

Department of Chemistry Newsletter

June 2017

#505



Kia Ora,

I know that for many of you the end of the semester was hectic. The busyness was enhanced by the bringing in of 9 candidates for our three Chemical Biology positions. This has required a high level of effort from not only the interview panel, but to those who have hosted the candidates, and the dozens who have turned up to lectures and seminars.

Things are now looking up, and it's been great to see some sun on the snowy mountains these last few mornings.

Most of you will be aware that the RRSIC project has some delays. Unfortunately we will not be teaching there in Semester 2, with handover now scheduled at the start of October. We hope that there will be little impact on the timetable for moving research labs.

The delay is particularly difficult for Geology and Biology who have to move their labs out of von Haast before the completion of the new building, to allow demolition to stay on track. Luckily the teaching labs can be accommodated in Rutherford, mostly on level 2 of Chemistry and Physics. Geology's research labs will be more challenging. Work on that issue is ongoing and may require clearing some space in Physics and Chemistry.

There have been various outreach activities taking place lately, with the Chemistry Club at Cobham in full swing. This involves members of ChemSoc working with a group from Cobham Intermediate and Burnside Primary, with assistance of some of Burnside High School's scholarship Chemistry class. Sarah and Samantha Bodman also did come ice cream outreach at St Margaret's College, which has spawned a whole inquiry topic for the Year 2 students. See below for more details!

Visiting Erskine Fellow Mark Turnbull did a Magic of Chemistry show to over 300 people last week in conjunction with NZIC. There were plenty of explosions and colour changes to entertain and educate the mainly school age audience, and it is great to see our Erskine visitors engaging with the wider community.

On the research side, many staff are hard at work on second-round Marsden, MBIE, and other grants. This can be a tedious and frustrating task, but I trust that it will be ultimately rewarding.

Other research news is that our NMR replacement purchase has been approved. This will provide two new JEOL machines (600 and 400 MHz) to be installed in the new building, and the current 400 MHz machine will remain in place until any teething troubles are ironed out. This is an excellent outcome, since the current machine will not be supported for much longer, and moving it would be costly. A big "thank you" to, in particular, Marie and Richard, who, among other tasks, such as copious form-filling, spent several days in the air to check out the options.

Elsewhere in the Newsletter there are some comments from Owen about Health and Safety. We have an excellent H&S record, but we need to work to keep it that way, so please read that carefully.

Most of you will be aware that Chemistry and Physics and Astronomy will soon officially become the School of Physical and Chemical Sciences. There will be a search process for the new position of Head of School, but in the meantime Richard and I will continue in our roles.

Mike Reid

Outreach

Sarah Masters and Samantha Bodman went to St Margaret's College recently to do some ice cream outreach with the Year 2 students. This was part of their technology unit, looking at processes and procedural writing. The girls learnt how to make ice cream 3 different ways, and about sublimation and changes of state. They were very engaged in the process (which is not surprising given that the reward was ice cream at the end!) and have taken the topic to new levels, designing their own ice cream flavours, undertaking surveys to find out the preferences of others, and designing advertising for their product.

SLM



The girls enjoying the fruits of their labour



Magic of Chemistry Show

Recently the New Zealand Institute of Chemistry in conjunction with UC Chemistry and ChemSoc enabled visiting Erskine Teaching Fellow Professor Mark Turnbull to present his Magic of Chemistry Show to over 300 people. Mark is a gifted orator and held the audience captive with his pet "chameleon" (a colour changing solution in a large conical flask!) that needed to be watered at regular intervals so it didn't get too red and angry, and exploding hydrogen balloons! With a story for each demonstration, he entertained and educated, and had most of the mainly school age audience down the front at the end with multiple questions and even requests for photos!! Check out the nice smoke ring in the picture... ☺

Many thanks to the large team of people who made the event happen, from Nathan in the teaching labs to the UC H&S team, the NZIC and ChemSoc committees and of course, Mark for being brilliant. SLM

ChemSoc News

Hello again from Chemsoc!

We had a fantastic night at the first ever Chemistry Cocktail Evening, the event was a success and we hope you had as much fun attending as we did hosting. We're looking forward to improving this event further and incorporating this into our annual events calendar henceforth.

