



Te Mana Tangata Whakawhanake

MacDiarmid Institute

Advanced Materials & Nanotechnology

As cooler weather sets in for 2023, there is no shortage of impactful events and research happening at the MacDiarmid Institute. We'd like to firstly acknowledge the pressure that many of our colleagues are under, due to redundancies having been announced to address major funding shortfalls across the university sector.

It is through this funding that we were able to support you, our alumni, to succeed (and you can read more about the achievements of your fellow alumni below). We hope you've enjoyed staying connected with the MacDiarmid Institute as much as we've enjoyed keeping in touch with you! Thank you for reading, and if you know of any alumni that might benefit from receiving this newsletter, please ask them to [Contact us](#).

As always there are opportunities for you as alumni to engage with our usual calendar events like the Regional Lecture Series, startup site visits, Science Advisory Panels and more. Happy reading.

News and Updates



[Otago PhD student from Pakistan converts solar energy into clean, green hydrogen](#)

Alumnus Dr Mohsin Ijaz and [Emeritus Investigator Professor Richard Blaikie](#) from [University of Otago](#) feature in this article by [New Zealand Education](#) on the PhD research that could help develop practical devices that effectively convert solar energy to hydrogen. [You read about producing alternative sources of renewable energy here.](#)



[MacDiarmid Institute alumni reunite in an Australian National University \(ANU\) lab with grads spanning 2017 to 2022.](#)

Alumnus [Dr Daniel Preston](#) is a DECRA fellow at the Research School of Chemistry at the [Australian National University \(ANU\)](#), after completing his postdoc with [Associate Investigator Professor James Crowley](#). From the same Otago group, alumnus [Dr James Findlay](#) also found himself in the Preston Group. Now, [Discovery Scholar alumnus, Zack Avery](#), who completed his Honours at the [University of Canterbury](#) last year, is with the Preston Group undertaking his PhD.



[Career Relevant to Industry Skills Programme \(CRISP\) held in June at University of Canterbury, with site visits to MacDiarmid alumni and friends](#)

We held four CRISP sessions in Christchurch this week, with 50 MacDiarmid students, Postdocs and RAs in attendance. This replaces the [Future Leaders' Programme \(FLP\)](#) and is hosted throughout the year at our partner centres. We're grateful to alumni Jono Ring for hosting a site visit at [Zinccovery](#) and to Dr Ben Westberry for mentoring at the Hackathon. If you'd like to participate as a facilitator or host a site visit, please get in touch with [Kevin Sheehy](#).



[New Deputy Directors announced](#)
[Associate Professor Anna Garden](#) from [University of Otago](#), is our new Deputy Director Outreach and Education, and [Associate Professor Natalie Plank](#) of [Victoria University of Wellington](#) our new Deputy Director Commercialisation and Industry Engagement. Huge thanks go to [Associate Professor Geoff Willmott](#) and [Professor Paul Kruger](#) for all their work in the deputy director roles. You can see more about Geoff and Paul's legacy across [our social media](#).



[Strategic Manager Māori role introduced for the MacDiarmid Institute](#)

Introducing [Kirsty Doyle](#) from Ngāti Kahungunu, Rongomaiwahine, Ngāti Rakaipaaka, who has been appointed to the new position of Strategic Manager Māori. Kirsty's role will be to provide strategic advice and implementation of building capability and capacity of Māori research.



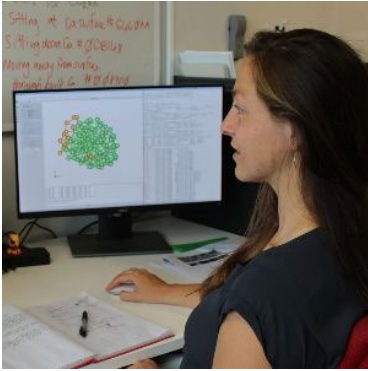
[Two successful Techweek events with many firsts.](#)

In May we hosted our annual [Techweek](#) events in Auckland and Palmerston North (the latter for the first time!). One of the highlights was a talk by [Mike Lim](#), visiting from Singapore on behalf of the CleanTech investor group [Trirec](#), who gave a strong appraisal of NZ Deep Tech at the Auckland event – including using HTS-110 as a key example of the quality of our ecosystem. Thanks to our speakers (including Investigators [Taniela Lolohea](#), [Keith Gordon](#) and [Shane Telfer](#)) and our event partners ([Dodd-Walls Centre](#), [NZPA](#), [BIC](#), [AUT Chemistry](#), [Momentum Committees](#), [CHIASMA](#), [MESA](#)).



[MacDiarmid Independent PDF fellowships](#)

We're delighted to announce the recipients of the [MacDiarmid Institute Independent Postdoctoral Fellowships](#). The [call for proposals was made late 2022](#), and now we welcome Dr [Caitlin Casey-Stevens](#), Dr [Kimtien Nguyen](#), Dr [Amy Yewdall](#), and Dr [Bicheng Zhu](#). Their independent projects will be in alignment with our [Research Programmes](#), [Reconfigurable Systems](#), and [Hardware for Future Computing](#).



