

ASET NSW NEWSLETTER



**Association of
Science Education Technicians NSW**
for labbies - by labbies

A newsletter by labbies for labbies.

ISSUE 1, 2018

The Website

www.asetnsw.org.au



The website can be used on multiple types of devices & allows easier access to information about events, news & galleries. It also allows online bookings for PD days & membership payments.

The ASET Email Forum

ASET has an email group list for Lab Tech's in educational institutions throughout NSW. It is for asking questions, giving advice, and any other facet of being a Labbie in NSW that you wish to share with your tech colleagues in other schools. Many schools only have one Lab Tech, which may make seeking help difficult other than using Google!

The email list reaches your fellow colleagues in other schools instantly, and you will receive answers or advice very quickly. Subscription is quick, easy and best of all, it's free! All you have to do is go to:

<https://mailmanlists.co/mailman/listinfo/asetnsw>

and enter in your email and your chosen password. You also have the option to select "Digest", which condenses the emails down into groups, these can still be replied to if you wish to contribute. Once approved, you will begin receiving group emails whenever they are sent! To send your own email to the whole group, use the following email address:

asetnsw@mailman.co

It is requested that you "Reply all" when providing information or an answer to a question, many Lab Techs will be waiting with baited breath for the answer! There are just a few basic rules around the use of the Email Forum, this is to provide a safe and helpful place to receive help:

Codes of Practice for Email List Use

By applying for and/or continuing to use the ASET-NSW email list the users acknowledge that they have read and accepted the following conditions. Any breach of these conditions may result in a warning or removal from the forum without notice.

- No teachers or educators are to join this email list. This is a space for Education Technicians to engage with one another and receive support. Therefore, it is in their capacity to seek help on how to deal with difficult work situations, and they should feel capable to do so without fallout at their workplace.
- Members of this email are not to use specific names of their colleagues: HOD, Chemistry Teacher, Principal, and other titles are acceptable. This is to preserve some form of anonymity among those you may have a "bug bear" with.
- No employees of suppliers or manufacturers are to join this email list, and that no paid or promotional material is distributed.
- Please keep "spam" mail to a minimum, particularly emails that don't contribute at all. Please keep the conversation relevant to Technicians.
- No talk of unions.
- Conversations need to remain "civil": no swearing; no fighting; no harassment; remain respectful of all views and opinions.

The ASET email blog is kindly managed by one of our members, Miranda Ford. We hope that you enjoy this wonderful resource and find it as useful as our current members do already. This is particularly in light of ChemTalk shutting down. Those of you that currently use it appear to be getting lots of valuable information and tips from it so hope

Conasta 2019

Darwin will host next year's event. Remember that some costs involved in Professional Development can be written off against your tax return, and most schools are happy to pay for your registration as part of their in-service expenses. Early bird entries can provide some savings. The recent Sydney event hosted just over 100 lab technicians. Want to share accommodation? Get talking to technicians in nearby regions now.

One recommendation made was to book accommodation early as Darwin's peak travel season is winter, and no rooms will be put aside for Conasta participants.

asta.edu.au/conasta

This is the premier science education event, and is an excellent networking opportunity for Lab Techs.



Conasta 2018 Summary

The welcome function was held at the Australian Museum on Sunday 8 July and most of us took advantage of the free entry to view the mammoth exhibition and the new 200 Treasures of the Museum gallery.



On Monday morning we were welcomed by Prof Trevor Hambley, Dean of Science at Sydney University. He talked about 2019 entry requirements re-introducing HSC mathematics for English, Science and Commerce degrees. Was also proud to offer new partnerships such as the Taronga Zoo conservation degree.

This was followed by a speech by the Honourable Senator Simon Birmingham who is Federal Minister for Education & Training. His speech was filmed by ABC TV and later broadcast. He talked about STEM skills not being a new thing but having evolved from the industrial revolution. Science/Capital/Communication having enabled the technology boom, it was up to educators to keep up.

