

# RSC NEWS Vol 40 : Issue No. 3

April 2009

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Roving Reporter: Gavin Perri

Editor: Peter Gill



Dear Reader,

Welcome to the April, 2009 edition of the RSC News.

As many of you will already know, our colleague Professor Ray Withers has just been elected to the Fellowship of the Australian Academy of Science. This is a great honour for any Australian scientist and has been bestowed on Ray for his seminal contributions to solid-state inorganic chemistry. As a result of Ray's election, the RSC continues to accommodate more FAAs than any other chemistry department in Australia.

New PhD candidates continue to arrive in the School while the Honours program is now in full swing. Indeed, the thirteen Honours candidates will present their preliminary research seminars in Lecture Theatre T1 during both the morning and afternoon of Friday, April 24<sup>th</sup>.

In regards to the acquisition of new equipment, the Agilent GC/MS has now been installed in Room 227 on the top floor of the Birch Building and I expect it will be commissioned shortly. The ordering of a 400 MHz NMR spectrometer to replace our old (broken) 300 MHz machine is not too far off now and I hope to be able to give you detailed information regarding delivery times etc in next month's edition of this newsletter.

The New Buildings Project has now actually started and details of the involvement of the RSC in this should become quite clear within the next six weeks or so. Again, I hope to be able to provide some detail on this matter shortly, perhaps in the next edition of this newsletter or through one of the two School forums I will hold within the next month or so.

Happy reading!

Martin Banwell  
Director, RSC

## MONTHLY HIGHLIGHTS

### CONGRATULATIONS

Congratulations to the following PhD students who have submitted:

**Ms Maria Matveen**ko, Banwell group, submitted 10/3/09, *The Chemoenzymatic Synthesis of Carbon Amaryllidacene Alkaloids*

**Mr Jee-Loon Foo**, Ollis group, submitted 19/3/09, *Mechanistic study of Enzymes involved in Phosphate Ester Hydrolysis*

Congratulations to the following PhD students who have been approved to graduate:

**Mr Andrew Phillis**, Banwell group, approved 27/02/09

**Mr Jeevan Khurana**, Easton group, approved 04/03/09

**Mr Bandar Babgi**, Humphrey group, approved 23/03/09

### RECENT ARRIVALS

A sincere welcome is extended to the following people who have joined us recently:

**Ms Leila Varghese**, Technical Assistant (Casual), has started with the Ollis group. Leila joins us from the Walter and Eliza Hall Institute for Medical Research, Melbourne and commenced with us on the 18/03/09.



**Mr Hendrick Maat** has started in the Electronics workshop.

**Dr Chris Richardson** has been appointed to a one year fixed term lectureship in organic chemistry essentially as a short term replacement for Mark Lynch. He comes to us after a stint in the UK. Rm 1.25, ext. 59525.

#### PhD Students:



**Ms Feihua (Lucy) Cao**, Easton group



**Mr Dwain Hoskins**, McLeod group



**Mr Solomon Wassyehun Kelemu**, Sherburn group



**Ms Choy Theng (Tiffany) Loh**, Otting Group



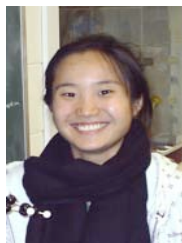
**Mr Lu Jin**, Pace group



**Mr Henry Toombs-Ruane**, Sherburn group



**Mr Mukesh Sharma**, Banwell group



**Ms Di Lu**, Salem group

#### Visiting Scholars:



**Ms Jill Halliday**, McLeod group, returns to the RSC for two months, Mar-Apr.



**Mr Sylvain Le Roux**, University Pierre and Marie Curie, Paris, Sherburn group for four months, Mar-July.



**Mr Alexander Kampfe**, Technical University Freiberg, Hill group for four months, April-July.

**Ms Toroskeh Mavarani**, University of Canberra student, working on an Honours project with Geoff Salem, Mar-Jun.

#### RECENT DEPARTURES

**Mr Nik Osinski**, Visiting Scholar, Sherburn group, returns to Utrecht University

## STUDENT MATTERS

Mal McLeod has kindly offered to do a **SciFinder Web training session** on Fri 17th April 11:00 - 1:00 for Chemistry Honours students. It will be held in Hancock flexible learning studio. This is not assessed coursework - just merely useful...

