

Te Mana Tangata Whakawhanake
MacDiarmid Institute
Advanced Materials & Nanotechnology

Three of our entrepreneurial researchers – along with an affiliated company – are amongst the [finalists in the 2025 KiwiNet Awards](#). [Professor Aaron Marshall](#), [Dr Michel Nieuwoudt](#) and [Dr Ben Mallett](#) are shortlisted for the KiwiNet Research Commercialisation Awards, together with start-up company [Zincovery](#) (which has both Aaron and alumnus [Jono Ring](#) as co-founders).



News and Updates

More success for [Advemto](#)

Continuing on this theme, congratulations to [Emeritus Investigator Professor Justin Hodgkiss](#) and his team on their [selection for the 2025 BioTools Innovator cohort](#). Check out start-up Advemto's video on YouTube [available via LinkedIn here](#), and 'like' it to help them win \$10K.



Cleantech Trek Christchurch

We partnered with [Ara Ake](#) and [ChristchurchNZ](#) to host 36 leaders - including start-up CEOs, banking executives and VCs - on [a learning tour of the companies scaling up cleantech in Christchurch](#), highlighting climate related innovation and start-ups in the cleantech space in Christchurch.



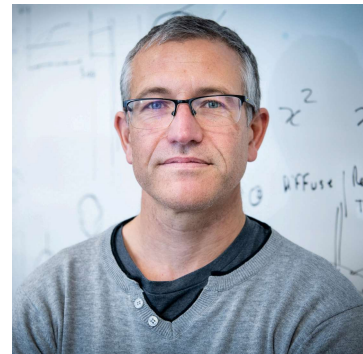
Welcome to our two newest governance Board members

We welcome two new members to our governance Board: Professors [Lucy Johnston](#), Deputy Vice-Chancellor (Research & Innovation) from the [University of Canterbury](#), and [Sally Brooker](#) (Principal Investigator with the Institute) from the [University of Otago](#).

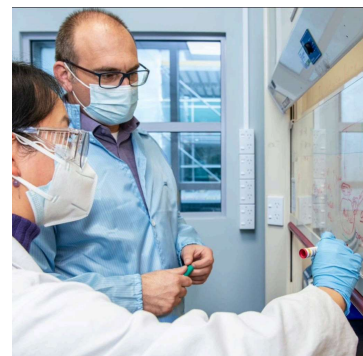


New Zealand Institute of Physics biennial awards

Congratulations to [Emeritus Investigator Professor Eric Le Ru](#) who has been awarded the [New Zealand Institute of Physics \(NZIP\) Dan Walls Medal for 2025](#) for his world-leading research in surface-enhanced Raman spectroscopy (SERS), plasmonics, single-molecule detection and electromagnetic scattering.



Congratulations also to [Principal Investigator Associate Professor Franck Natali](#), recipient of the [Te Tohu mō te Whaihua i te Mātai Ahupūngao – Physics Impact Award](#), presented by the [New Zealand Institute of Physics](#). This award honours an individual or team whose physics research delivers demonstrable benefit to Aotearoa New Zealand through commercial success, industrial uptake, or societal impact.



[Distinguished Alumni award for founder of OpenStar](#)

Alumnus [Dr Ratu Mataira](#) received a Distinguished Alumni award from [Te Herenga Waka Victoria University of Wellington](#) for his trailblazing work leading his start-up company [OpenStar](#).



Outreach Highlights



Deputy Director Māori [Associate Professor Pauline Harris](#) and [Kirsty Doyle](#) led a community-focused science engagement in and around Raetihi. The outreach team engaged with over 150 participants, including tamariki and rangatahi from local schools, as well as whānau and community members ranging from pēpi to kaumātua. A stand-out was the SMART Dome—an inflatable, mobile planetarium in which participants were taken on a guided tour of the night sky. This was in partnership with [Paihau — Robinson Research Institute](#).

[Deputy Director Outreach and Education Associate Professor Anna Garden](#) led a pop-up station on renewable energy at the [NZ International Science Festival](#) in Dunedin, demonstrating wind turbines and solar panels, as well as showing

off our rotating MOF model and making the ever-popular folding buckyballs and hydrogen fuel cell-powered cars, with kids as young as two (as well as "big kids"!)) splitting water to make hydrogen and using this to race their own cars.

[Dr John Roche visit](#)

We welcomed [Dr John Roche](#), the Prime Minister's Chief Science Advisor, into some of our labs to talk about emerging technologies in the Quantum and Advanced Materials space, and the development of the new [NZ Institute of Advanced Technology](#). One of our researchers made the surprising connection between ammonia fertiliser and quantum technologies: an example of serendipitous discovery in basic research leading to commercial impact in cleantech!



