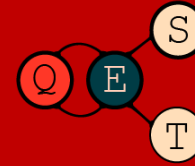


Wednesday 10 NOVEMBER 2021

1:00PM – 3:00PM



QUEENSLAND EDUCATION
SCIENCE TECHNICIANS

TECH TALK – QEST MEMBER EXCLUSIVE

CON
QUEST 21
Sustainable Science

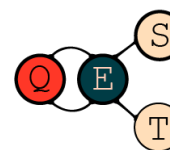
Workshops by Technicians for Technicians

Programme collated by Cheryl Tsan and Nikki Bradford
on behalf of the ConQEST21 Organising Committee

CONQUEST21 “Sustainable Science”

TECH TALK – QEST MEMBER EXCLUSIVE

Workshops by Technicians for Technicians



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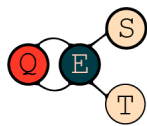
Wednesday 10 NOVEMBER 2021

1:00PM – 3:00PM

TIMETABLE		WORKSHOP PROGRAMME	
from 12:50		LOGIN to Virtual meeting	
1:00 – 1:08	8 min	EVENT WELCOME	Nikki Bradford, <i>QEST President</i>
1:08 – 1:33	25 min	WORKSHOP 1	Room 1: Keeping Sustainable Science Simple with Hilary Malone Room 2: 3D Printing in Science Laboratories with Doug Benson Room 3: Small Things Amuse with Lynette Dent, PART 1
1:33 – 1:36	3 min	REGROUP	
1:36 – 2:01	25 min	WORKSHOP 2	Room 1: Laboratory Management with Glenda Harvey Room 2: Aquaponics with Olivia Frost Room 3: Small Things Amuse with Lynette Dent, PART 2
2:01 – 2:04	3 min	REGROUP	
2:04 – 2:29	25 min	UNION BREAK OUT	Room1: Together Union with Sandra Lewis and Thom Ryan Room2: IEUQNT with Annette Gregory and Brad Hayes
2:29 – 2:32	3 min	REGROUP	
2:32 – 2:57	25 min	WORKSHOP 3	Room 1: STEM and Robotics Program with Jason Wood Room 2: Mini PCR / Electrophoresis with Sharon Malone
2:57 – 3:00	3 min	EVENT CLOSE	Nikki Bradford, <i>QEST President</i>

About the Workshops

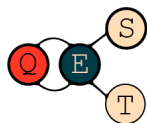
WORKSHOP DETAILS		
	About the Presenter	About the Workshop
Workshop 1 Room 1	<p>Hilary Malone, Proserpine State High School</p> <p>Hilary is married with 2 sons. She has a diploma in Applied Science Chemistry. She worked as a Sugar Chemist for 10 years and then did a variety of jobs.</p> <p>She was working as a part time laboratory technician at Proserpine State High School from 2012-2017 and transition to full time in 2017. When she first started, the experiments that she was required to set up were not working in the classroom, and with her growing disappointment that students were missing out on the experiences, it became her personal goal to make sure any practicals that she set up worked. Her aim is for the students to successfully run the experiments that she set up and they are able obtain the data and results and they get the sense of achievement which makes them more receptive to the theoretical science behind what they are doing. She gets the sense of fulfilment as well as getting the support and respect from the teaching staff who appreciate the effort she puts in to supporting them in their role.</p>	<p>Keeping Sustainable Science Simple – Making a bioplastic from corn-starch.</p> <p>Hilary will describe the method she developed in making a bioplastic from the corn-starch. Hilary will share the resources that she based this method on and the various resources that she would like to experiment with next.</p>



