



ASET-NSW NEWSLETTER

April 2019

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Links for Articles

- <https://assist.asta.edu.au/>
- <https://wellingtonconstanz.wixsite.com/constanz19>
- <https://asta.edu.au/conasta>
- <https://www.thescienceshop.co.nz/shop/>

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Editor

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Chairperson's Report

Welcome to the 2nd edition of the ASET-NSW newsletter, written after first term was complete. It has been an extremely busy time for most NSW Lab Technicians as we implement the new Stage 6 syllabus with our Year 12 students. Hopefully we have all had chance to catch up on our ordering, replenish our glove cupboard, and restock all those supplies used in the mainly chemistry-based subjects of first semester.

The focus of the committee has been on organising our State Conference at UTS on 9th-10th of September, and a PD session in the Newcastle area.

Information is on the website for the Booragul session, & we will let you all know when our NSW conference registration is open. Our NSW Conference is a bit earlier this year as UTS has their labs free on those days. By having this on Monday & Tuesday, we hope attendees can still enjoy the weekend beforehand in Sydney.

There is also still time for the Early Bird registration for CONASTA68 held in Darwin, NT this year. CONASTA is a fantastic yearly conference for both Science Teachers and Science Laboratory Technicians, and is run by ASTA (Australian Science Teachers Association).

SETA is organising a National Laboratory Technician recognition week called #STARWEEK. #STARWEEK stands for Science Technician Appreciation and Recognition Week and will be celebrated in the week following Science Week, 11th-19th of August. SETA will send us further information when available.

Margaret Croucher

Current Elected Committee Members

Margaret Croucher

Chairperson, Public Officer

Loretta Fincato

Vice-Chairperson, Newsletter Editor

Julie Ryan

Secretary

Laurence Wooding

Publicity Officer, IT Manager

Annett Stanley

Membership Secretary, Treasurer

Tracey King

Committee Member

Secretary's Report

Term 1 has been busy, busy, busy! Apart from an increased workload at our school we are also feeling our way around new practicals for the new school syllabus. It certainly keeps us all on our toes!

I'm busy re-drafting our constitution so that members can vote on any changes at the next AGM.

With two ASET-NSW conferences coming up this year the committee will be busy planning & inviting keynote speakers.

If anyone has suggestions or ideas for workshops at the NSW conference, or would like to host a workshop, please get in contact with me at: secretaryasetnsw@gmail.com
An email has just arrived in your inbox, asking for ideas.

Julie Ryan

Publicity Officer's Report

The main focus has been on re-branding ASET-NSW and ensuring all our documentation & website details are easy to use & up-to-date. We have reset all member's registrations, & are screening all new applications. I hope that by asking everyone to log in to update their details, we will have back up email addresses for all our members in case we ever change physical addresses.

The Treasurer and Membership Officers are working really hard to reconcile all renewals to current member lists.

Laurence Wooding

Calendar of Events

07-10 July	CONASTA68 – Darwin Early bird registration closes 31 st May
30 July	Australian National Chemistry Quiz
07 August	Australian Science Olympiads Chemistry
11-19 August	National Science Week
09-10 September	Annual ASET-NSW Conference – UTS Campus, Sydney
08-10 October	ConSTANZ19 – Wellington, NZ (registration open Feb 19) Early bird registration closes 31st July
22-28 October	Aussie Backyard Bird Count
12-18 November	National Recycling Week

Science Books Reviews

When I started my first job as a lab technician, I had my practical training from TAFE and experience in various industries, but I had no background in educational science. I was lucky to be mentored by excellent science teachers who were extremely patient and very generous with their time when I had questions. My prep room library didn't have many books that were relevant to my role so I started recipe books and used the internet to find answers. I really wished I'd bought one of these two books sooner. Some schools would already have a copy for their prep room or may be willing to order them for their lab techs.

