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NEWSLETTER
OCTOBER 2021



QUOTE OF THE MONTH

***“Science doesn't deal with facts;
indeed fact is an emotion-loaded
word for which there is little
place in scientific debate.”***

Hermann Bondi

1919 – 2005

Chemist

<https://www.azquotes.com/quote/573280>

CLIENT OF THE MONTH:

Incitec Pivot Limited

Winners are chosen by our computer on a random basis. The prize is the client's choice of \$100 worth of laboratory items from a supplied list.



From Incitec Pivot:

"Incitec Pivot Limited's Purpose is to make people's lives better by unlocking the world's natural resources through innovation on the ground. An ASX 100 Company, IPL had its origins in Europe and North America in the 19th century and Australia early last century. It is now a global leader in the resources and agricultural sectors with an unrelenting focus on Zero Harm.

With a diverse leadership, we add value for our customers through manufacturing excellence, leading technology solutions, innovation and world class services focused on our customers.

Through Dyno Nobel, we play a critical role in releasing the world's natural resources, so we can build infrastructure and generate the energy we need to live in a modern world today. With population growth, through Incitec Pivot Fertilisers' 100-year heritage in Australian agriculture, we play an important role in enabling sustainable food production to meet the rapidly rising demand for food around the world."

<https://www.incitecpivot.com.au>

CLEVER PERSON'S QUIZ

Question:

When was the first permanent vacuum created in a laboratory setting, and who created it?



The answer will be in the next edition of the Rowe Scientific newsletter.

Did you know the answer to the last quiz question?

What was the first Amino acid to be isolated?

Answer:

Asparagine. Due to Asparagine's extraordinary ability to crystallise as a monohydrate, when Louis Vauquelin and Pierre Robiquet left concentrated juice from asparagus shoots out for several days, they found that crystals of an unknown substance, which they named Asparagine, had formed. In 1809, Pierre Robiquet extracted what he believed was a similar substance from Liquorice root, later confirmed by Auguste Plisson in 1828 to be the same chemical.

Vauquelin, L. and Robiquet, P., 1806. Découverte d'un nouveau principe végétal dans les Apserges (asparagus sativus, Linn.). Annales de chimie et de physique, 57, pp.88-93. Plisson, A., 1828. De l'identité de l'asparagine avec l'agédoïte. Journal de pharmacie et des sciences accessoires, 4(14), pp.177-182. C. Anfinsen, J. Edsall and F. Richards, Advances in Protein Chemistry, Academic Press, New York, 26th edn., 1972.

SUPPORTING THE RFDS



Royal Flying Doctor Service



Amount raised to date:
\$8,040
as of 1/10/21

32,000
30,000
28,000
26,000
24,000
22,000
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000

Every purchase of Rowe Quantumclean (**CQ1050, CQ1000, CQ1100**) and pH buffers (**CB3515, CB3115, CB2660**) in the unique twin neck bottles, results in a **\$2.00** per item donation to the Royal Flying Doctor Service.



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 - Accessories and spare parts.



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**MONASH UNIVERSITY CHEMISTRY PRIZES.
SUPPORTED BY ROWE SCIENTIFIC PTY LTD.**

In place of a single annual chemistry scholarship at Monash University, Rowe Scientific will now sponsor Semester I and II Undergraduate Student Prizes across all of the "CHM" units delivered

by the Monash School of Chemistry.

Each Prize is named after one of Monash's past staff members in honour of their significant contribution to Chemistry and their service to the School of Chemistry at Monash. For example, Messer's Collier, McKinnon and Wilson were former distinguished lecturers at Monash.

Our congratulations to the following Monash chemistry prize recipients from Semester 1; Mr Marcus Halim, Ms Tori Guamera, Mr Mason Lam and Ms Mia Dewar, Abbey Muller, Eva Doukas, Rebecca Leith, and Jemma Gullick. Included with their photograph are a few words about "chemistry" from each of them.

Coller McKinnon Wilson Prize

CHM1011 Chemistry



Mr Marcus Halim

For as far back as I can remember, curiosity has driven me to constantly challenge my own understanding of why things behave the way they do in the world.