The government recognises the importance of having specialised STEM, Maths and Science teachers in every school. This means that more teachers need training including primary teachers. These are part of recommendations from the Finkel and Gonski reports. VET and STEM programs need to form partnerships with local industries in order to provide graduates with local jobs.

Keynote speaker was Dr Tanya Latty (Entomologist) with Sydney University.

She is unravelling the mysteries of swarm intelligence and asked "Are you smarter than a slime mould?" She showed us how studying slime moulds and ants can solve problems like finding the shortest routes between many points.

	Trainee Science Technician	Science Technician	Senior Science Technician	Science Laboratory Manager
Level of Autonomy	Under takes specific and defined tasks within a defined service delivery framework under close supervision	Provides standard services within a defined service delivery framework under general supervision	Delivers a range of services in complex situations working autonomously under limited direction and supervision	Operational service delivery plans based on accepted standards working with a high degree of autonomy
Minimum Qualifications	None*	Certificate III in Laboratory Skills or relevant experience	Certificate IV in Laboratory Techniques* with significant relevant experience	Certificate IV in Laboratory Techniques* and extensive relevant experience in an educational setting
Preferred Qualifications	Working towards Certificate III in Laboratory Skills	Certificate IV in Laboratory Techniques* with relevant experience	Diploma of Laboratory Technology* with significant relevant experience in an educational setting	Diploma of Laboratory Technology* and extensive relevant experience in laboratory work in an educational setting

SETA FORUM

SETA has been concentrating on developing national standards for laboratory technicians including TAFE Certificate III courses. They are working on calculating hours that lab techs should be working vs teaching hours.

They have suggested establishing lab tech week, an Australian version of #techognition in the week following the annual Science Week.



DAY 2

Keynote speakers included Prof Richard Garrett from ANSTO who spoke about Australia's involvement in big science like CERN, ITER, LIGO and the Australian Synchrotron.

Prof Dietmar Muller is professor of Geophysics at University of Sydney. He was attracted to the timescale of geology. He and his students are designing software that can show us how the continents were formed. Did you know that opal is only found where the former inland sea was located in Australia's past. The www.gplates.org software uses palaeogeography and geodynamic models to generate maps. This can show how Australia was formed and by using this software you can explore sea rise and erosion effects.



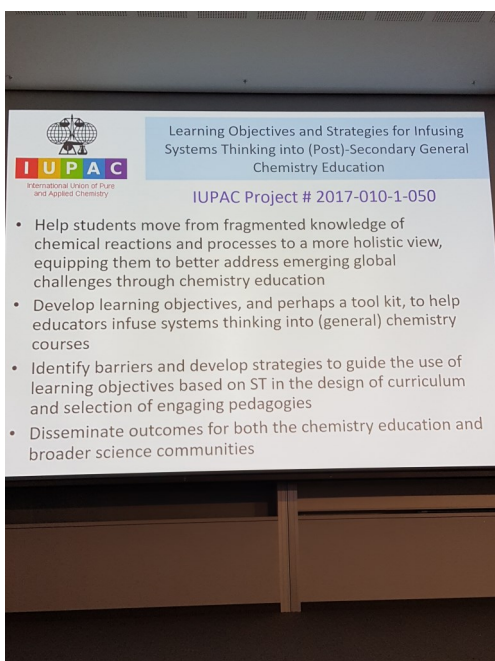
Australia's Chief Scientist Dr Alan Finkel is a trained electrical engineer and businessman. His report "Optimising STEM industry school partnerships: inspiring Australia's next generation" talks about 21st Century education and believes that human teachers will be essential to teach content, facts and produce resources. The goal is to challenge our students to be curious, agile and collaborative. To be able to learn the principals and out them into practical applications. Future graduates need to be experts in their chosen field and then be flexible when using those skills in the workplace.