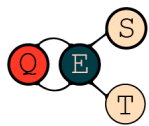
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WORKSHOP DETAILS		
	About the Presenter	About the Workshop
<p><i>Workshop 1 Room 2</i></p>	<p>Doug Benson, Park Ridge SHS Doug has been working in school science laboratories since 1980 when he started at Richlands SHS. Doug worked there for approximately 15 years, then had a short change of career, starting back as a Science Technician at Coorparoo SC, where he worked for another 15 years. During his time at Coorparoo Doug oversaw the introduction of their marine science course and the construction of a marine wet lab. Due to his mother’s ill health, Doug stopped work for a while to look after her, restarting as a Science Technician in 2018 (with one day a week at Springwood SHS) and then in 2019 he landed the current contract work at Park Ridge SHS.</p>	<p>3D Printing in Science Laboratories Introducing 3D printing into the Science Department. Tools to aid in Curriculum delivery.</p>
<p><i>Workshop 1&2 Room 3</i></p> <p><i>NOTE this workshop runs across 2 breakout sessions</i></p>	<p>Lynette Dent, Tasmania Lynette holds a Diploma of Business and has had a variety of work experiences before becoming a high school science technician. She was Senior Vet Nurse in several Vet Clinics and Hospitals for over 16 years, a Police Officer in Victoria for 8 years, and a Security Guard in Victoria and Queensland for 10 years. Lynette worked as a Lab Manager at Beef City in Toowoomba, was 2IC at JBS Dinmore for 5 years, and a Senior Lab Technician with the Department of Agriculture in the Vet Lab in the Falkland Islands for 2 years. She worked as a laboratory technician in Coca Cola, DMG Microlab, DTS, Laidley State High School, Devonport High School, Burnie High School, and Scottsdale High School. Lynette also owned and operated her own wedding hire business, Your Carriage Awaits, with her horse for 7 years. Her hobbies including target shooting with pistols and rifles, drives harness horses and she loves canoeing in her outrigger canoe during the summer time in Tasmania. Don’t mess with this Lab Tech!</p>	<p>Small Things Amuse Learn about microbial biomass in humans, and microbiology techniques including aseptic techniques, making agar, serial dilutions, using a micropipettor, 16 streak plate, lawn plate, pour plate, settle plate, and Petrifilm. Lynette will also touch on using mastrings for zones of inhibition – antibiotic sensitivity/competitive inhibition, incubation and lastly, waste management.</p>



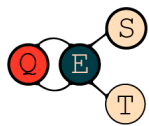
WORKSHOP DETAILS		
	About the Presenter	About the Workshop
Workshop 2 Room 1	<p>Glenda Harvey, All Saints Anglican School</p> <p>Glenda Harvey holds an Associate Diploma in Laboratory Techniques and currently works as the Laboratory Supervisor at All Saints Anglican School, a position she has held for 16 years. Previously Glenda worked at another school for 7 years and Griffith University for 12 months. Before children Glenda worked in a variety of laboratories analysing amounts of nutrients in soil, water, plants and potting mix, analysing pesticides in meat and testing new breeds of wheat.</p> <p>She feels very fortunate at her currently workplace, having fantastic facilities to work in, a great team of teachers, and a Laboratory Technician who works 25 hours a week with her who is completing her second degree and is a pleasure to work with. Together they cater for Senior School years 10, 11 and 12.</p> <p>When participating on the Science Technician Discussion List, if Glenda doesn't know the answer she likes to challenge herself in trying to find it. In doing this she is constantly gaining more knowledge or her role.</p>	<p>Laboratory Management</p> <p>Are you new to the business of managing a school laboratory or in need of some inspiration to make things work a little more efficiently?</p> <p>This workshop will cover general resources (websites, calculations, chemical disposal, books), procedures for setting up a new experiment, and a couple of inventions to make lab life easier.</p>
Workshop 2 Room 2	<p>Olivia Frost, Caloundra SHS</p> <p>Olivia has been at Caloundra High School since 2015, and has completed a Bachelor of Science – Biology and Health in 1993 and a Masters of Applied Science – Biotech and Microbiology in 2002. Olivia has worked in several industries such as Food Microbiology, Quality Systems, Quality Assurance, Pest Management and Science in Schools.</p> <p>An active member of the Sunshine Coast School Science Technicians network, Olivia works with her network to provide PD opportunities and a growing the support network for local Science Technicians.</p> <p>Olivia is also the recipient of the 2020 International Science Technician of the Year.</p>	<p>Aquaponics</p> <p>Initially a tour of Caloundra SHS's aquaponics during the planned face-to-face ConQUEST21, now a recorded tour for all members to access! Join in the watch party and have your questions answered by Olivia post video.</p> <p>Aquaculture + Hydroponics = Aquaponics</p> <p>Aquaponics: Growing fish and plants together. Aquaponics is a combination of aquaculture, which is growing fish and other aquatic animals, and hydroponics which is growing plants without soil. Aquaponics uses these two in a symbiotic combination in which plants are fed the aquatic animals' discharge or waste. In return, the vegetables clean the water that goes back to the fish. She will be presenting on the set-up, the how to and tips on what not to do on the aquaponics system.</p>