This pursuit of knowledge has led me to embark on a scientific journey throughout my life, particularly with a focus on Chemistry throughout both my schooling and tertiary studies. As the central science,

it doesn't merely provide information on physical matter in the Universe, but serves as an aperture to perceive our world under an entirely new lens. In this way, we can begin to identify chemical reactions saturated in almost all things we encounter, many of which most of us often ignore or take for granted in our day to day lives.

CHM1011 this semester has continued to strengthen and nurture my understanding of key concepts including thermodynamics, subatomic models and equilibrium that build on my prior established foundation of chemistry knowledge. Laboratory sessions have been exceptionally beneficial in equipping me with countless essential scientific-related skills and valuable experience in functioning within a dynamic and collaborative environment with like-minded peers. Subsequently, this unit has thus succeeded in inspiring me for a future career involving Chemistry that I eagerly await to fulfill.

Jackson Prize

CHM1051 Chemistry I Advanced

Ms Tori Guamera

Chemistry is the basis of not only our lives but the whole universe that surrounds us! Chemistry enables us to comprehend natural phenomena (for example how plants synthesise glucose via redox reactions) as well as enhance industrial processes like the Haber Process by considering Le Chatlier's Principle.

Monash University has provided me with an incredible insight into the broadness of



chemistry by offering in-depth units like CHM1051 and boasting exceptional on-campus facilities. For these reasons chemistry is my favourite science and is something I wish to pursue a career in.

RFC Brown Prize

CHM2911 Inorganic and Organic Chemistry



Mr Mason Lam

My fascination for chemistry started even before I took the subject in VCE. Whether it be Bill Nye, Crash Course Chemistry or even a book like Chemistry for Kids, I grew up fascinated by the world of molecules, reactions and especially how the humble atom could form the structures and systems we see all around us today. Sometimes the wonder you feel in childhood wears off with time, but chemistry only continued to impress me with its depth as I progressed into VCE, so much so that after I completed year 12, I was convinced that a major in chemistry was my goal.

CHM2911 has only inspired me to expand my knowledge in the field. Inorganic chemistry is a very eye-opening concept for me, as its mere presence has demonstrated just how much there was to still learn and

discover in chemistry after VCE. Even my current knowledge was further challenged by the organic chemistry section, which added a whole new layer of complexity to explore and apply to my current knowledge. Combined with a robust lab schedule, CHM2911 has truly inspired me to see the brilliant complexity of the subject and has me excited to see even more.

Hart McKelvie Beckett Prize

CHM2951 Environmental Chemistry - Water



Ms Mia Dewar

The elegance of chemistry sparked my passion for it. Breaking down everything we can and cannot see into specific concepts that are deeply interconnected fascinates me.

Chemistry enables us to explain the behaviour and relationships between everything from the smallest molecules to entire ecosystems. I am particularly interested in environmental chemistry and how researching it can create meaningful and sustainable change in urban areas.

CHM2951 showed me how far-reaching the environmental effects of urbanisation are in all aspects of our lives from the safeness of our drinking water to climate change.

Science communication about chemistry is integral in informing and moving individuals

and communities to act as it provides clear evidence and predictions on these devastating anthropological impacts. I am very passionate about the practical nature of chemistry and how applying it to real world examples helps the public understand the importance of the environment and the value of supporting chemistry in order to research and subsequently find ways to live in a more sustainable way.

Ultimately, chemistry is a doorway which allows us to understand the workings of everything and how we can continue to develop as a society in a way that does not disrupt these workings.

Burden Prize

CHM3960 Environmental Chemistry

Ms Abbey Muller

Whilst I have enjoyed most chemistry throughout my undergraduate degree so far, I have always found myself drawn to the chemistry with a more apparent application to general society. Thus, I have really enjoyed learning about the chemical processes underlying several pertinent environmental disciplines in CHM3960 this semester. Although I had acknowledged how lucky we are to have access to clean water and effective wastewater treatments here in Australia, up until this semester, I had never really questioned how it came to be that way.