Coming up soon we also have the brew off in collaboration with UCBC. A storm is brewing between UC's most prestigious beer forging clubs...

UC Brew Club and Chemsoc are holding a brew-off later in the year, and if you are interested, come along to the tutorial event after exams to learn how to brew (details to be confirmed, keep an eye on our Facebook group). You can learn how to start making your own beer, cider, wine, mead and more! Each club will also be brewing a club beer which will be judged on the day of the competition. Get brewing for this ASAP!

And last but not least, get excited for the ever popular TriSci Ball! Returning on Saturday the 5th of August, prepare yourselves for a fun and colourful night with Chemsoc, Biosoc and PhysSoc. This year it's at a new "not very well kept secret" location with buses from campus on the night to and from the venue. Tickets are \$40 for members and \$45 for non-members and will be on sale very soon! Save the date and keep an eye out for Chemsoc committee members coming around the department with EFTPOS machines during the week of 19-23th June. Last year chemistry made up half of the attendees and we look forward to a strong presence again this year!

Thanks,

Chemsoc Committee.

Link to Facebook group: <https://www.facebook.com/groups/822463201166560/>

Position Vacancies

- **Lecturer/Senior Lecturer – Analytical Chemistry**
Chemistry, School of Science, Faculty of Health and Environmental Sciences
Auckland University of Technology

The School of Science at the Auckland University of Technology is strengthening its research and teaching capabilities in Chemistry, and is seeking applicants for the position of Lecturer / Senior Lecturer in the broad area of Analytical Chemistry. [Read more....](#)

- **Scientist**
Syft Technologies Ltd

Syft Technologies is offering a unique opportunity to take on a key sales and applications role in a dynamic, fast growing New Zealand technology company. [Read more....](#)

News

- 2017 Marsden Preliminary Round Results: Congratulations to Alison Downard and Sarah Kessans who have been selected to progress to the full proposal stage.
- Ian Shaw has been invited to be the food toxicologist on the Chief Scientist (Sir Peter Gluckman)'s Folate & Pregnancy Panel. The Panel (set up by the Royal Society of New Zealand) will review the risks and benefits of fortifying the NZ diet with folate (to prevent spina bifida) to inform government decision making.

Health and Safety

Reminders:

- Do not carry bulky chemicals down stairs – use the goods lift. Which also means that, if you do not actually need to use the goods lift, don't tie it up so that others can't!
- If you are using equipment in a teaching lab: firstly, you need permission; secondly, there should be a sign on it if it is unattended; thirdly, you should not be doing this when the lab is being used for teaching.

New policies:

- Gumboots are no longer approved footwear in teaching and research laboratories. Yes, I did see someone in gumboots in the first year lab... Gumboots are probably worse than open footwear as they will collect and trap spilt chemicals.
- As part of the process of moving into the RRSIC, and also for good management generally, the department has adopted a policy for the inventory and storage of old student/postdoc/visitor samples. This will be e-mailed out shortly and will also be available on the School's H&S web pages in due course.
- Students and staff who require vaccinations as part of their work can ask for the department to pay for these.
- Staff and students who regularly go on field trips can (or might be expected to) have a defensive driving course paid for by the department.

Also, just to forewarn you that when we move chemicals into the RRSIC, you will need to carry out a risk assessment for that: consider how it should be transported and what you will do if there is a spillage.

Up-coming courses....

Date	Training	Duration
June		
Mon 26	First Aid Revalidation	9am–4pm
Thur 29	Health & Safety Rep (Stage 1)	9am–4.30pm
July		
Wed 12 & Thu 13	Comprehensive First Aid	2 days 9am–4pm
Fri 14	First Aid Revalidation	9am–4pm

EPS Library Contribution

Library Liaison Officer for Chemistry,
Assoc. Prof. Greg Russell <http://bit.ly/GZr6zY>

Help with EndNote? If you or your students need EndNote instruction or already know how to use EndNote but have questions or issues, contact John for help <http://bit.ly/johnarnold-uc>

Applications for the Library Open Access Fund
are welcomed <http://bit.ly/2l9EBI5>



