

# UC



# SPCS Newsletter

## School of Physical and Chemical Sciences/Te Kura Matū

19th June 2020

Welcome to our SPCS newsletter for 2020.  
 Please send me your news articles, photos, travel diaries, conference reports or funnys by 9am each Friday.  
 Email [sharlene.wilson@canterbury.ac.nz](mailto:sharlene.wilson@canterbury.ac.nz)  
 You can find previous issues here <https://www.canterbury.ac.nz/science/>

Facebook(@PhysandChematUC)  
 Twitter (@UCNZ\_PhysChem)  
 WeChat(Physical&ChemicalSciences)

### Rudi's Weekly Report.

Kia ora koutou

Hope everyone had a great week, and that exams are going well. This week we had a number of exciting things happening across the school.

First of all, join me in congratulating Chikezie Onyema for successfully defending his thesis on "Mist-CVD deposited ZnO thin films for metal-semiconductor field effect transistors". Chikezie works under the supervision of Roger Reeves and Martin Allen.

We are also very excited about the large media coverage that the 'Super-Earth' story has received. Please join me in congratulating Michael

Albrow for helping to raise the profile of the University and the School in such a meaningful way. Please take a look at the article here <https://www.thecut.com/2020/05/astronomers-discover-super-earth-but-it-cant-sustain-life.html>.

Outreach is a key part of our growth strategy, and as such, we will be featuring at KidsFest 2020 on the 10th of July – please join in thanking Rodrigo Martinez and Graeme Plank for helping coordinate this. We still need volunteers to help on the day. Please get in touch with Sharlene if you are interested in helping out.

Please don't forget that nominations for teaching awards and for the health, safety and wellbeing awards are now

being accepted – please come forwards if you are interested in applying.

Finally, June is Men's Health month and Men's Health New Zealand have some great resources for men to use. Click here to view.

<http://menshealthnz.org.nz/>  
The [EAP Newsletter for June 2020](#) also has ideas for men and boys to consider.

Stay safe and have a great weekend.  
Nga mihi nui  
Rudi



### Happy 147th birthday, University of Canterbury!

The founders of the University of Canterbury 147 years ago were progressive, but could never have imagined the diverse, multi-cultural, gender-balanced leadership of today's university. UC is the first, and remains the only, Aotearoa New Zealand university to be led by four women; in the Vice-Chancellor, Chancellor, student association President and Vice-President roles.

See the UC news article for more. <https://www.canterbury.ac.nz/news/2020/happy-147th-birthday-university-of-canterbury.html>

### UC Legends include;

[Tā Apirana Ngata](#) (1874–1950), [Roy Kerr](#) (1934–), [Dame Ngaio Marsh](#) (1895–1982), [Helen Connon](#) (1859–1903), [Beatrice Tinsley](#) (1941–1981), [Sir Karl Popper](#) (1902–1994), [Rita Angus](#) (1908–1970), [Nobel Laureate, Lord Rutherford](#) (1871–1937), [Anoto Tong](#) (1952–).



[Tā Apirana Ngata](#)  
(1874–1950)



[Lord Rutherford](#)  
(1871–1937),



[Roy Kerr](#) (1934–),



[Rita Angus](#) (1908–1970)



[Beatrice Tinsley](#)  
(1941–1981)



[Dame Ngaio Marsh](#)  
(1895–1982)



## Health, Safety and Wellbeing- Sharlene Wilson (H&S Administrator)

**2020 Training Calendar**  
To enrol in training log in to [UC People](#) and navigate to the Professional Development tile.



**Fire Extinguisher & Evacuation Training**

Tuesday 25 February  
Friday 17 July  
Monday 14 September  
Tuesday 13 October 9am - 12pm

**First Aid Comprehensive**

Thursday 23 and Friday 24 July  
Thursday 24 and Friday 25 September  
Monday 7 and Tuesday 8 December 2

days 9am - 4.30pm

**First Aid Revalidation**

Friday 10 July  
Thursday 20 August  
Friday 11 September  
Wednesday 7 October  
Friday 20 November  
Friday 4 December

[The full list of 2020 H&S Training.](#)

**EAP Services newsletter**



**Replacing used first aid equipment**

All SPCS first aid kits have now got seals on them that need to be cut to open. When you open a first aid kit you must notify Lu-Ellen that you have done so she can check and replace items.



**Health, Safety & Wellbeing Awards** <https://www.canterbury.ac.nz/about/health-and-safety/engage-in-hs/>

The Health, Safety & Wellbeing Awards acknowledge people and teams who demonstrate commitment and achievement in improving health, safety & wellbeing at the University of Canterbury. They give campus-wide recognition to good ideas, superior systems, great initiatives and hardworking people who have made a difference.

In 2020 here is a change to the Health, Safety & Wellbeing Awards.

**The Awards have been divided into to distinct categories:**

1. Health and Safety Initiative Award - Seek funding to help advance a Health, Safety & Wellbeing initiative. Applicants will need to set out clear objectives, provide a budget and show they have support from the relevant department.
2. Health and Safety Recognition - Recognition for a piece of work, actions completed or a non-funded initiative realised.

Nominations and applications may be received from all staff members (including part-time and fixed term staff).

Further details about the purpose, eligibility and criteria for determining awards is set out in the Protocol: Health, Safety & Wellbeing Awards. There are detailed additional Instructions for Applicants

Applicants will need to complete the Application for Health Safety, and Wellbeing Recognition or Application for Health, Safety and Wellbeing Initiative Award and ensure this is forwarded to the Health and Safety Team. Applications are called for each year. The dates for applications are published in the UC Intercom, but usually close mid-July.