The training will involve a one-hour tutorial on how to use the software followed by an hour of individual search time where the students conduct their own searches and can receive advice from Mal on search strategies.

The registration link is below. \*Students must register in advance of the tutorial.

[http://anulib.anu.edu.au/subjects/science/databases/sfs\\_login.html](http://anulib.anu.edu.au/subjects/science/databases/sfs_login.html)

\*For any questions regarding this session, please contact Mal.\*

### Academic Skills Centre Seminars:

- Adopting a No Complaints Policy in Your Life - 21 April

### Workshops:

- Staying Calm When Anxiety Hits - 29 April
- For details and more Workshops, see the Counselling Centre Workshops website:

[http://www.anu.edu.au/counsel/seminars\\_and\\_workshops/index.php](http://www.anu.edu.au/counsel/seminars_and_workshops/index.php)

### Get Up and Go Walking Program

Get Up and Go is peer support walking program for ANU students offered by the counselling centre. It provides opportunities for regular exercise and social contact which can be a great way to manage your mental health and wellbeing. See the Counselling Centre Website for more information.

<http://counselling.anu.edu.au/get-and-go>

Check out their calendar for April for further details: <https://academicskills.anu.edu.au/calendar/2009-03>

## Student Profile



**Name:** Henry Toombs-Ruane  
**Qualifications/Degree:** BSc(Hons), just started a PhD

**Favourite TV Show:** The Daily Show

**Favourite Movie:** Rear Window

**Favourite Music/Band:** Damien Rice

**Sporting Code and Favourite Team/Player:** Tennis, Roger Federer

**What is your thesis topic / field of interest?** Well, so far I don't know (I only just started!). Radicals, dendralenes, or cavitands. They all sound so good.

**If you could be a chemical element for a day which one would you choose and why?**

Helium, it's light-hearted but also aloof.

**What have you learnt about yourself during your time here?**

That humans can survive and function under extreme stress, and they can be cool while doing it.

**If you could dine with any three people who would you choose (alive or dead)?**

Richard Feynman, Kurt Vonnegut and Jesus.

**What do you see yourself doing upon completion of the program?**

Becoming rich and famous, but probably not. I think I'll travel.

**If you were stuck on a deserted island for one week what three essential items would you hope to have with you?**

Food, water and a blanket. Alternatively: pen, paper and women.

**What has been the most enjoyable experience during your studies at RSC?**

Meeting people here and realising that, maybe after the initial stress of settling in, this place may be a really amazing environment to work in.

**Favourite Saying**

Our strength is often composed of the weakness we're damned if we are going to show.

-Mignon McLaughlin

## Student Profile



**Name:** Choy Theng Loh  
**Qualifications/Degree:** BSc  
Biochemistry, just started a  
PhD

**Favourite TV Show:** Bones, CSI  
**Favourite Movie:** Tomb Raider  
**Favourite Music/Band:** Better in Time by Leona Lewis  
**Sporting Code and Favourite Team/Player:**  
Swimming HERO – Michael Phelps!

**What is your thesis topic / field of interest?** Cell free protein synthesis and NMR structural studies

**If you could be a chemical element for a day which one would you choose and why?**  
Aurum. I am GOLD!

**What have you learnt about yourself during your time here?**  
Being TOUGH and NEVER GIVE UP!

**If you could dine with any three people who would you choose (alive or dead)?**  
Yokky Cheong (my mum), Peg (London) and Joleen (Malaysia) – Both are crazy friends.

**What do you see yourself doing upon completion of the program?**  
Post Doc

**If you were stuck on a deserted island for one week what three essential items would you hope to have with you?**  
Knife, lighter and camping tent

**What has been the most enjoyable experience during your studies at RSC?**  
Doing research and being friends with everyone of course!