Consequently, I found it particularly eye-



opening and stimulating to learn about the drinking water and sewage treatment processes and the chemical basis behind each step. This knowledge promoted a greater appreciation for the relevance of chemistry in all areas of our society. With climate change being one of the most important global issues of this century, the study of the environment will become pertinent in influencing decisions in any career field I choose to pursue. As a young voice, I feel empowered to further educate myself and others, to encourage changes that make a positive impact in this area.

Youatt Prize

CHM3930 Medicinal Chemistry



Ms Eva Doukas

Chemistry has always been a strong passion of mine. Everything both living and non-living can be explained by chemistry. I enjoy the logic behind how different molecules interact with each other, and linking this to the overall view of how many complex reactions work together to sustain life.

I also find chemistry to require creative and abstract thinking, as you often need to visualise the molecules and the way in which they are reacting. As someone who has been closely affected by cancer, the medicinal side of chemistry is of great interest to me.

Studying CHM3930 has greatly benefitted my knowledge of drugs and medications on a chemical level, and their interactions within the body. This is an area of research that I am considering of pursuing upon completion of my studies, particularly assisting with development of cancer treatments. CHM3930 has inspired

this passion of mine, as it contextualises the topics that we study within the areas of medicine and disease, allowing me to appreciate the bigger picture of what chemistry can achieve.

Pullen Heffernan Prize

CHM3911 Advanced Physical Chemistry



Ms Rebecca Leith

My passion for chemistry is a newly found one. After pursuing a career in professional ballet and realising that I had a love for academics which I wanted to fulfill, I enrolled at Monash and quickly found a passion for chemistry.

This led me to join the student team Monash Nova Rover, in which I have put my chemistry knowledge into practice by creating analytical devices and systems to assess habitability and detect life on other planets. These devices have been put to the test in competitions including the Australian Rover Challenge which my team competed in this March and won first prize. Last year, I completed my first research project in CHM2990.

This introduced me to chemical research and has inspired me to do an Honours year and one day a PhD. I explored the optical properties of gold nanoparticles using software which simulated the shape and characteristics of the molecules. This was extremely rewarding and I felt the pride of discovering something brand new which has made me hungry for more.

The physical chemistry unit CHM3911 has shown me the chemistry of everyday products such as dishwashing detergents and fruit juice. This has made chemistry feel so much more tangible as I have been able to relate my learning to the items I interact with every day. It has also shown me many industry applications for chemistry which really illustrates the pathways that I could one day follow. Getting back into the lab for CHM3911 after a year online has also been really exciting as I have really enjoyed using more lab equipment that I missed out on seeing in second year.

Dickson Prize

CHM3941 Advanced Inorganic Chemistry

Ms Jemma Gullick

As a passionate STEM student I have always loved learning about how the world around me works on a molecular level and chemistry allows me to learn just that. I love studying chemistry as it is applicable to so many other sciences such as biology.



I think being able to understand how things work at a small level like an atom or a molecule and then working up to bigger systems like the human body or the universe makes chemistry extremely interesting.

CHM3941 has inspired me about chemistry as it has allowed me to realise the interesting properties of metals and get valuable experience working with complexes like butyllithium, which have very interesting reactivities. CHM3941 has made

me realise that there is more to inorganic chemistry than just the transition metals and has given me another research area to consider for my honours year.

SOUTHERN CROSS UNIVERSITY

Rowe Scientific Chemistry Scholarship



Ms Renae Borrow

Congratulations to Ms Renae Borrow, the 2021 winner of the Rowe Scientific Chemistry Scholarship at Southern Cross University.

In Renae's words;
"As a high school student back in the '80s, I thoroughly enjoyed chemistry classes and often daydreamed of a career in science. However, the lure of travel to immerse myself in different cultures and landscapes seemed to get in the way of pursuing my scientific interests. While this somewhat detoured from my teenage dreams, it did instead develop my awareness of emerging global environmental issues and sparked my long-term interest in environmental chemistry.

At 27, I enrolled in a Bachelor of Applied Science at Southern Cross University (SCU) and couldn't have been happier. Life circumstances changed, however, and at the end of my first year I left my course to have children. I accepted that I was not to finish my degree as first planned, but

the goal to complete a degree in environmental science never left me.

