete in the National competition in Melbourne on 8 October which he also won! This means Doug has won a \$3,500 trip to Asia to give a presentation at international conference/s. The topic of Doug's talk was "Pitch Deposition versus Composition".
- **Doug McLean** and Angela Strk on their marriage on 24 August 2002.
- **Jarrold Coad** and Angela Gaby who were married on 26 January 2002 but whose photograph (*at right*) appeared in *The Mercury* on 6 September 2002.



## ARC GRANTS 2003

Congratulations to staff members who have been awarded the following new grants by the Australian Research Council for 2003:

- *Discovery Project Grant* for **\$275,035** (over 3 years) to **Dr Andrew Bowie** for "Targeting organically-complexed iron species in seawater using selective solid-phase adsorbent resins".
- *Discovery Project Grant* for **\$440,000** (over 4 years) to **Prof Allan Canty** for "High Oxidation State and Related Chemistry of Organic Compounds of Palladium".
- *Discovery Project Grant* for **\$255,000** (over 3 years) to Dr R Stranger, **Dr Brian Yates** and Prof K Morokuma for "Activation and Scission of Small Molecules using Three-Coordinate Metal Complexes", to be administered by The Australian National University.
- *Linkage Infrastructure Equipment & Facilities Grant* for **\$210,000** to Prof J B Reid, Prof R C Menary, Dr C L Mohammed, A/Prof S R Mclean, Dr J J Ross and **Dr Adrian Blackman** for purchase of a Benchtop Triple Quadruple Gas Chromatograph Mass Spectrometer.

## VISITORS

- **Dr Noni Johnson**, the 2001 Woolmers Visiting Lecturer, returned to the School this year as the **2002 Woolmers Visiting Lecturer**. During her visit from 28 August to 18 September, Dr Johnson, from the CSIRO Division of Molecular Science in Melbourne, gave a series of lectures to KRA210 students and also an RACI lecture. We look forward to welcoming Dr Johnson again next year.
- **Professor Ian Ritchie** formerly of Murdoch University in Perth is visiting the School from 7 - 24 October as the **2002 Pasmenco Visiting Lecturer**. During his visit Professor Ritchie will give a series of lectures on "Analytical Chemistry in Gold Processing" to KRA303 students, a guest lecture to 1st year students, a research seminar to the School, an RACI lecture and another specialist seminar to Pasmenco. Professor Ritchie was the former Chief Executive Officer of the AJ Parker Cooperative Research Centre for Hydrometallurgy in Perth. This centre is one of country's leading research institutes into the recovery of natural resources, in particular metals from ores. Professor Ritchie was scheduled to visit last year but was unable to reschedule his flights due to the Ansett collapse.
- **Professor Tony Haymet**, the first Woolmer's Visiting Lecturer in 1997, has been appointed the new Chief of CSIRO Marine Laboratories from 2003. The School has offered Prof Haymet laboratory space for one year to enable him to continue research in marine science but not directly related to his new role. In conjunction with this research, opportunities have arisen for a research assistant and vacation scholar to assist a collaborating researcher, Dr Peter Wilson, who will visit the School in December for about 8 weeks.

## NATIONAL SCIENCE WEEK/OPEN DAY

National Science week and Open Days on the Launceston and Hobart campuses were held in mid-August. The theme this year was Science in the Bush and the School's display featured steam distillation of eucalyptus oil from gum leaves. The distillation apparatus intrigued many people with a few people wondering what else they could add in place of gum leaves! We took the prize for being the most aromatic display and even though we were placed in the back corner of the Brooks Gym and Activities Centre our display could be smelt from the door. Thanks to everyone who gave up their time in looking after the display. *The School would like to thank Dr Andrew Seen for coordinating these events on both campuses.*