**Favourite Saying**  
“You may not always WIN, but never give in to DEFEAT”

*If you are a student interested in adding your voice to the RSC News editorial team, email [steph@rsc.anu.edu.au](mailto:steph@rsc.anu.edu.au)*

## MONDAY SEMINAR SERIES - APRIL Rm 134, 1pm.

6th: Junming Ho **Mid Term** (Coote group) – RSC LT  
7th **TUESDAY:** Christine Dietinger **End of Term** (Banwell group) – RSC LT  
20th: Jia Deng **Mid Term** (Gill group) – RSC LT  
28th **TUESDAY:** Bill Lording **End of Term** (Sherburn group) – RSC LT  
30th **THURSDAY:** Paul Lloyd **End of Term** (Otting group) – **BaMBi Seminar Room**

## THURSDAY SEMINAR SERIES – APRIL RSC Lecture Theatre, 4pm.

2nd: Dr Dieter Seebach, Dept. Fur Chemie, ETH Zurich (Sherburn group)  
15th **WEDNESDAY:** Prof Daniel Nocera, 2009 Birch Lecturer (Krausz group)  
16th: Prof Daniel Nocera, 2009 Birch Lecturer (Krausz group)  
23rd: Dr Katie Cergol, New post doc (Sherburn group)  
30th: Dr Dannon Stigers, New post doc (Easton group)

## COMPUTING UPDATE

We have created an online survey to evaluate your views on the provided IT support in the RSC/Chemistry areas. The survey has been designed to be quickly completed, and as straightforward as possible.

The poll is found at:

<https://apollo.anu.edu.au/default.asp?pid=3583>

The poll will close at midnight on the 7th of April, so please don't feel rushed, we value your comments and suggestions.

- Hamish

## FOR YOUR INFORMATION

The next **DAG meeting** will be held at 1.30pm on the 14<sup>th</sup> of May in the Boardroom.

The next **School Forum** will be held at 10.30am on the 15<sup>th</sup> of May in the tearoom.

## Bramley's Bar:

To welcome all new people to the RSC the social club will be holding a special Bramley's TODAY. All new people to the RSC this year will be eligible to their first drink free and everyone can partake in free nibbles

during the night.

It's a great opportunity to meet other people in the RSC so please come along. In case you are unaware, Bramley's occurs from 5 pm every Friday in the RSC tearoom.

If you want to know more feel free to come and speak to me. Hope to see you there.

- Tristan  
Lab 239

### Casual Timesheets:

A reminder that due to the Easter and ANZAC day public holidays this month, our payroll deadlines have been moved as follows:

Could I please have all casual/casual sessional timesheets for next pay by \*\* Tuesday 7 April by 12pm\*\* and all timesheets for the following pay by \*\* Wednesday, 22 April by 12pm.\*\*

Kind Regards,  
Jo

### Easter Raffle:

Don't miss your chance to go in the draw for the EASTER RAFFLE!!!! The proceeds will go to Thanusikka through World Vision. The yummy chocolate prizes will be drawn next Thursday the 9th of April.

### PURPLE SHINS SOCCER UPDATE

We are approaching the new season of the annual Purple Shin competition, which starts at the end of April. For those of you who don't know, Purple Shin is a soccer league at the ANU, where the players are postgraduate students and faculty staff. There will be around 8 teams from different research schools and departments. Each team will play with all other teams twice. The matches run at lunch time.

I am now taking names for anyone who is keen to play, there are no skill requirements to play for our team. So, if you are interested please let either myself ([jiadeng@rsc.anu.edu.au](mailto:jiadeng@rsc.anu.edu.au)) or Chris ([tc.corkery@yahoo.ca](mailto:tc.corkery@yahoo.ca)) know. Females are also welcome (your score will count as two points!!!)

Cheers,  
Jia

### FUNNIES

You know you're Australian if....

§ You know the meaning of 'girt'

§ You believe that stubbies can either be worn or drunk

§ You think it is normal to have a Prime Minister called Kevin

§ You waddle when you walk due to the 53 expired petrol discount vouchers stuffed in your wallet or purse

§ You've made a bong out of your garden hose rather than use it for something illegal such as watering the garden

§ When you hear that an American 'roots for his team' you wonder how often and with whom

§ You understand that the phrase 'a group of women wearing black thongs' refers to footwear and may be less alluring than it sounds

§ You pronounce Melbourne as 'Mel-bin'

§ You pronounce Penrith as 'Pen-riff'

§ You believe the 'L' in the word 'Australia' is optional

§ You can translate: 'Dazza and Shazza played Acca Dacca on the way to Maccas'

§ You believe it makes perfect sense for a nation to decorate its highways with large fibreglass bananas, prawns and sheep

§ You call your best friend 'a total bastard' but someone you really, truly despise is just 'a bit of a bastard'