Recently, at the age of 50, I finally completed my Bachelor of Environmental Science and was awarded the student with the overall highest Grade Point Average. I am now undertaking a Bachelor of Science (with Honours) at SCU specialising in paleo-fire reconstruction. Using the sedimentary record I am investigating bushfire impacts on aquatic ecosystems, in particular, whether there is a link between heavy metals that are released during fire events and bushfire intensity. This research will assist environmental managers to understand potential adverse effects on aquatic systems from bushfires and to develop mitigation strategies to minimise these impacts.

The Rowe Scientific Chemistry Scholarship will greatly assist me with the travel costs that I will incur while completing this study as much of my research requires me to access specialist laboratory facilities across Australia. With my husband recently being diagnosed with a degenerative disease that affects his ability to work in a full time capacity, the scholarship will also play a large role in relieving the financial burden on my family as I continue my studies. Thank you Rowe Scientific Pty Ltd for your generosity! The scholarship makes it possible for me to undertake this important environmental chemistry research, especially in the context of a changing climate and predicted future increase in bushfire frequency.

Renee Borrow Southern Cross University, Lismore Bachelor of Science (with Honours)"

Well done Renae, and best wishes in your future studies from the national staff of Rowe Scientific Pty Ltd.

THE UNIVERSITY OF ADELAIDE

Rowe Scientific Chemistry Scholarship

Congratulations to Ms Ellie Leopold and Ms Meaghan Ashton, the current recipients of 2021 Rowe Scientific Chemistry scholarships at The University of Adelaide.



Ms Ellie Leopold

Ms Ellie Leopold

In Ellie's words;

Environmental chemistry is my passion. Growing up on a farm about an hour from Mount Gambier in the state's South East, I have always been interested in the physical environment around me. Alongside Chemistry, I am also studying Majors in Ecology and Geography, Environment and Population. After my degree, I would love to use my knowledge of chemistry to support industries such as sustainable agriculture, water production or natural resource management. Sustainable technologies are vital for these industries and I hope that I can be a part of this process

Ms Meaghan Ashton

In Meaghan's words;

I am a student in my final year of my chemistry degree, hoping to undertake either honours or MPhil next year. I

am intensely passionate about the applications of chemistry towards the betterment of human health, particularly in the area of drug design and development. My interests lie in medicinal and bioinorganic chemistry.

Receiving this scholarship has been a ground-breaking opportunity for me. As a financially independent student, I always knew that my penultimate year would be challenging, especially whilst trying to reach my academic goals whilst leading a balanced lifestyle. Hopefully, this opportunity will assist me to put the theory I have learned into practice through research in these areas in the years to come.

Well done Ellie and Meaghan, from the national staff of Rowe Scientific Pty Ltd.



Ms Meaghan Ashton

THE UNIVERSITY OF ADELAIDE

Rowe Scientific Viticulture & Oenology Scholarships

Congratulations to Mr Benjamin Dowling and Ms Amber Venning, the current recipients of 2021 Rowe Scientific Viticulture and Oenology scholarships at The University of Adelaide.

Mr Benjamin Dowling

In Benjamin's words;

I am a current first-year student in the Viticulture and Oenology program at The University of Adelaide and I am extremely thankful to have received this scholarship to support my studies. I am very interested to learn more about various grape varieties and clones and how they can be selected for in the future to both meet the changing tastes of consumers but also a changing climate. "



Mr Benjamin Dowling

Ms Amber Venning

In Amber's words;

My journey in the wine industry began working harvests across different Adelaide wine regions and one Canadian region. I became fascinated around the winemaking process, the science and chemistry behind



Ms Amber Venning

it. This influenced my decision to begin my Oenology and Viticulture degree. I desire to pursue a career in the Adelaide wine regions as well as travelling overseas to broaden my horizons. I would like to thank Rowe Scientific for my scholarship and the opportunities it has granted me, I am incredibly grateful.

MONASH UNIVERSITY ROWE SCIENTIFIC CHEMISTRY SCHOLARSHIP

Congratulations to Ms Jessica Pitts, the 2021 recipient of the Rowe Scientific Chemistry Scholarship at Monash University.