Recently Seen on the Web

- What Happens When Scientists Stand Up for Science (The Conversation) <http://bit.ly/2qQO6CK>
- Brainstorming Is Not the Way to Discuss Scientific Issues (Nature News & Comment) <http://go.nature.com/2qjDlyP>
- Go Ahead and “Teach the Controversy:” It Is the Best Way to Defend Science (Sci-Ed) <http://bit.ly/2qQRjNb>
- Citation Performance Indicators – A Very Short Introduction (The Scholarly Kitchen) <http://bit.ly/2pN35cm>
- Crowd-based Peer Review Can Be Good and Fast (Nature News & Comment) <http://go.nature.com/2qzaxV0>
- The Traditional Lecture Is Dead. I Would Know—I’m a Professor (WIRED) <http://bit.ly/2r45xeL>
- How to Tell the Difference between Fact and Fiction on a ‘Post-truth’ Internet (Sciblogs) <http://bit.ly/2qJ5TEN>
- What’s the Opposite of Post-truth? It’s Not As Simple As “The Facts” (NewStatesman) <http://bit.ly/2qIWL52>
- Updating Asimov – How Do We Regain Control in the Digital Age? (The Scholarly Kitchen) <http://bit.ly/2pAtp5D>
- Science Publishers Try New Tack to Combat Unauthorized Paper Sharing (Nature News & Comment) <http://bit.ly/2qtPhm1>
- Are We Educating Educators about Academic Integrity? (Swansea U) <http://bit.ly/2q8ihMv>
- Lines of Spines: What Is a Library? (The Smart Set) <http://bit.ly/2qvMiHp>

On the lighter side...

- Recursive (PHD Comics) <http://bit.ly/2pegVAo>

John Arnold
Subject Librarian for Chemistry
<http://bit.ly/johnarnold-uc>

Solution: Cryptic Crossword #22

1	S	Y	2	S	T	3	E	M		4	V	5	E	R	6	B	A	7	T	I	8	M
	O		H		M						N		O		R							I
9	C	A	E	S	A	R				10	S	C	A	M	P	E	R	S				
	K		B		C						H		B		A							P
		11	R	A	C	I	N	12	G	C	A	L	E	N	D	A	R					
			N		A		R		N		R		L									I
13	E	I	G	H	T	E	E	N	T	H		14	M	E	S	S						
	N				E		E		R		15	C										E
16	C	A	17	S	T		18	U	N	H	E	R	A	L	19	D	E	D				
	O		T		20	R		G		S		R		E								
21	M	A	R	K	E	T	R	E	S	E	A	R	C	H								
	P		O		D		O				P		L								22	I
23	A	M	B	I	E	N	C	E			24	C	A	N	A	R	D					
	S		I		E		E					C		R								
25	S	Y	C	A	M	O	R	E			26	S	E	V	E	R	E					