§ You think 'Woolloomooloo' is a perfectly reasonable name for a place

§ You believe it makes sense for a country to have a \$1 coin that's twice as big as its \$2 coin

§ You understand that 'Wagga Wagga' can be abbreviated to 'Wagga' but 'Woy Woy' can't be called 'Woy'

§ You believe that cooked-down axlegrease makes a good breakfast spread

§ You believe all famous Kiwis are actually Australian, until they stuff up, at which point they again become Kiwis

§ You know, whatever the tourist books say, that no one says 'cobber'

§ You know that certain words must, by law, be shouted out during any rendition of the Angels' song 'Am I Ever Gonna See Your Face Again'

§ You believe, as an article of faith, that the confectionary known as the Wagon Wheel has become smaller with every passing year

§ You still don't get why the 'Labor' in 'Australian Labor Party' is not spelt with a 'U'

§ You wear ugh boots outside the house

§ You believe that the more you shorten someone's name the more you like them

§ Whatever your linguistic skills, you find yourself able to order takeaway fluently in every Asian language

§ You understand that 'excuse me' can sound rude, while 'scuse me' is always polite

§ You know what it's like to swallow a fly, on occasions via your nose

§ You understand that 'you' has a plural and that it's 'youse'

§ You know it's not summer until the steering wheel is too hot to handle

§ Your biggest family argument over the summer concerned the rules of beach cricket

§ You shake your head in horror when companies try to market what they call 'Anzac cookies'

§ You still think of Kylie as 'that girl off Neighbours'

§ When returning home from overseas, you expect to be brutally strip-searched by Customs - just in case you're trying to sneak in fruit

§ You believe the phrase 'smart casual' refers to a pair of black tracky-daks, suitably laundered

§ You understand that all train timetables are works of fiction

§ When working at a bar, you understand male customers will feel the need to offer an excuse whenever they order low-alcohol beer

§ You get choked up with emotion by the first verse of the national anthem and then have trouble remembering the second

§ You find yourself ignorant of nearly all the facts deemed essential in the government's new test for migrants.

§ You will immediately forward this list to other Australians, here and overseas, realising that only they will understand!!

*Submitted by Ray Withers*

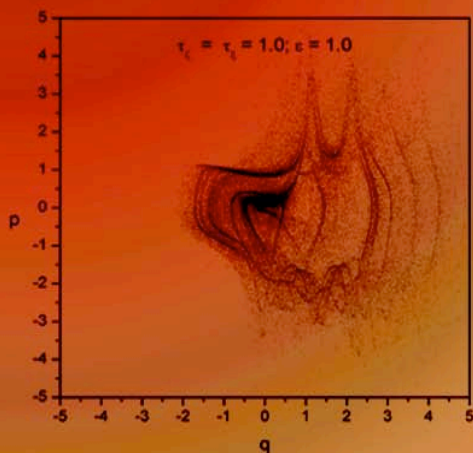
## GUESS THE STAFF / STUDENT MEMBER

Mr March was Horst Neumann!



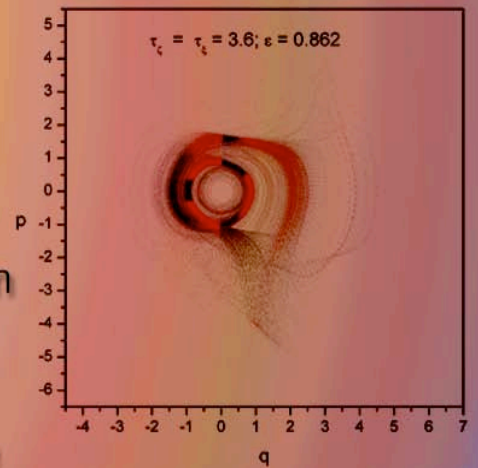
## MOLECULE OF THE MONTH

### ~~Distribution~~ ~~Molecule of the Month~~



A Harmonic Oscillation under heat stress. The coordinates are projected down to the position  $q$  and the momentum  $p$  of the oscillating particle.