## TITRATIONS

The annual Titration Competition this year involved 77 teams from a total of 17 schools and colleges throughout Tasmania. There were two sessions held in Hobart with the 1<sup>st</sup> 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<sup>st</sup> St Patrick's College (Launceston)  
                          2<sup>nd</sup> Ogilvie High School (Hobart)  
                          3<sup>rd</sup> Ogilvie High School (Hobart)  
Senior Secondary: 1<sup>st</sup> St Patrick's College (Launceston)  
                          2<sup>nd</sup> St Patrick's College (Launceston)  
                          3<sup>rd</sup> Marist Regional College (Burnie)

By Dr Vicki Tolhurst

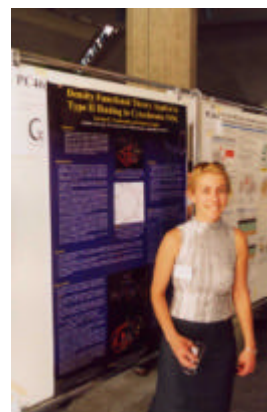


The top 10% of teams overall have been invited to participate in the National Finals, to be held on the 21-25<sup>th</sup> October. Individual certificates were awarded to competitors who were within 1% accuracy of the state-wide median. This year, 99 students were within this margin.

Thanks to all who helped out during the various stages of the competition. It was very much appreciated.

## CONFERENCES

In August, I (**Dr Brian Yates**) attended the **Electronic Methods in Computational Chemistry** conference in rainy **Nottingham, UK**. This excellent conference presented talks on four different themes and included a provocative talk by Nobel Laureate Prof John Pople on how much simpler chemistry would be if we all used atomic units. Following this it was off to the shores of **Lake Lugano in Switzerland** for the tri-annual conference of **WATOC** (the World Association of Theoretically Oriented Chemists - what a mouthfull!). This is one of the premier conferences in computational chemistry and was attended by about 800 people. There were many excellent talks at this conference and it is clear that theory is being used to study larger and larger systems and to analyse dynamical processes over a substantial time-frame. **Katrina Frankcombe** (ex-PhD student of mine, now in the UK) presented an interesting poster. A highlight of the conference was the Hollywood-style award ceremony featuring the Ken Houk show, complete with sunglasses. Leo Radom (ANU) and I have been short listed to hold the 2008 meeting in Australia. At each of the conferences I was able to present work by **Dave Graham** and **Dave McGuinness** and it stimulated some excellent feedback and possible collaboration.



Katrina

**Prof Paul Haddad** went to the **Malaysian Symposium on Analytical Chemistry, Penang, 10-13 Sep 2002** where he presented a plenary lecture; and to **ISC'02: 4th International Symposium on Chromatography 2002, 15-20 September, in Leipzig, Germany** where he presented an invited lecture.

**Prof Haddad** and **Sun Baoguo** went to **IICS2002: International Ion Chromatography Symposium 29 September - 2 October, 2002 Baltimore, Maryland, USA** where Paul gave the traditional course 'Ion Analysis by Capillary Electrophoresis and Capillary Electrochromatography' prepared and co-authored by Mirek Macka and Paul, and a workshop 'Ion Chromatography Methods Development: Theoretical and Practical Approaches', presented with Dr. Chris Pohl from Dionex.