[Dr Steph Lambie awarded the Vice-Chancellor's prize](#)
 Congratulations to Dr Steph Lambie, who was [awarded the Vice-Chancellor's prize](#) for the best doctoral thesis in the Faculty of Science at the [University of Auckland](#), supervised by Principal Investigator [Professor Nicola Gaston](#). Dr Lambie's research achievements include this [Science paper](#) last year. She was also a former MESA Co-Chair.



[Regional Lecture Series 2023](#)

We are planning the Regional Lecture Series 2023 for between July-September this year. As usual, the lectures will be delivered in regional centres and as well as the evening talks, we plan to organise school visits. If you are keen to volunteer to contribute to the content and delivery of the series, please email MacD-Admin@vuw.ac.nz (cc vanessa.young@vuw.ac.nz).



[Science Advisory Panels](#)

We commenced an online platform for regular engagement between technology companies and our scientists in the form of Science Advisory Panels. Each panel session hosts a company that is interested in pursuing research to overcome a technical challenge with commercial relevance. If you or your company is interested in being part of our Science Advisory Panel, please contact [Kevin Sheehy](#).



[Internships](#)

As you probably know, we offer internships to our affiliated graduates so they can experience working on real industry problems. We have a comprehensive network of companies, start-ups, NGOs, and government agencies. If your company or workplace wishes to host an internship, please [contact us](#).

Recent media



[Clean tech unleashed at a lab near you](#)

This Newsroom article on the rise of deep-tech in New Zealand, particularly the clean tech sector, interviews founders, investors, and others, including emerging [MacDiarmid Institute affiliated spinout Liquium](#).



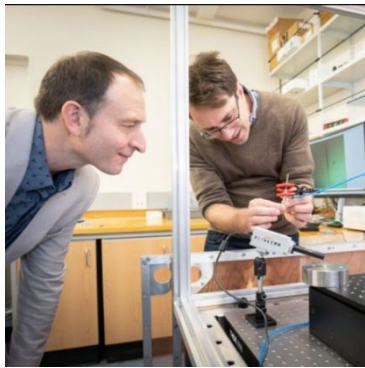
[When downsizing means destroying our universities](#)

Co-Director [Professor Nicola Gaston](#), shares her reckons with [RNZ](#), [The Spinoff](#) and the [Conversation](#) saying funding cuts to our Universities, mean more than academic job losses. It's clear that these cuts impact on the health and viability of our sector as a whole. We all lose when any of our universities is struggling. [Read the collection of articles here.](#)



[Budget 2023 won't move dial on R&D 'hole'](#)

In this article Co-Director, [Professor Nicola Gaston](#), highlights the massive deficit in R&D expenditure. "There are a lot of areas of research where the effort we put in needs to scale with the size of our country, not the size of our population." [You can read the full article here.](#)



[Entrepreneurship at Wellington UniVentures, Kim McKelvey](#)

Associate Investigator [Dr Kim McKelvey](#) from [Victoria University of Wellington](#) is working with [Wellington UniVentures](#) on commercialising electrochemistry tools for clean tech. Dr McKelvey has invented a novel technology that makes it possible to measure electrochemical reactions across surfaces quickly and cheaply. [Read more about his work here.](#)



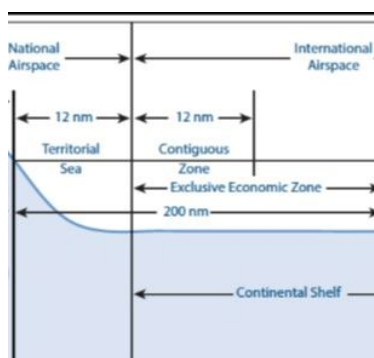
[No silos or ivory towers: How Wellington's innovation hub aims to supercharge science](#)

"It's really good to have this nice little community around with similar people" – our former Investigator [Dr Jérôme Leveueur](#), who is now chief technology officer at [Bspki](#) (a MacDiarmid Institute affiliated spin-out) on the [Gracefield Innovation Quarter](#) which is part of the three multi-institution research hubs in Wellington that the government's announced funding of \$451 million towards in the [Budget](#). [Read more about it here.](#)



[Matariki Award - Kiwibank New Zealander of the Year](#)

Tino pai to our Deputy Director [Associate Professor Pauline Harris](#), who worked closely with Kiwibank New Zealander of the Year, [Dr Rangi Matamua](#), promoting and educating New Zealanders regarding the new Matariki holiday last year. [You can read all about Dr Matamua's award here.](#)



If you have something newsworthy coming up (a paper about to be published, job-related announcement, or anything cool your company is working on) and you'd like some help obtaining media around it, please email [Vanessa Young](mailto:Vanessa.Young@macdiarmid.ac.nz) (ideally before the publication or announcement – we're used working with embargoed content).