In Jessica's words;

"I've spent my whole life in the outer western suburbs of Melbourne, growing up in the Point Cook area where I went to primary school in Altona and then completed high school in Bacchus Marsh. I'm fortunate to have been surrounded by beautiful natural landscapes including Port Phillip Bay, the Surf Coast, the Cheetham wetlands, and rural farms surrounding Werribee South and Bacchus Marsh.

These areas have a very close knit and supportive community approach which is an attitude I have strongly come to value. I come from a family of four; Kerrie (mum), Craig (dad), Cooper (younger brother), and me. My younger brother is currently completing Year 11 and is looking to study Engineering at Monash University in 2023. My mum works as an Integration Aide at a local primary school and my dad works as an IT Security Architect for a global food manufacturer.

Outside of University, I volunteer as a motorsport marshal with Motorsport Australia. As a result, I have been fortunate enough to have worked at four Australian F1 Grands Prix. Whilst these events can be tiring, I really love the passionate and supportive community that works together to ensure the best outcome for everyone. I am hopeful that in the future I can be a mentor to other young people starting in motorsport and help make it more accessible to a wider community.

I chose to study science at university because I've always been interested in understanding how



Ms Jessica Pitts

and why things work the way they do. This desire to understand why is what led me to a chemistry major. I looked at doing an environmental science major at university, however, I found that it didn't satisfy my need to understand 'why'. I found it looked at things purely on a macro scale, when I wanted to understand how what was happening on the micro scale affected the macro scale. This led me to an extended chemistry major with a focus on industry and environmental applications.

This year I have a few goals I wish to achieve. I plan to complete my Bachelor of Science at the end of 2021. I also hope to be admitted to Law School in 2022 where I plan to use my science and law skills in partnership as an intellectual property lawyer. My main personal goal for the upcoming year is to work toward a better work/life balance while working from home and to work at the 2022 Australian F1 Grand Prix."

Well done Jessica, from the national staff of Rowe Scientific Pty Ltd.

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DEAKIN UNIVERSITY ROWE SCIENTIFIC CHEMISTRY SCHOLARSHIP

Congratulations to Ms Jessica Glasson, the current 2021 recipient of a Rowe Scientific Scholarship, at Deakin University in Melbourne.

In Jessica's words, when asked what she found interesting about chemistry;

"At first, the word chemistry seems daunting, and the image of a scientist running experiments in a laboratory

comes to mind. Of course, chemistry is an integral part of being able to run experiments, but it is an incredibly important part of everyday life.

The chemistry involved in everyday activities like washing our hands, the air we breathe, and baking are just as important as those chemical reactions that allow me to undertake experiments to investigate neuroendocrine cancer.”



Ms Jessica Glasson

Well done Jessica and every success in your future experiments, from the national staff of Rowe Scientific Pty Ltd.

MURDOCH UNIVERSITY ROWE SCIENTIFIC CHEMISTRY SCHOLARSHIP

Congratulations to Ms Amarsha Gooneratne, and Ms Rachel Mattsson, recipients of a Rowe Scientific Chemistry Scholarship, at Murdoch University in WA.

Ms Amarsha Gooneratne

In Amarsha's words;

“I first became interested in chemistry when I was about 8 years old and my mum bought me a science kit from book club, it was the first of many.

The simple reactions like baking soda and vinegar and glow in the dark slime were fascinating to me and I wanted to know why and how they worked. I've loved science and chemistry ever since, experimenting with things and then trying to explain the observations I make. What amazes me the most about chemistry is how diverse it is, it's applied in mining, medicine, construction, automotive, defence and more.

Thank you so much for awarding me the Rowe Scientific scholarship, “



Ms Amarsha Gooneratne

Ms Rachel Mattsson

In Rachel's words,

"I think chemistry is interesting because it intertwines itself within a majority of occupational sectors and is crucial for societies survival.

Chemistry can be found in cooking whether it be the reaction of yeast in bread or the curdling of milk to cheese. In the medical sector chemistry plays an important role in being the science behind the production of a range of medicines.

This is interesting because the development of chemistry has provided cures and treatments for a number of diseases. A recent example where chemistry spikes interest is the evolving production of Covid-19 vaccines. These vaccines are single-handedly saving lives from the Covid-19 pandemic by providing protection to infection all thanks to the discoveries of chemistry."