He sees a mathematic skills as an essential part of high school education. Wants us to be explicit in instructions, have high expectations of our students, and report effectively on their progress. He mentions that the goal is to have qualified STEM teachers in all schools. English, math and science should be pre-requisites The STAR portal was mentioned.

DAY 3

Keynote speakers were Prof Peter Mahaffy and Prof Stephen Matlin from the IECC Committee. Their annual conference was being held at the same venue at the same time. They talked about using systems thinking in chemistry education. They want to make chemistry visual and relevant to students. Chemistry has an important role in science.

1. It is a fundamental science.
2. Chemistry has valuable outcomes.
3. Is practised for benefit of society.
4. Underpins other sciences.
5. Is related to world values.
6. Should be governed by ethical practices.
7. Should contribute to sustainability, human health, animal health and saving the environment.



This was also a fun day as we got to build an insect hotel with the educators from Taronga Zoo.

STANHOPE ORATION

The special guest was Prof Lisa Harvey-Smith an astrophysicist from the CSIRO. You would know her from Stargazing Live.

Her speech described the Square Kilometre Array observatory in Western Australia and described the educational and career opportunities that this billion dollar project will bring.



Stem Academy celebrates obtaining sponsorship for their website by launching it at Conasta.

www.stemx.edu.au

Also check out careerswithstem.com

Adaptable STEAM projects - Earth Science looked at a Mining module and how to adapt Muffin Mining recipe to be suitable for primary through to High School students, and how to extend it for the more advanced students. Good discussion from the floor between those of us labbies who do this prac to help the others adjust it for their needs,

especially to modify it for the primary student.

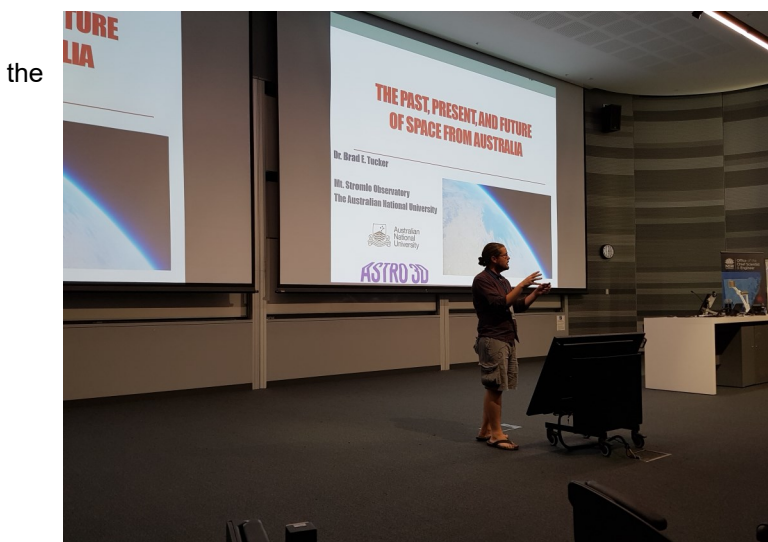
STEM without breaking the budget was a hands on session where we were given a challenge and materials that had to be used to solve the problem. The materials were cheap & all aspects of STEM were covered by our very entertaining Tasmanian teacher. Our challenge was a fun one - we had to design and make a contraption to catch the Tasmanian Devil with no injuries to the Devil of course! (The Devil being a small plastic version).

Introduction to Microscale Chemistry by Mr Bob Worley. So many of those time and chemical consuming experiments were done in microscale. Quick, easy and simple to clean up! A labbie's dream! A lot of these were performed on small circles on laminated paper using dropper bottles (instead of racks of test tubes). Any one interested should go check out Bob's site: <https://microchemuk.weebly.com/> and also search for Bob Worley's you tube videos.