I found two manuals written for lab techs, one is by an Australian author Barbara Dungey and is called "The Laboratory – a science reference & preparation manual for schools". It is available for sale from Southern Biological.

The other is called "The Biolab Sourcebook" and it was written by various NZ authors and has to be purchased from New Zealand websites and bookstores. My colleague's husband brought one back from a business trip.

Being curious, the first thing I did was compare the same recipe from both books. They were very similar. Barbara's book is longer and contains many more useful tables.

The other book that explains chemistry in layperson's terms is "Chemistry in the Marketplace" by Ben Selinger & Russell Barrow. I really enjoyed the explanations and stories told by the chemistry professors. This book is in its 6th edition and was originally written when the authors could not find practical chemistry books that explained how chemical solutions are used for industrial purposes. This book is well worth buying but can also be borrowed from most public libraries. It would make the perfect gift for the chemistry student.

L Fincato

SUPPLIER SUGGESTION

Dropper bottles and dropper caps are more expensive if purchased in small quantities. You are going to have to replace the rubber dropper lids if certain solutions react with the rubber in the teat. If you are setting up for a practical exam, you may need large quantities of small bottles and in some cases, you will not be able to re-use a dropper that has had dye or carbonates contained in it. In that case, wash the droppers out and label them with the chemical that was used in them and put them in a zip lock bag for next time they are required. Leave any uncontaminated labels on the bottles and store the bottles in sturdy shoe boxes. One of the cheapest suppliers of bottles is Plasdene Packaging in Milperra. The minimum order is \$200 and they can be collected from the warehouse if any order is placed 48 hours beforehand. An order of 100 bottles will come shrink-wrapped and the matching droppers/lids come in a plastic bags. Their website is very informative about which lids fit each base bottle. 15, 25, 50, 100ml amber bottles are the most versatile.

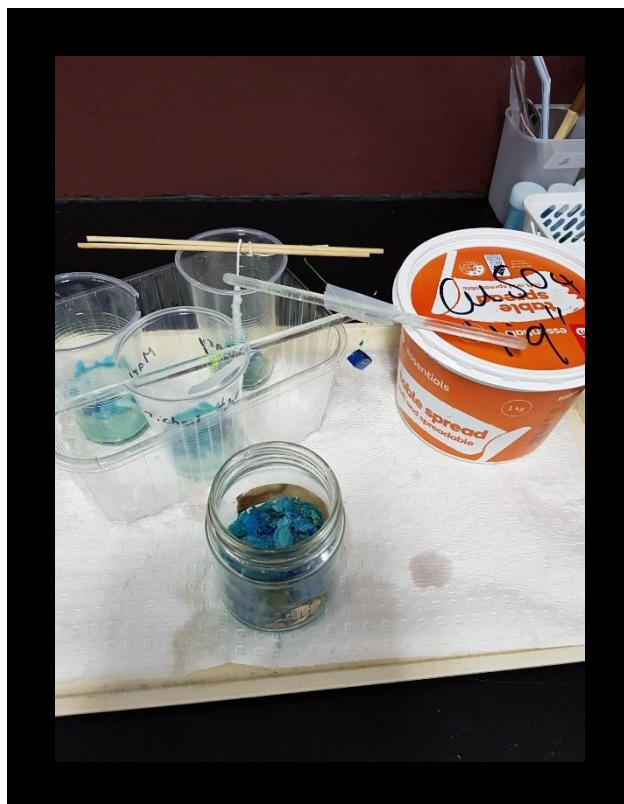


CRYSTAL GROWING HINTS

Some times teachers don't have the luxury to allow students to form crystals from saturated solutions. Keep a jar full of suitable seed crystals from the previous experiment. All that is needed is prepared solution, fishing line, paddle pop sticks, cups and sticky tape. Notch the disposable cups to hold the sticks and wind the crystal down as the solution evaporates so that it is always in the middle of the solution.