Well done ladies, and best wishes in your future studies, from the national staff of Rowe Scientific Pty Ltd.



Ms Rachel Mattsson

THE UNIVERSITY OF WESTERN AUSTRALIA ROWE SCIENTIFIC VACATION AWARDS

Congratulations to Ms Eloise Dixon, and Messrs Samuel Beerkens, Elliott Fourie, and Aston Summers, recipients of Rowe Scientific Vacation Scholarships last summer, in the School of Molecular Sciences at the University of Western Australia.



Ms Eloise Dixon

Ms Eloise Dixon

In Eloise's words,

"I am very grateful for the incredible opportunity Rowe Scientific provided me with. Thanks to their funding I was able to complete 8 weeks of funded research work in the field of molecular electronics with Prof. Paul Low's research lab at UWA. Molecular electronics studies the conductance of charge through individual or small assemblies of organic molecules for future application in the miniaturisation of computer devices and creation of new unique electrical components.

More specifically I spent my time developing a synthetic method of attaching gold phosphite capping groups to either end of a series of highly conjugated molecular bridges and observing their behaviour in a scanning

tunnelling microscope. These capping groups dissociate from the molecular bridge allowing

conductance measurements to take place without interference by anchor groups, which are generally used to chemically link the macroscopic electrodes to the molecule.

I hope that my work in the lab might pave the way for future research in the lab and ease the difficulty of measuring these molecules in a scanning tunnelling microscope. Working within such a passionate group of PhD students and fellows has exposed me to the potential of research as a career option.”

Mr Samuel Beerkens

In Sam's words,

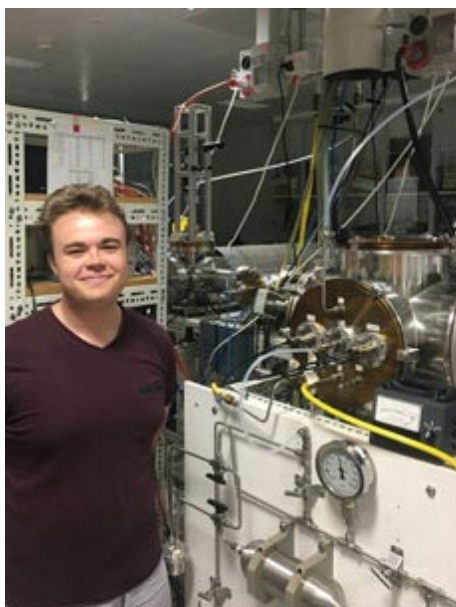
“I am honoured to have received the vacation scholarship from Rowe Scientific this summer. It has given me the opportunity to work with an amazing group of people in the Chooi research laboratory at the University of Western Australia, working on some cutting-edge projects that integrate aspects of chemistry, biochemistry, biology and genetics.

I was heavily involved in a project attempting to activate biosynthetic pathways of fungi using CRISPR techniques, for the discovery and production of molecules which could ideally be used in pharmaceutical, agricultural or scholarly contexts. My work involved a range of DNA cloning techniques, fungal culture, and microscopy.

As I am preparing to enter my Honours year of study, this scholarship could not have come at a more perfect time. The research experience I gained from this project has made me feel much more prepared for the research-intensive year ahead, as well as confirming that research is definitely a field in which I would love to continue working. A massive thanks to Rowe Scientific for the scholarship. I value this experience among the greatest of my time at university.”



Mr Samuel Beerkens



Mr Aston Summers

Mr Aston Summers

In Aston's words,

“Contrary to what is in the picture, I carried out my vacation project investigating phosphine compounds using computational chemistry. My supervisor Dr. Duncan Wild and the Wild group use computational chemistry to enhance their work on anion photoelectron spectroscopy.

Many of you may have heard of phosphine recently in the news, with many conflicting reports of its detection on Venus. Phosphine itself is a very toxic gas and as such any experimental work on it is not a simple matter. Preliminary work using computational chemistry helps to ascertain whether any compounds could be detected using anion photoelectron spectroscopy and if they might give us insight

into interesting chemical phenomena.

