

Deep tech innovation shone at last month's <u>KiwiNet Research</u>

<u>Commercialisation awards</u>. The awards celebrate the heroes in research commercialisation, and this year several MacDiarmid Institute affiliated companies and alumni were finalists.

News and Updates



"Kevin Sheehy has set a very high benchmark for commercialisation leaders" (KiwiNet judges)

Our Commercialisation Manager
Kevin Sheehy won the Simpson
Grierson Commercialisation
Professional Award at this year's
KiwiNet awards. The judges said
Kevin's contributions to the
commercialisation sector, both at the
MacDiarmid Institute and beyond,
had been hugely impactful. You can
see more reaction here, plus the full
list of KiwiNet winners here.



<u>Congratulations to our other KiwiNet</u> finalists

We also congratulate our other KiwiNet finalists: BNZ Researcher Entrepreneur Finalist, Principal Investigator <u>Dr Laura Domigan</u>, Sprout Breakthrough Innovator Finalists, alumna <u>Dr Olivia Ogilvie</u> and alumnus <u>Dr Jerome Leveneur</u>.









Meet the people taking science to the marketplace

Ahead of the KiwiNet Awards we took a dive into the dark art of spinning out a deep tech company and asked a bunch of startup CEOs why commercialisation managers matter and what they do.

Bspkl wins at KiwiNet

One of our newest affiliated startup companies, <u>Bspkl</u>, won the KiwiNet PwC Breakthrough Project Award: Activating sustainability through innovative manufacturing.
Congratulations to alumnus Dr Jérôme Leveneur and Christina Houlihan.

Adding new kupu to our mahi

We celebrated Te Wiki o te Reo
Māori by sharing some kupu Māori
related to the mahi we do:
Toitūtanga = Sustainability
Kaipūtaiao = Scientist
Kairangahau = Researcher
Hangarau = Technology
Hangarau mōkitokito =
Nanotechnology
Hangarau rawa ōkiko = Materials
Technology
Here is an awesome resource to add
to these kupu.

The invisible hi-tech world of nanorecycling

This week is recycling week, so to celebrate, we spoke to some of our researchers and affiliated startup companies about the world of nanorecycling- a world we literally can't see.



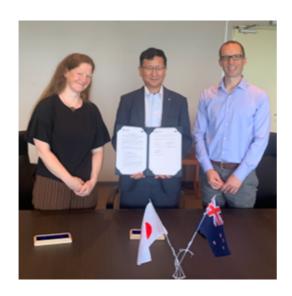
2023 Regional Lecture Series Good news for a change: Sustainability Tech in Aotearoa New Zealand and the science behind it

This year's series looked at things happening within the sustainability tech ecosystem, with clear potential to address some of the challenges we're facing. Alumni Drs Michelle Cook (GNS), Charlie Ruffman (University of Auckland) and Calum Gordon (Victoria University of Wellington) joined our researchers touring around Aotearoa.

Focus of this project

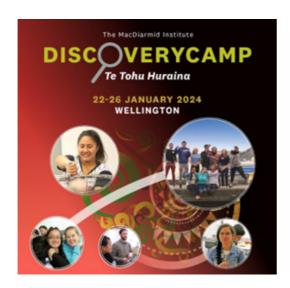
Computationally design organic solar materials

Kiwi postdoc powers Japanese collaboration for computational discovery of new solar cell materials JSPS Fellow Dr Geoffrey Weal will be based at Kyoto University's onsite integrated data materials lab at Te Herenga Waka Victoria University of Wellington.



<u>Deepening our connections with</u> <u>Japan</u>

A delegation from the Institute visited Japan in August, holding workshops at iCeMS at Kyoto University (with which we signed an MOU in 2021 and which operates an on-site lab at VUW) and at Japan's National Institute for Materials Science (NIMS, with which we signed an MOU on this visit). Contact Vanessa Young for more info.





Any alumni keen to be part of our annual student camps?

We'll hold our annual NanoCamp and DiscoveryCamp in January 2024 in Auckland and Wellington respectively. We're always keen to chat with Auckland or Wellington-based alumni who may wish to be involved in the camps, e.g. in a session about future pathways and careers. Please email us at macd-admin@vuw.ac.nz if you're interested in potentially being part of either of the camps.

Career Relevant to Industry Skills Programme (CRISP)

We have formalised CRISP by introducing a virtual 'badge' for participation in each opt-in module, distributed via the global Badgr platform, and can be attached to one's LinkedIn profile. If you'd like to participate as a facilitator or host a site visit as part of CRISP, please get in touch with Kevin Sheehy. We will be in Christchurch for our Annual Symposium in December!

New Zealand Institute of Physics (NZIP) Conference

Three Discovery scholarship recipients: Maia Dean, Jesse Teumohenga and Chez Panapa attended the NZIP conference in June. Deputy Director Māori Pauline Harris gave a keynote on Mātauranga Māori at the conference. You can read more about the Discovery Scholars here.

Alumnus Nico Hackner received a Fulbright scholarship

Alumnus Nico Hacker will be going to the University of Illinois Urbana-Champaign for a PhD under the scholarship. Nico completed his MSc in Physics at the University of Otago with Associate Investigator Dr Philip Brydon.