- Denis Evans and Stephen Williams



## Staff Publications as at 30 March 2009:

For a full list of RSC publications from 2002, see <http://rsc.anu.edu.au/research/Publications/index.php>

### 2008

Gregorkiewitz M, Li Y, White TJ, Withers RL, Sobrados I **The structure of "orthorhombic"  $\text{KAISiO}_4\text{-OI}$ : evidence for Al–Si order from MAS NMR data combined with Rietveld refinement and electron microscopy.** *Can. Mineral.* (2008), 46(6), 1511–1526. <http://dx.doi.org/10.3749/canmin.46.6.1511>

Liu Y, Withers RL, Welberry TR, Wang H, Du H-L, Yao X **Structural disorder in BZN-based pyrochlores.** *J. Electroceram.* (2008), 21(1–4), 401–404. <http://dx.doi.org/10.1007/s10832-007-9226-z>

Zhou D, Wang H, Yao, X, Liu Y **Microwave dielectric properties of low-firing  $\text{BiNbO}_4$  ceramics with  $\text{V}_2\text{O}_5$  substitution.** *J. Electroceram.* (2008), 21(1–4), 469–472. <http://dx.doi.org/10.1007/s10832-007-9223-2>

### 2009

Archer AW, Elix JA **New species and new reports in the lichen genus *Pertusaria* (Ascomycota: Pertusariaceae) from Australasia.** *Nova Hedwigia* (2009), 88(1–2), 1–10. <http://dx.doi.org/10.1127/0029-5035/2009/0088-0001>

Barrow RA, McCulloch MWB **Linear naphtho- $\gamma$ -pyrones: a naturally occurring scaffold of biological importance.** *Mini-Rev. Med. Chem.* (2009), 9(3), 273–292. <http://www.bentham.org/mrmc/contabs/mrmc9-3.htm#1>

Bennett MA, Bhargava SK, Bond AM, Bansal V, Forsyth CM, Guo S-X, Priver SH **Electrochemical and chemical oxidation of  $[\text{Pt}_2(\mu\text{-pyrophosphite})_4]^{4-}$  revisited: characterization of a nitrosyl derivative,  $[\text{Pt}_2(\mu\text{-pyrophosphite})_4(\text{NO})]^{3-}$ .** *Inorg. Chem.* (2009), 48(6), 2593–2604. <http://dx.doi.org/10.1021/ic802213v>

Goossens D, Dr Trevor J Hicks. *J. Phys.: Condens. Matter* (2009), 21(12), 120301/1–1. <http://dx.doi.org/10.1088/0953-8984/21/12/120301> (Guest Editorship of Special Issue)

Goossens DJ, Beasley AG, Welberry TR, Gutmann MJ, Piltz RO **Neutron diffuse scattering in deuterated *para*-terphenyl,  $\text{C}_{18}\text{D}_{14}$ .** *J. Phys.: Condens. Matter* (2009), 21(12), 124204/1–10. <http://dx.doi.org/10.1088/0953-8984/21/12/124204>

Hudspeth JM, Goossens DJ, Studer AJ, Withers RL, Norén L **The crystal and magnetic structures of  $\text{LaCa}_2\text{Fe}_3\text{O}_8$  and  $\text{NdCa}_2\text{Fe}_3\text{O}_8$ .** *J. Phys.: Condens. Matter* (2009), 21(12), 124206/1–8. <http://dx.doi.org/10.1088/0953-8984/21/12/124206>

Jeng U, Lin T-L, Hu Y, Lin J-M, Huang Y-S, Liang KS, Fan L, Thiyagarajan P **Complex structure of fullerene star ionomers and sodium dodecyl sulfate resolved by contrast variation with SANS and SAXS.** *Nucl. Instrum. Methods Phys. Res., Sect. A* (2009), 600(1), 294–296. <http://dx.doi.org/10.1016/j.nima.2008.11.048>

Kingsland SR, Barrow RA **Identification of chaetoviridin E from a cultured microfungus, *Chaetomium* sp. and structural reassignment of chaetoviridins B and D.** *Aust. J. Chem.* (2009), 62(3), 269–274. <http://dx.doi.org/10.1071/CH08259>

Perez-Mato JM, Withers RL, Larsson A-K, Orobengoa D, Liu Y **Distortion modes and related ferroic properties of the stuffed tridymite-type compounds  $\text{SrAl}_2\text{O}_4$  and  $\text{BaAl}_2\text{O}_4$ .** *Phys. Rev. B* (2009), 79(6), 064111/1–12. <http://dx.doi.org/10.1103/PhysRevB.79.064111>