Using ab initio methods, I investigated neutral and anion structures that form between PH_2 and H_2S and calculated the binding energy that we would expect from the spectra for these compounds. My initial findings indicate that proton transfer occurs in the anion structures to form PH_3 and HS whereas in the neutral structures they remain as PH_2 and H_2S . Some of the structures observed had hydrogen bonding characteristics; however, most of the structures exhibited non-specific intermolecular interactions, primarily between the sulfur and phosphorous atoms. The remaining step in this project is to complete the full calculations of the energy of the neutral structures. This will help to determine whether gas mixtures of PH_2 and H_2S are worth investigating using anion photoelectron spectroscopy.”

Mr Elliott Fourie

In Elliott's words,

“From a young age, I had it in my mind that I wanted to help people. Initially, I thought this was through studying medicine and having a hands-on approach with people. But throughout high school and my time doing my undergraduate (in biochemistry and genetics), I fell in love with the research aspect of study. I loved the idea that through research, the lives of thousands of people can still be helped whilst simultaneously expanding current scientific knowledge. Ever since, I have shifted my focus towards a career as a researcher. I have always had a keen interest in the fields of biology and chemistry in school, and so the combination, biochemistry, seemed to me like a natural pursuit. Through my time in the labs, I have



Mr Elliott Fourie

discovered a new found passion for the emerging field of Synthetic Biology. Designing new types of DNA constructs that have the potential for delivering real-world change, whether this be through making plant energetics more efficient or hopefully in the future aiding livestock or treating disease, is precisely the science I wanted to get involved in from the beginning. Receiving this scholarship has been amazing to relieve the financial burdens as I continue my studies, and will be instrumental in helping with my honours year. I would personally like to thank Rowe Scientific Pty Ltd, the Lister Lab and UWA for their continued support throughout my education.”

Well done people, and good results in your future studies, from the staff of Rowe Scientific Pty Ltd nationally.

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STATE NEWS



NEW SOUTH WALES

Dear Clients.

As we near the end of the year, we also appear to near the light at the end of the tunnel. With vaccination rates increasing, many in NSW are now experiencing their first taste of freedom after what has been several long months.



We would like to thank you all once again for your continued support throughout these trying times, and we look forward to supporting you in turn as we move ahead together.

With the silly season fast approaching, we encourage our clients to plan in advance wherever possible to ensure adequate stock of core chemicals and consumables for the coming months. Most freight providers are expecting to see a substantial increase in business as we approach the holidays, and local delivery times are likely to be affected as a result of this. In addition to this, international freight congestion continues to give rise to increased shipping costs and significant delays. While we are doing our best to overcome these challenges, we do recommend placing your orders for essential stock as early as possible.

For many of our clients, cell cultureware is essential and we are happy to report that several shipments of SPL serological pipettes and other SPL cell culture consumables have just landed, with more shipments on the way. An overview of the SPL product range can be found on our website [here](#). If you have any questions our friendly team are available to help, please [reach out to us](#) with your enquiries so that we can assist you with supply of the goods you need to complete your work.

We look forward to speaking with you soon.

Kathryn, Ari, Connor, Hayden, John, Julia and Rob

QUEENSLAND

Dear Clients.

The year is pushing ahead fast and it will soon be time to think about Christmas. Despite the many frustrations in business relating to delays with international air freight, shipping and the availability of raw materials, we are pushing ahead with securing as much stock as possible to meet your daily laboratory needs.



Our Queensland team have been very busy over the past few months and it appears that many labs are experiencing a return to the old days pre COVID19 as more staff are able to work on site instead of home. Let us hope that this trend continues and everyone is able to keep their job.

Nitrile Gloves have been a challenge but stocks are beginning to flow through more regularly now and we have a supply of face masks as well as other PPE products. For our Life Science clients a reminder that we have very experienced staff in our Rowe Scientific team who deal with Charm products and carry good stock in our Melbourne warehouse.

If you are testing for antibiotics in dairy products then we have a good range of lateral flow test strips and FAP test kits. We also have the Novalum II unit which supports ATP testing for a wide range of industries.