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

Latest SciGest podcast from Plant & Food Research

We welcome our newest Associate
Investigator, Dr Roshan Khadka,
who is an alumnus of Principal
Investigator Professor Jadranka
Travas-Sejdic and who is now
working at Plant and Food Research.
Listen to the latest Plant and Food
Research SciGest podcast, where Dr
Khadka is featured talking about his



Welcome to our first Institute Affiliate!

science journey and his research.

It is with great pleasure that we announce the appointment of our first Institute Affiliate (IA), Dr Dave Warren from the University of Otago. Dave has longstanding involvement with the Institute, particularly in the area of outreach. Institute Affiliate status recognises outreach partnerships, research collaborations and other contributions that complement and strengthen our activities. To read more about the new IA role and how to apply, please check our website.

Young physicist seeking to harness power of the stars

Alumnus Dr Ratu Mataira who studied under Principal Investigator Professor Chris Bumby at Paihau – Robinson Research Institute, is CEO and founder of OpenStar Technologies, a company developing nuclear fusion technology emerging from the Robinson Research Institute in the Hutt Valley. Read about his work on 1news.



<u>Scientists race to validate controversial superconductor claim – Expert</u> <u>Reaction</u>

<u>Associate Investigator Dr Philip Brydon</u> from <u>University of Otago</u> was one of the Science Media Centre's subject experts commenting on the LK99 'superconductor' story.

Dr Laura Domigan: from cells in the lab to steaks on a plate
Principal Investigator Dr Laura
Domigan from the University of
Auckland spoke to Kim Hill on RNZ
about her work through MacDiarmid affiliated start-up Opo Bio on cell-based meat – check it out here.



The liquid metals giving catalysis a new phase

Co-Director and Principal Investigator <u>Professor Nicola Gaston</u> from <u>the University of Auckland</u> spoke with Chemistry World about liquid metals and their potential as catalysts and more as part of her collaboration with <u>Professor Kourosh Kalantar-Zadeh</u> from the University of Sydney.

Sci Fi/Sci Fact - Zero Point Energy

<u>Professor Cather Simpson</u> Emeritus Investigator with the MacDiarmid Institute and a Professor of Physics & Chemistry at University of Auckland investigates Zero Point Energy from The Incredibles. She tells Bryan Crump that Zero Point Energy is a REAL thing, but that the writers of The Incredibles might have stretched the truth of it somewhat.

If you have something newsworthy (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 (ideally before the publication or announcement – we're used working with embargoed content).

Opportunities

<u>Catalyst Seeding – Paenga-Whāwhā July 2023 open call</u>

On behalf of the MBIE Hīkina Whakatutuki, Royal Society Te Apārangi has opened the April 2023 Call for Catalyst: Seeding. Catalyst: Seeding facilitates new small and medium pre-research strategic partnerships with international collaborators that cannot be supported through other means, and with a view to developing full collaborations that could be supported through Catalyst: Strategic over time. For detailed information please refer to the Catalyst: Seeding Guidelines. Closing Date: 19 October 2023

New Zealand Hydrogen Symposium 2024 – Call for Abstracts

This symposium, which will take place Wednesday 31 January – Friday 2 February 2024 at Te Papa in Wellington, New Zealand. Registration is now open and the organisers kindly request that you register for the symposium using this link. For further details, please see their website: https://gns.cri.nz/nzhs

<u>Allegro Energy Electrical Engineer - Microgrids, power electronics</u>

MacDiarmid affiliated spinout <u>Allegro Energy</u>, is seeking a skilled and experienced Electrical Engineer with expertise in microgrids, power electronics, and systems integration. As an Electrical Engineer at Allegro Energy, you will be a vital contributor to the development and integration of cutting-edge energy solutions, shaping the future of sustainable energy practices. <u>More information and application via LinkedIn</u>.

Anything to share?

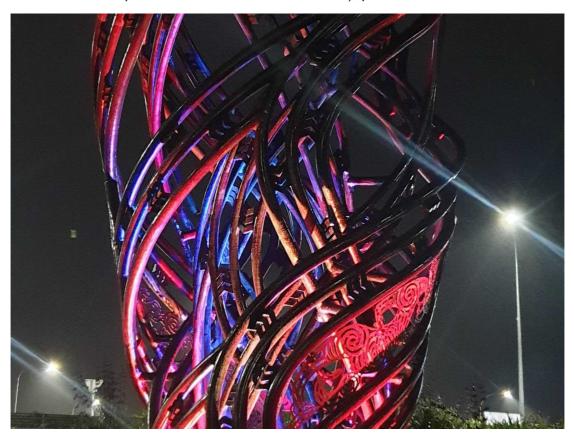
We'd love to celebrate your journey post-graduation. It helps us tell stories and paint pathways for secondary school students and others who are keen to see where science can lead them. If you would like to share with us your story or a recent discovery, achievement, media appearance etc. Contact us!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

As always thank you for reading, and if you know of any alumni that might benefit from receiving this newsletter, please ask them to <u>Contact us.</u>

There are plenty of opportunities to stay connected with the MacDiarmid

Institute whānau, by joining our <u>LinkedIn Alumni Group</u> 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 Techweek events etc.), please <u>contact us</u>.











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