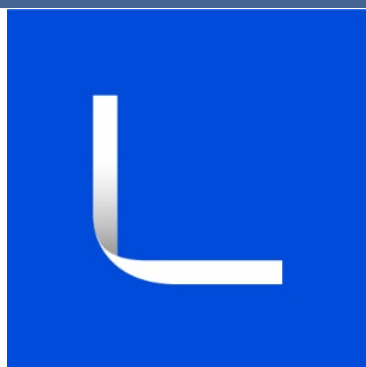
[Seabed Mining Around Aotearoa - Expert Q&A](#)

A select committee will consider the risks and benefits of seabed mining in New Zealand waters. The [Science Media Centre](#) has published a press release on [Scoop](#) with expert opinion on the topic. Principal Investigators Professors [Chris Bumby](#) and [Nicola Gaston](#) provided comment, which you can [read here](#).

[One small step towards banning 'forever chemicals'](#)

Associate Investigator, [Dr Erin Leitao](#) contributed to this [Newsroom](#) piece about how PFAS in cosmetics enter the environment through the water we drink, the food we eat, and the air we breathe. [Read the full article here](#).

Opportunities



[Lanaco Engineering, Research and Technical Sales](#)

Lanaco are currently doing a recruitment drive for a variety of roles including: skilled engineers (including but not limited to mechanical, materials, chemical), Quality specialists and professionals, Lab technicians, and researchers masters or doctorate qualified who have experience in air filtration. [Detailed role and application information available via Seek.](#)

[Professional Teaching Fellow, University of Auckland](#)

The University of Auckland Department of Physics is recruiting for an 18-month fixed term Professional Teaching Fellow for the advanced lab course. [Applications via SmartRecruiters can be made here by 14 July 2023.](#)

[Senior Lecturer, University of Auckland](#)

The University of Auckland Department of Physics is recruiting for a permanent Senior Lecturer in condensed matter. [Applications can be made by SmartRecruiters by 14 July 2023.](#)





[General Synthetic Development Scientist – Contract](#)

GreenCentre Canada is currently recruiting for a Development Scientist specializing in synthetic organic chemistry. This exclusive full-time contract is for 12 months. [Applications close 10 July and can be made here.](#)



[Datacom - Senior Product Analyst](#)

The Senior Product Analyst role works closely with the Product Manager (PM) as well as senior members of our Engineering team, to define and design the products and services in a customer centred way. [Apply via LinkedIn.](#)



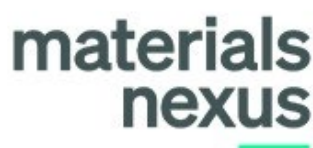
[Hot Lime Labs – Chemical Process Engineer](#)

Based in Lower Hutt, NZ, This role offers hands-on involvement in the development & deployment of our core CO₂ capture technology. For more information and to apply, [see LinkedIn.](#)



[Mint Innovation – various roles](#)

Friend of the Institute, Mint Innovation is expanding in Auckland and opening a new site in Sydney, Australia. They're hiring various roles from engineers to scientists and managers. [For more information see their website.](#)



[Materials Nexus – various roles, based in UK](#)

Materials Nexus is recruiting a variety of roles from developers to [Thermodynamicists to engineers and associates.](#) They work to reduce global CO₂ emissions by enabling new green materials with reduced emissions and improved performance. [More information on their roles are available on their website.](#)



[Nyobolt - Battery Scientist](#)

As a Battery Scientist, you will play a leading role in our Cambridge, UK-based materials R&D team to optimise the materials and systems core to our fast-charging technology. [For more information and to apply, see here.](#)

As you'll know from your time as a MacDiarmid student or early career researcher, we're always looking for volunteers to help with our educational outreach ([Regional Lecture Series](#), events organised through our [museum partnerships](#), and our [RNZ series](#) etc.) If outreach is your thing, and you'd like to stay involved with this, please [contact us](#).



Anything to share?

We'd love to celebrate your journey post-graduation. It helps us tell stories and paint pathways for secondary school students and others who are keen to see where science can lead them. If you would like to share with us your story or a recent discovery, achievement, media appearance etc. [Contact us!](#) We'll take care to only share where and how you'd like us to.

As always, there are plenty of opportunities to stay connected with the MacDiarmid Institute whānau, by joining our [LinkedIn Alumni Group](#) in particular. We'd love to continue receiving feedback on this newsletter, and to hear if there's anything else MacDiarmid-related that you'd like to be kept up to date on. Please also forward this newsletter to other alumni you know.

If you are a MacDiarmid alumni and have been forwarded this email by someone else and would like to join our quarterly alumni newsletter mailing list (and also hear of opportunities in between newsletters, e.g. jobs, scholarships and updates on the Techweek events etc.), please [contact us](#) and we'll add you to our mailing list.