Thank you for your business, keep well and stay safe from the Queensland Team:

Yvonne, Brian, Daniel, George, Jacob, Josephine, Kiran, Leon, Martin, Robert, Steve.

SOUTH AUSTRALIA & NORTHERN TERRITORY

Dear Clients.

With winter now behind us and now moving into spring, it brings it's own joy for people like me who suffer enormously from pollen and hay fever!

Mark Hunter finished up with us at the end of September as planned and we wish him well. We now welcome Luke Timperon to our team in Adelaide as Mark's replacement. He has been settling in well and we wish him the best.



Erik and his wife Cara welcomed their second child, a daughter named Fia weighing in at a healthy 4.04kg and 54cm tall.

We are well and truly under the pump here in the office and are on the lookout for another Internal Account Manager so we will keep you posted on who we find, alternatively if you are reading this and think the commercial world is of more interest than what you are currently doing, please let me know.

Jo and Sam have just attended the RACI conference held at the University of South Australia at Mawson Lakes. Thank you to all of those of you that stopped by for a chat about the goods we had on display. Freight is a continually challenging aspect for all of us at the moment while unprecedented high costs has created a container shortage which adds to the frustration .

To secure your high volume critical items, please contact us and indicate your requirements. This will ensure you are allocated your stock once arrived.

All the best from:

Doug, Danielle, David, Erik, Joanne, Lauren, Luke, Mark, Michael, Paula, Samuel, Steve.

VICTORIA & TASMANIA

Dear Clients.

Christmas is already on the horizon but who knows what it will bring? Hopefully we will see continued easing of restrictions here in the south east. As a result, life will become easier in Victoria, but this will also mean that you will need to stock up and secure the available essentials to keep your operations functioning at maximum efficiency over the next few months and into 2022.



We have just received a string of deliveries from overseas of long awaited plasticware. For those of you who have endured these extended back orders, thank you for your patience. It does look like freight issues are easing and "things may be starting" to get back to normal.

Have you seen the latest [LABLIKES Edition11?](#) [Click here to download](#). Check out the free

glassware offer with every purchase of a Miele washers. There is information regarding flocculators for Water Industry people and ATP special offers for the busy diary folk. Of course, if you need more masks, we have plenty, please contact us today.

Hope to hear from you soon.

From your team in Victoria:

Garry, Adam, Amanda, Brian, Christine, Darren, Hoa, Louise, Mango, Nic, Paul.

WESTERN AUSTRALIA

Dear Clients.

COVID-19 continues to play havoc with supply chains around the world as container prices continue to rise, while uncertainty prevails in when you can get your freight into a container and when you can get your goods onto a vessel.



The Chinese government has recently instructed one of our supply partners of the ""Double control of Energy consumption", which is requiring all the related industries to control both the total energy consumption and energy intensity consumption. This means they will not be able to manufacture with our full capacity, and our production capacity will be lower than previous. The production lead time will be delayed in some extents and will be much longer than previous, this may also impact the pending orders in hand...."

On another front, "Chinese producers of downstream phosphorus products have recently called *Force Majeure*, announced large price increases, or have cancelled/delayed shipments."

This is as a result of an extended dry period in the Yunnan province, reducing the availability of hydroelectricity. Additionally, under the policy of environmental protection and production restrictions, China's phosphate ore production has decreased drastically. We have seen negative growth in production from 2016 and a negative growth rate of -27.9% in 2018. Power batteries are classified as being either lithium iron phosphate or ternary lithium, depending on their composition. Lithium iron phosphate batteries are recognised for being less expensive and safer. As of May, the cumulative production of lithium iron phosphate is predicted to see year on year growth up to 80%. These 3 factors have already resulted in an increase of more than 100% in phosphorous based products.

We fight against every increase, and vigorously seek every efficiency. With a Mission Statement of "keeping our clients supplied with the scientific items you need to do your work", we strive to ensure that we have goods to hand to meet your demand, at whatever the cost. If we have the goods to hand there are options, without, there are none.

On a brighter note we are pleased to announce that Mr. Andre Berlandier has joined us in our internal accounts team. Andre has a long history of working in the gas industry and will strengthen our capacity in this area.

Thanks for your business,

Peter Sommers and the Western Australian Team.



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