Applications Close - Wednesday 17 July 2020



## Publications

Owen J. Curnow, Kelvin J. Walst, and Ruhamah Yunis. Synthesis and Physical Properties of Protic Triaminocyclopropenium Ionic Liquids, *Chemistry Select* 2020, 5, 6978–6986.  
<http://dx.doi.org/10.1002/slct.202000609>

Jenniskens P., Lyytinen E., Baggaley J., A An outburst of delta Pavonids and the orbit of parent comet C/1907 G1 (Grigg-Mellish). *Plan. Space Science*, June 8 2020, [DOI 10.1016/j.pss.2020.104979](https://doi.org/10.1016/j.pss.2020.104979)

## Congratulations to Chikezie Onyema



I have much pleasure in announcing that Chikezie Onyema successfully undertook his PhD oral examination On Friday morning. His examiner commended him on his work and recommended that he be admitted to the qualification of PhD after making some technical amendments to the thesis.

Chikezie's thesis on "Mist-CVD deposited ZnO thin films for metal-semiconductor field effect transistors" was conducted under the supervision of Roger Reeves and Martin Allen.

Well done Chikezie!

## UC Science Radio: Episode 8-Dr Michele Bannister: Words and worlds collide

What's the difference between a poet and an astronomer? Nothing, if you're UC astrophysicist Dr Michele Bannister.

The poet, planetary astronomer, hunter of new and strange worlds, and self-described 'connoisseur of fuzzy dots of light' is the guest on [episode 8 of UC Science Radio](#).



## Super-Earth story increases online visitors

UC Marketing have confirmed that traffic to the UC website in May increased by 70.18%, thanks largely to COVID news and the Phys\_Chem 'Super-Earth' story.

Traffic to the 'Super-Earth' story came largely from a UC news site called [thecut.com](http://thecut.com). The ran their own version of the story, which included a link to UC News in the second paragraph. Associate Professor Michael Albrow has confirmed since that the story was also picked up by USA Today, MSN and Fox News, which could also be responsible for some of the additional site hits.

The UC Website received 15,230 hits in May 2019. In May 2020 it received 51,073 hits – an increase of 35,843 visitors.

Great numbers!

## Condolences to John & Vickie Hearnshaw

Sincere condolences are extend from the School to John and Vickie Hearnshaw on the heart breaking passing of their 43 year old son Edward.

Edward was tramping in the Ruahine Range. It was raining, and during a flooded river crossing , on the 2nd June, he lost his balance and was swept away.

John says "Edward was a very successful public servant working as 2/IC to

Simon Upton in the Parliamentary Commission for the Environment. He loved tramping and died doing what he loved." Ed Hearnshaw was the Chief Economist in the Office of the Parliamentary Commissioner for the Environment. Commissioner Simon Upton said Ed Hearnshaw's death is "a huge loss not just to the Office, but to the wider New Zealand economics community".



"Ed was a highly valued colleague who made a significant contribution to a wide range of environmental issues both in his time at the Ministry for the Environment and over the last two years in the office of the PCE," he said. "The entire team is shaken by his untimely death."

Dr. Edward Hearnshaw , son of Professor John Hearnshaw, died in a tramping accident in the Ruahine Ranges during Queens Birthday weekend. Edward was a very successful public servant working as 2/IC to Simon Upton in the Parliamentary Commission for the Environment.

## Unravelling the biomolecular secrets of bacteria

Campylobacter jejuni is a common cause of food poisoning in New Zealand. Yet the biomolecular interactions at play when this bacterial infection strikes are poorly understood. With the support of a Fast-Start grant from the 2019 Marsden Fund Te Pūtea Rangahau a Marsden, University of Canterbury (UC) researcher Dr Timothy Allison is taking a closer look at this human pathogen in order to expose the complex interactions of its membrane-bound machinery.



UC Doctoral Student James Titterington (pictured) studies under Dr Allison in his research into the biomolecular interactions of Campylobacter jejuni.

Campylobacter jejuni is a common cause of food poisoning in New Zealand. Yet the biomolecular interactions at play when this bacterial infection strikes are poorly understood.

With the support of a Fast-Start grant from the 2019 Marsden Fund Te Pūtea Rangahau a Marsden, University of Canterbury (UC) researcher Dr Timothy Allison is taking a closer look at this human pathogen in order to expose the complex interactions of its membrane-bound machinery.

UC is the only institution in New Zealand with the right cutting edge equipment – a specialised mass spectrometer instrument – for this innovative new research in the area of protein science and structural biology.

See UC News for more <https://www.canterbury.ac.nz/news/2020/unravelling-the-biomolecular-secrets-of-bacteria.html>

## Library News-John Arnold

### New books and ebooks:

- \* Astronomy <http://bit.ly/xntPcH>
- \* Chemistry <http://bit.ly/2GYps4U>
- \* Physics <http://bit.ly/wafgiA>
- \* Adaptable new-titles-list generator <http://bit.ly/1brTI3E>

### Science and Indigenous Knowledge (Sciblogs)

<https://bit.ly/2LmsC13>

### How Scientific Conferences Will Survive the Coronavirus Shock (Nature.com)

<https://go.nature.com/2N0icIX>

### The Rise of Preprints in Chemistry (Nature Chemistry)

<https://go.nature.com/2A7zMYJ>

### How Science Fails [Lakatos and the philosophy of science] (Aeon)

<https://bit.ly/2UV0GtL>

### Library Liaison Officer for Chemistry

Assoc. Prof. Greg Russell

<http://bit.ly/2SvmiJd>



### Library Liaison Officer for Physics and Astronomy

Dr Konstantin Pavlov

<http://bit.ly/31z5tCP>



### John Arnold Subject Librarian for Physical and Chemical Sciences

<http://bit.ly/johnarnold-uc>