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WORKSHOP DETAILS		
	UNION Delegates	UNION Organiser
<p><i>UNION breakout Room 1</i></p>	<p>Sandra Lewis, Bremmer SHS Recent recipient of the prestigious Emma Miller award, union activist and past QEST President, Sandra Lewis, is passionate about your rights at work and encouraging Science Technicians to be active in their Enterprise Bargaining. Upon returning to our industry, Sandra took the lead on the campaign for Science Technicians to be recognised on the Technical Stream.</p>	<p>Thom Ryan, Together Union Together Union members have been a driving force and made a positive influence on the rights at work and job conditions for Science Technicians. Learn more about the process of renegotiating Enterprise Bargaining and participating in discussions about what members want to achieve. Union members have access to information and advice about issues they are experiencing in their workplace. Not a union member? That’s ok, this is a presentation for all Science Technicians in the Public Sector and an opportunity to recognise the work that your union delegates do.</p>
<p><i>UNION breakout Room 2</i></p>	<p>Annette Gregory, Ignatius Park College 2019 winner of the Peter Doherty outstanding STEM support officer award and QEST Webmaster, Annette Gregory, has been leading the way to raise the profile of Science Technicians in the private sector.</p>	<p>Brad Hayes, IEU-QNT The Independent Education Union (IEU) represents school support staff across all non-government schools in QLD and the Northern Territory. This workshop session will provide an update on current collective bargaining negotiations and outcomes relevant to Laboratory Technicians working in non-government schools. The session will also touch on some of the emerging workplace issues being encountered by Lab Techs in our sector and how our union can support and represent members in dealing with such challenges. Not a union member? That’s ok, this is a presentation for all Science Technicians in the Private Sector and an opportunity to recognise the work that your union delegates do.</p>



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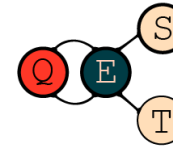
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WORKSHOP DETAILS		
	About the Presenter	About the Workshop
Workshop 3 Room 1	<p>Jason Wood, Tullawong SHS</p> <p>Jason has an engineering and construction background with a considerable amount of study in physics and chemistry. He spent several years designing and project managing sports centre projects in both Southeast Queensland and Sydney before changing to a Science Technicians role for family reasons. He has now been an education science technician for 20 years.</p>	<p>STEM and Robotics Programs</p> <p>Jason will talk about the room layout, project organisation and equipment used to run the STEM and Robotics program at Tullawong State High School. He will also share the types of projects they have and how to troubleshoot issues they have encountered in the program.</p>
Workshop 3 Room 2	<p>Sharon Malone, St Michael’s College</p> <p>Sharon currently works as a Science Technician at a College in Merrimac QLD. She comes to this role with a background in Immunology, haematology, biochemistry and vet pathology.</p>	<p>Mini PCR/electrophoresis demonstration. Diagnosing sickle cell anaemia in a short laboratory practical</p> <p>Demonstration of the separation of pre- digested DNA fragments with a blue gel electrophoresis apparatus. The result of the electrophoresis process will be analysed and used to diagnose sickle cell anaemia.</p> <p>The technology is not new, but the kit uses nontoxic dyes and buffers that are safe for students to use. The practical is very relevant to the current senior biology syllabus and is a good introduction for further discussion about genetics and hereditary disease.</p>

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Thank you...



CONQUEST21
Sustainable Science

to our ConQUEST21 Coordinator

Sharon Hunter

Victoria Point State High School

and the ConQUEST21 Organising Committee

Andrew Hoschke

Maleny State High School

Annette Gregory

Ignatius Park College

Cheryl Tsan

Redeemer Lutheran College

Christine Forrestal

Springfield Central State High School

Jenny Walters

Bowen State High School

Kym Hunt

Caloundra State High School

Margot Lloyd

St Theresa's Catholic College

Nikki Bradford

Pittsworth State High School

Olivia Frost

Caloundra State High School

Paul Evans

Kawana Waters State College

Sharon O'Keeffe

Lockyer District State High School