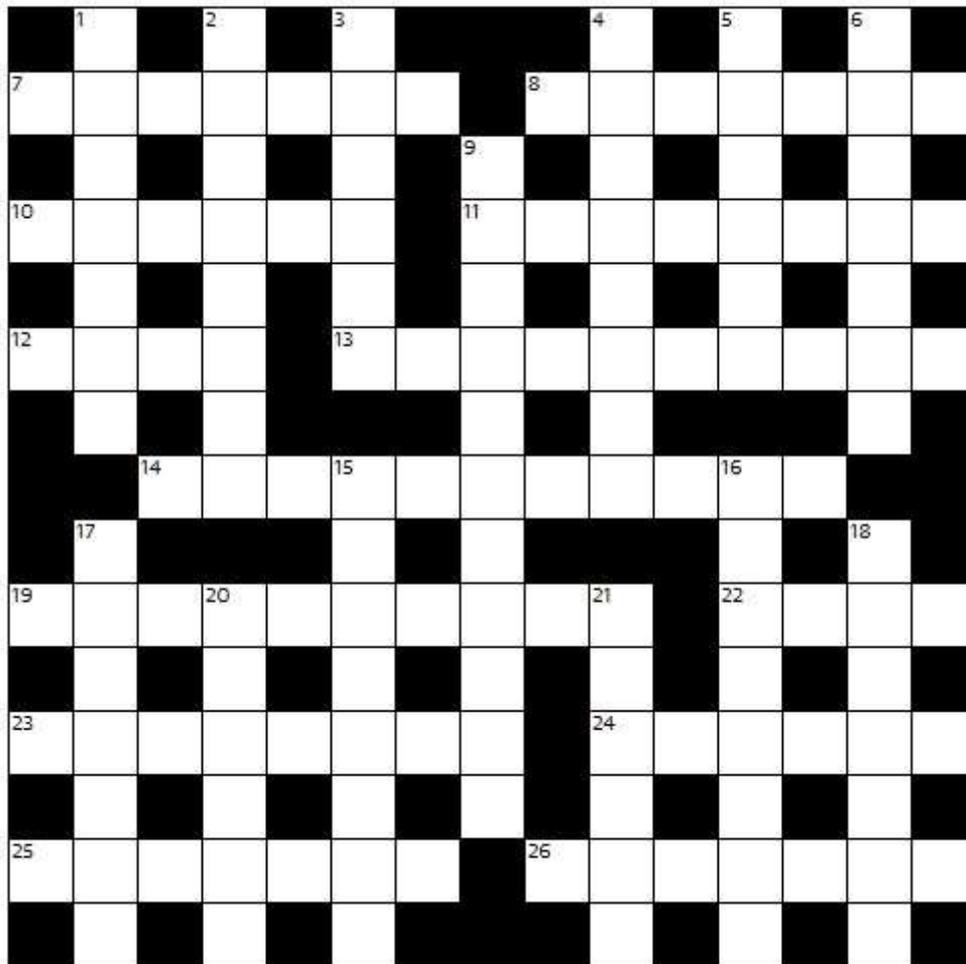
Across

- 1 Shabby outsiders block organisation (6)
- 4 Brave Tim crumbled -- literally (8)
- 9 Emperor took vehicle round turbulent sea (6)
- 10 Hurries south before those in temporary accommodation (8)
- 11 Time passing quickly for punters (6,8)
- 13 Last on the course for a coming of age (10)
- 14 Dining room's a disaster! (4)
- 16 Discard the players (4)
- 18 Handle rude arrangement without warning (10)
- 21 Customer enquiry about sales event and new look (6,8)
- 23 Atmosphere produced by a doctor that is mainly nice (8)
- 24 Rumour about a French duck (6)
- 25 Tree makes my Italian darling sound ill at first (8)
- 26 Cut off ear first? That's harsh (6)

Down

- 1 Hit on the foot (4)
- 2 Affair of the woman with fringe (7)
- 3 I came back and dined, but get thin (8)
- 5 Charm about craft of Circe, for example (11)
- 6 Aeroplane jacket? (6)
- 7 Foot-powered machine a step ahead of the French (7)
- 8 Heard the girl is valued, but disparaged (9)
- 12 Environmentally friendly tradesman? (11)
- 13 Surround leaderless men with direction finder (9)
- 15 Shell vehicle at speed (8)
- 17 Strange cribs to describe flashing lights (7)
- 19 Real confusion after last month, say (7)
- 20 Recover from river in dreaming sleep (6)
- 22 Lazy and lied badly (4)

Cryptic Crossword #23



Across

- 7 Since the Parisian dropped in, it's quiet (7)
- 8 A down-trodden machine operator (7)
- 10 A pile of snow cut loose (6)
- 11 Music-maker wanting wine to take in (8)
- 12 Learner is taken in by family baker (4)
- 13 Engines produce this; something you ride might (10)
- 14 Inhibit poor in another form of ban (11)
- 19 Seek advice about tan from specialist (10)
- 22 Nothing to pay, so charge is about right! (4)
- 23 It's amusing returning and going in to see host (8)
- 24 Number and name, yet in different order (6)
- 25 Me and the Queen wander aimlessly (7)
- 26 Abandons infertile regions (7)

Down

- 1 Sid and I upset by scorn (7)
- 2 Novice has to pray inside (8)
- 3 Put an end to spirit North of the Border (6)
- 4 Best street to go in is the widest (8)
- 5 Material an accountant left with one firm (6)
- 6 Walter edited the part that's changed (7)
- 9 Twenty pieces of timber seen at cricket grounds (11)
- 15 Holy building was in debt (8)
- 16 Away from work stopped getting insulted (8)
- 17 Searched for food for the elderly? (7)
- 18 Having left instructions in case one becomes late! (7)
- 20 Part of railway sign I'd damaged (6)
- 21 Sunburnt man embraces Ann (6)