Used copper sulfate solution cannot be poured down the sink. Clean margarine tubs from the canteen can be filled with steel wool and any solution can be poured into it to neutralise the copper. After 24 hours you can dispose of the tub in the bin. Dried out copper sulfate solution can be re-used again next time you need to make saturated solution.

Empty tubs with lids are also good for disposing of contaminated broken glass like smashed chemical jars. Just tape the lid down and you will protect the cleaning crew from injury.



Freebies

Need one metre rulers but can't get enough wooden items? IKEA has paper measuring tapes available at their stores. Great for taping to tables during practical exams. Use blue tack to temporarily adhere to walls.



BOB'S INSTRUMENT SERVICE

Bob's Instrument Service specialises in the service and repair of school science lab equipment including microscopes, balances, power supplies, panel meters and other equipment throughout NSW and ACT.

Please feel free to contact Bob Death on 0416 721 011 or bobsinstruments@gmail.com to discuss your school's needs.

If you have any interesting science stories, photos, hints, tips or freebie suggestions, and they haven't been published on other forums, please send me an email so I can publish in the next edition of the newsletter. Please put NEWSLETTER in the subject line.

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31st Australian Speleological Federation Conference in Devonport, Tasmania 30 December 2018 – 4 January 2019

Field trip to Gunns Plains Caves

Having to base all your conversations on speleology for five days is not always easy but the added attraction of being in Tasmania instead of a stinking hot Sydney summer has its advantages.

My partner is a member of various caving associations and has attended caving conferences in the most diverse parts of

Australia and the world. This time it was in a cooler part of the country, and I decided to attend as a partner. The bi-annual Australian conference brought together geologists, biologists, film makers, teachers, scientists, spelunkers, caver's children and grandparents, campers and outdoor enthusiasts. It also welcomes partners of cavers and provided heaps of activities to occupy those who weren't interested in speleo sports and adventure caving. There were scientific lectures, trivia nights and movies pertaining to caving and extremophile animals.

One of the highlights was the cavers' dinner held at Gunn's Plains Caves and Wildlife Park. It is a very beautiful deep cave with unexplored passages, and it has a creek campsite. The kids and adults loved the wildlife park, and it has a conservation program for tasmanian devils.

I would highly recommend that you visit, next time you are in northern Tasmania.

L Fincato



You know you are a labbie when -

- you walk into an op shop & only see items for the prep room like craft supplies & knitting needle tools
- your plans for all your holidays include visits to the nearest science museum
- most of your t-shirt drawer is science-themed
- you get excited about a visit to pick up dry ice from Coldjet or kidneys from your butcher



Random Factoid

Stinkhorn Fungi: It has been dubbed “ the mushroom from hell”. The *Aseroe rubra* (Latin translation is “disgusting red juice”) fungi produces a dark black brown slime which has an intense smell of rotting meat. The short lived fungi grows to a height up to 10 cm and is commonly found in mulched gardens or on the rainforest floor. It is the first Australian fungi that was scientifically documented when it was collected in 1792 by the French botanist, Jacques Labillardiere when visiting Tasmania on a voyage of exploration.

Fun with Magnets

This is a great way to demonstrate magnetic fields and so much easier to clean up than iron filings! Saw this at CONASTA67 last year where the product was demonstrated by Narika (not sure who are being used to supply the product) but it's essentially plastic twist ties cut into small pieces. At our school I have made class sets of these by cutting various colours up and putting them into snaplock bags in class sets of 10. I used ties I had at home and I also scoured the local shops for packets (can be tricky to find but Daiso had packets for \$2 each) and also Kent Paper sells bags of plastic twist ties www.kentpaper.com.au. The picture shows three bar magnets with varying amounts of the cut ties on them to show how easy it demonstrates the fields. Very 'zen-like' to play with - even for adults!



Julie Ryan - St Patrick's College, Sutherland.



Science Shows & Workshops

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- ✓ Full risk assessments
- ✓ Easy to arrange
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