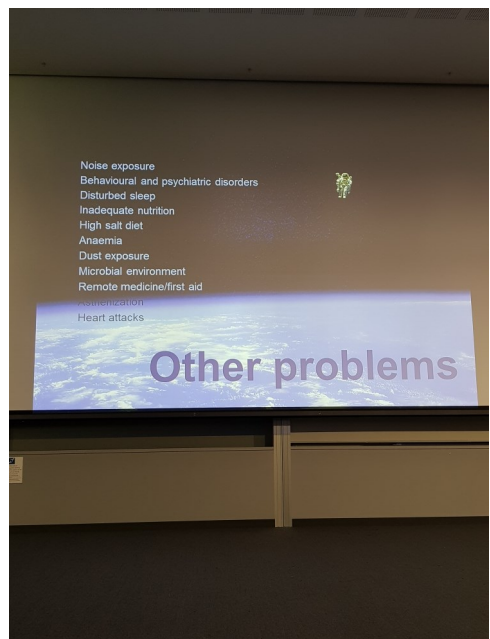
Ticking time bombs, triggering volcanic explosions. Associate Professor Heather Handley gave a great run down of volcanoes, and then we had a hands on session of projects that can be used to explain why volcanoes are different and how to make our own simple volcanoes. Easy practicals for junior high that were fun.

The closing talk was from Dr Brad Tucker who is an astronomer at Stromlo Observatory. He talk was amazing (as usual) and he will be familiar to you if you have attended previous conferences or been to Stem Academy or watched Stargazing Live.

He talked about the past, present & future of space from Australia. Why Australia shouldn't rely on other countries for our space programs, emergency satellite information and data. The new Australian space agency was discussed and he talked about where the funding was being allocated and what sort of decisions were made.



Some problems



of in-

involved with travelling to Mars and establishing space colonies were discussed. Dr Tucker also mentioned the problem of space junk and demonstrated the distances involved in exploring space.

Making Borax Crystal Decorations

Make your ornament by bending pipe cleaners to your desired shape.

Suspend the ornament with a piece of hooked wire.

Dissolve borax into hot water until the solution is saturated.

Suspend the ornament in the solution using a stick.

The crystals should grow on the pipe cleaner within days.

Take home in a padded lunchbox.



Tip of the month

If you are unsure what equipment, data loggers and chemicals you will need for the new Senior Sciences Curriculum, try the lab technician section of the online textbook. Publishers have produced lists attached to the new textbooks. Otherwise your text book representative can talk you through getting an access code or log in.

Science Hack

Make a free ph chart by gently removing the label off the bottle of empty universal indicator

and sandwiching it between a piece of folded clear contact.



2018 Calendar

21-24 November Labcon 2018 University of Melbourne (www.ltav.org.au)

20 October , 2pm ASETNSW AGM

2019 Calendar

7-10 July CONASTA 68 Darwin High School, Bullocky Point Education Precinct

AGM Announcement

ASETNSW will be holding it's AGM on the 20th of October at 2pm as an afternoon tea at Dooleys Waterview, Silverwater. This will be a fantastic opportunity to meet up with your Labbie friends while also hearing about what ASET-NSW has achieved this year, and is aiming to achieve next year. Additionally, there will be also a keynote speaker (TBA) delivering a talk after the AGM.

Annual General Meeting of ASET-NSW Inc. will be held on

**Saturday October 20th 2018
Dooleys Waterview, Cnr Clyde St & Silverwater Rd
Silverwater NSW 2128
Commencing at 2:00pm**

Following the AGM there will be a keynote speaker (TBA) and afternoon tea will be provided.

For catering purposes, please RSVP to secretaryasetnsw@gmail.com by October 16th.

Agenda

1. Apologies and proxies
2. Acceptance of minutes of 2017 Annual General meeting
3. Annual Reports for 2018
4. Election of Auditor
5. Other Business
6. Election of ASET-NSW Inc. Committee

Motions to be considered:

- Election of ASET-NSW Inc. committee positions. Nominees for consideration prior to the AGM 2018 will be posted on www.asetnsw.org.au after close of business on 12th October 2018.