ACROSS was further represented at this Symposium with 2 talks: Paul R. Haddad, Zhu Yan, James S. Fritz, "Mixed Zwitterionic and Carbonate Eluents for Suppressed Anion Chromatography", Baoguo S., Macka M., "Trace Speciation of Arsenic Compounds by Capillary Electrophoresis Using Large Volume Sample Stacking and a High Sensitivity Detection Cell", and 9 posters Shaw M.J., Dicoski G.W., Haddad P.R., "The Separation and Determination of Transition Metals, Lanthanides, Actinides and Heavy Metal Ions in High Ionic Strength Matrices Using a Chelating Phosphonate Ion Exchanger"; Zhu Yan, Ye Mingli, Wang Fang, James S. Fritz and Paul R. Haddad, "High Efficiency Multicoated Anion Exchange Columns Prepared Using Reversed-Phase Materials Coated with Cationic and Nonionic Surfactants"; Cook H., Haddad P.R., Modelling of Retention in Zwitterion Ion Chromatography"; Zakaria P., Macka M., Haddad P.R., Modelling the Separation of Six Opiate Compounds in Electrokinetic Chromatography Using a Sulfonated-Cyclodextrin as a Pseudo-Stationary Phase"; O'Reilly J.W., Dicoski G.W., Shaw M.J., Haddad P.R., "Determination of Gold Thiosulfate and Polythionates in Gold Thiosulfate Leach Solutions by Ion-Interaction Chromatography"; Baoguo S., Macka M., Haddad P.R., "Simultaneous Separation of Arsenic and Selenium Compounds by Capillary Electrophoresis Using a Coated Capillary and a High Sensitivity Detection Cell"; Fang Wang, Greg Dicoski, Yan Zhu and Paul R. Haddad, "Simultaneous Determination of Monofluoroacetate, Difluoroacetate and Trifluoroacetate in Environmental Samples by Ion Chromatography"; Hutchinson J., Macka M., Haddad P.R., "Avdaloic N., Effects of a Water Plug Injection in Preconcentration of UV-Visible Anions Using On-Capillary Open-Tubular Ion-Exchange Preconcentration and Elution with a Transient Isotachophoretic Gradient"; Zhu Yan, Ye Mingli, Wang Fang, and Paul R. Haddad, "Organic Analysis by Ion Chromatography: 4. Determination of Catecholamines by Cation-Exchange Using Amperometric Detection".

### **BRONWYN LARNER HEADS SOUTH**

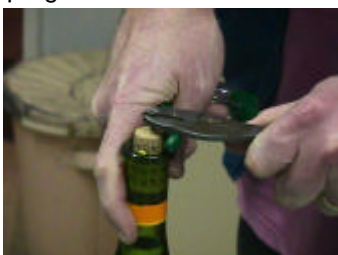
Bronwyn Larner, a chemistry PhD student in Launceston (supervisor Dr Andrew Seen), has headed off for 3 months to Antarctica. Bronwyn's journey is via South Africa where she boards the Russian ice breaker Kapitan Khlebnikov for the first voyage south, departing on September 29 and arriving at Casey station on October 22. During Bronwyn's trip to Casey she will undertake sampling of sediments and water in Brown and O'Brien Bays by deploying films of chelating resins which will concentrate the metals from the water and sediments into the chelating resins. The work is part of Bronwyn's PhD project and is aimed at developing sampling techniques for assessing contaminated sites in Antarctica.

Bronwyn will return in mid-January, spending Christmas and New Year's eve at Casey - a long way to go for a white Christmas.

### **KOONYA CAMP FOR 3<sup>RD</sup> YEARS**

*By Dr Vicki Tolhurst*

This semester the School invited the 3<sup>rd</sup> year KRA301/302/303 students to attend the Koonya tutorial weekend. It was also used as an opportunity for the third year students to ask more specific questions on the Honours program and individual Honours projects. KRA 301/302 tutorials were held by Jason Smith, Brian Yates, Adrian Blackman and Karen Stack. Unfortunately the students left soon after lunch because of a clash with Adele Wilson's 21<sup>st</sup> birthday. For some reason she preferred to spend her birthday evening with family and friends rather than her lecturers. Although there were no students staying at Koonya overnight, the staff had a good time with group building activities (how do we get the



corks out of the wine bottles with no cork screw?), roast lamb with baked vegetables followed by cheesecake for dinner, and a social game of cards with the occasional trip to the television to watch the progress of the footy (Go Brisvegas, go!!). Unfortunately, Mirek Macka had only one student for his tutorials on Sunday but he still seemed to enjoy his trip to Koonya and I'm sure Katie benefited from one-on-one tutorials.