If a member cannot attend the AGM and wishes to cast a vote, they are asked to fill out the attached proxy form and return it to the Secretary no later than 5.00pm 12th October 2018, via email

to secretaryasetnsw@gmail.com
Clause 25 of ASET-NSW Inc. Constitution

*"Each Member is to be entitled to appoint another Member as proxy by notice given in respect of which the proxy is appointed.
The Chairperson may be appointed as proxy on behalf of the member"*

Meet the Committee

Margaret Croucher—Public Officer/Chairperson

Margaret has been working as a Lab Technician for the last 31 years in education for the Catholic, State and Independent sectors as well as at university level. Prior to this she had 18 years' experience in the insurance and banking sectors. Margaret was on the working party to establish ASET back in 2011 and was elected as the inaugural Chairperson.

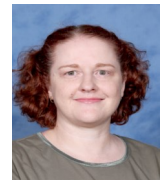


Margaret holds a Certificate of Administrative Leadership (CAL), a Diploma of Applied Science and a Certificate III in School Services (Science). She is currently the Chairperson of ASET and President of the National Association for Lab Technicians - SETA. Margaret is on the Project Reference Group to establish and maintain a national advisory service for teachers and lab technicians and is a member of the Working Party to establish national standards for Lab Technicians. She is a member of the Working Party to establish national standards for Lab Technicians as well as being on the Science ASSIST Strategic Group.

During her employment, Margaret has been actively involved in various committee positions on state and national associations, helping to promote and be successful in training and supporting colleagues in the education sector. This has culminated in her receiving a State Parliamentary award for volunteering services to education.

Loretta Fincato—Vice Chairperson

Loretta worked as a secretary, technical librarian, and in customer service roles for 20 years in aviation, engineering firms, garden company, cookware and retail chains. She retrained at Bankstown TAFE as a laboratory technician in 2013, then began work in the independent education sector. She joined ASET in 2017. She enjoys travelling, gardening, cooking, visiting science museums, does Bushcare with Canterbury-Bankstown Council, and also enjoys science fiction movies and books. Loves watching any show, documentary or movie that uses science themes.



Julie Ryan—Secretary

Julie spent her early years working as a Medical Laboratory Scientist, both in the public and private sectors in Australia and London. After time out to raise a family (and doing a lot of school related volunteer work) she worked as a pathology collector before finding a position as the Lab Assistant at St Patrick's College in Sutherland. She loves the work and the staff and volunteered for the ASET committee two years ago. Currently on a year of LWOP she is enjoying living in Tasmania, but will be returning to her job at St Pat's in August 2018. In the meantime, she is doing her best to see as many sights and do as many bushwalks in Tassie as she can.



Cathy Tripolone—Webmaster

Cathy has worked in a range of schools from State, Catholic & Independent sectors. She originally came from an industrial scientific background in food, pharmaceutical and pathology laboratories. Currently, Cathy is looking after the ASET NSW website and has been a member of the committee for the past four years.



Laurence Wooding—Media

Laurence recently started his career as a Laboratory Technician at Norwest Christian College, where he is employed as the Learning Resource Technician. He graduated from Hunter TAFE in 2016 receiving a Diploma of Laboratory Technology. Laurence decided that a full-time job, commuting to the Central Coast and back every weekend, and a small role in the family business, just wasn't enough to fill his days. He volunteered for the Committee in 2018 and has since taken on the website and has begun to work on building a social media presence. Laurence is ever keen and always fascinated to extend his knowledge and capabilities within new and old Laboratory techniques. He is particularly passionate about microscale chemistry and seeing more schools realising its potential.



Annett Stanley—Membership

Hi my name is Annett Stanley. I currently work at Calrossy Anglican School in Tamworth. I have been working in the education sector for the last 20 years. I am a full time Lab technician and we also have a part-time assistant who helps out on our 2nd campus.