*The School would like to thank Dr Tolhurst for organising and catering for the Koonya weekend.*

## CHEMISTRY CLUB



Photos from the **Mexican Night** held on 23 August



The annual Chemistry Dinner was held on 27 September at the Queens Head Cafe and Bar where 54 people enjoyed a HUGE three course meal. The night began early with some of the guys going to the Uni Bar to have Pre-Pre-Dinner Drinks and then joining us in the Tea

room for more drinks. As many people as possible were squashed into cars and headed to north Hobart without getting Dave Vercoe anything to eat despite him wanting pizza! On arrival at the Queen's Head we all shuffled into the Bull Bar, got ourselves a drink and proceeded to find a table for the evening. As expected the academics sat together, ACROSS had a table (with a couple of ring ins), the third years and honours sat together and then there were two tables with everyone else. A record number of 300 raffle tickets were sold in a half hour by Helmy Cook and Amanda Glover for a 4 prize raffle to be drawn later in the evening, I think that there were a few people interested in winning the first prize of 6 cartons of beer!! After mains came the formal part of the night. Firstly Professor Canty thanked everyone who came down from Launceston for the night and also thanked the Chem Club for their efforts this year and Alison Radford thanked a number of people who have helped with this year's functions. A Chem Dinner wouldn't be complete without some awards. This year we had the people's choice awards. There were a minimum of three nominees for each award and they were put to a vote through cheering and clapping for the most worthy recipient. The winners were:

- The person most likely to be a member of an Al Queda sleeper cell - Doug "Mullah" McLean
- The Real Man Award- Mirek "Ohhh cakes!!" Macka
- The Inseparable Award- Matt Shaw and Andy Bowie
- The Fashion Award- Doug "Bowtie" McLean
- The Departmental Fish Award- Dave "Who broke the toilet?" Nielsen
- The Unluckiest Person Award- Matt Shaw
- The Early Bird Award- Allan Canty
- The Night Owl Award- Yang WenChu
- King and Queen of Chemistry- Adele Wilson and Andrew Dick

There were a number of close calls like the one for King and Queen of Chemistry which was nearly won by Micheal Gardiner and Vicki Tolhurst and a number of unanimous decisions such as Matt Shaw and Andy Bowie winning the inseparable award. The raffle was drawn by Allan Canty with Mirek Macka and Evi taking out third and fourth prize of movie tickets and cd voucher, Dave Nielsen winning the second prize of a cheese basket and Matt winning the first prize which made up for all his bad luck! All in all it was a great night and the Chem Club would like to thank everyone for coming.

## THANKS TO SEMINAR SPEAKERS

### PhD Final Seminars

David Graham, "Stability of Heteroatom-Substituted Carbenes and Their Complexes"

David Nielsen, "Adventures with Donor Functionalised Nucleophilic Heterocyclic Carbenes - Some Pd(II) and Ag(I) Complexes, their Reactivity, Stability, and Catalytic Applications".

Helmy Cook, "Electrostatic Ion Chromatography"

### Honours Final Seminars

Samra Tulumovic, "Analytical Applications of Spectrophotometry Through Opaque Phases Using Light-Emitting Diodes"

Amanda Glover, "Determination of Carbohydrates in Combat Ration Packages by Anion-Exchange Chromatography"

Margaret Mary Dooley, "Biomimetic Synthesis of the *Stemona* Alkaloid, Stenine"

Bonnie Atkinson, "Degradation of the Natural Pyrethrins in Crop Storage"

### Guest 1<sup>st</sup>-year Lecture

Professor Ian Ritchie, Murdoch University, "Mercury - a Mobile and Murderous Metal"

**Thank you for your contributions for this issue of *ChemNews*.  
The next *ChemNews* will be issued on Friday, 13 December 2002  
Please e-mail all contributions (as and when you think of them) to**

**[Secretary@chem.utas.edu.au](mailto:Secretary@chem.utas.edu.au)**

**Current and previous editions of *ChemNews* are on the Chemistry Web site at  
<http://www.science.utas.edu.au/chem/news.asp>**