[Te wiki o te reo Māori 2025](#)

This year saw 50 years of Te wiki o te reo Māori. We're always keen to tautoko (support) our people's development with kupu (words) that relate to our science:

Matū (materials)

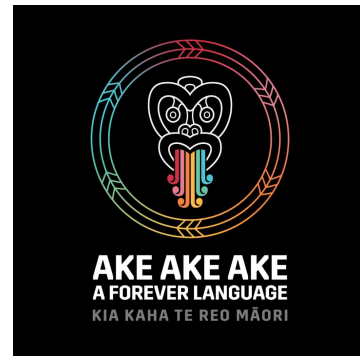
Rangahau (research)

Taiwhanga pūtaiao (science laboratory)

Kaipūtaiao (scientist).

For your learning journey, explore reomaori.co.nz

— it's packed with guides, assets and pronunciation help.



[Collaborating for Climate Resilience and Space Innovation](#)

[Kirsty Doyle](#) and [Associate Professor Pauline Harris](#) met [Dr Hugh Mortimer](#) at RAL Space and [Andy Shaw \(Assimila\)](#) part of the [Rutherford Appleton Laboratory \(RAL\)](#), the UK's national lab for space science. Assimila uses Earth-observation data to support decision-making in agriculture, land management, and climate resilience. Hugh generously hosted the team at the [Harwell Space Cluster](#).



LabMates

[MESA](#) is excited to be partnering with LabMates, a new start-up company that aims to connect scientists across NZ and the rest of the world to help share your work, grow your network and discover new opportunities in science and innovation all in one platform. It allows you to talk with other scientists, join various interest groups to discuss ideas, promote events and job opportunities.

MESA has started a group on this platform specially designed for MESA alumni as a place to reconnect, network, and keep the spirit of MESA going long after our studies. This forum is designed to help us stay in touch, share opportunities, and spark conversations with fellow alumni from across the years.

In the near future, we'll also be using this platform to post alumni-only events and gatherings, so keep an eye out as new features roll out. For now, feel free to introduce yourself, share what you've been up to after graduating, and let's start building our alumni network stronger than ever! 🚀 🧪

To get started, you can sign up for free at labmates.net. Once you have signed up and created your profile, you can find our group under the "Interest Groups" > "Social Groups". Then you can request to join. Please add the password 'Nanotechnology' so that we know you are an alumni.

You can [read about 'Our Inspired 100' here](#)

We continue to update this list of our 'Inspired One Hundred' alumni working in or supporting the deep tech sector in New Zealand. If you know of anyone (including yourself) who ought to be on it, or if you know of details that have changed, please let vanessa.young@vuw.ac.nz know.

Recent Media

[Principal investigator Professor Michele Governale](#) and [Emeritus Investigator Professor Uli Zuelicke](#) teamed up to write this article for [The Conversation on 'Spooky action at a distance'](#) – a beginner's guide to quantum entanglement and why it matters in the real world.



[Associate Investigator Dr Michel Nieuwoudt](#) spoke with [RNZ Saturday mornings about her start-up company Luminoma and skin cancer diagnosis](#).



The Science Media Centre collected some commentary on the new research funding changes [here](#); [Director Professor Nicola Gaston](#) contributed a few thoughts alongside others.

Alumnus [Dr Ratu Mataira](#) spoke with [RNZ about nuclear fusion and the ambition of Openstar](#).

KiwiNet finalist [Associate Investigator Dr Michel Nieuwoudt's start up Luminoma was featured in the NBR](#).

[Associate Investigator Dr Paul Hume](#) has written an article for [The Conversation on the need for New Zealand to up our solar power use](#).

Other articles of interest:

Further reading:

- Measuring the climate performance potential of startups – a climate VC's perspective of this challenging but useful approach <https://www.worldfund.vc/knowledge/measuring-the-climate-performance-potential-of-startups>
- Carta commentary and data on [bridging rounds for startups](#)
- Report by Greenhouse (Sydney) on Catalytic capital [Catalysing Climate Capital: Unlocking Investment for Australia's Climate Tech Future](#)

Does New Zealand punch above its scientific weight? [This report](#) suggests so, and as Sir Peter Gluckman says in the preface “This timely report provides important insights showing how effective and efficient the science community has been, despite comparatively low funding levels.”

Opportunities

[The Applied Doctorates Scheme \(ADS\)](#)

ADS is inviting submissions for the inaugural cohort of doctoral-level research projects. The theme for this call is Aotearoa’s Path to Energy Innovation. The ADS Secretariat will be facilitating this and future calls on behalf of the partner universities – [Waipapa Taumata Rau - University of Auckland](#), [Te Herenga Waka Victoria University of Wellington](#), [University of Otago \(Ōtākou Whakaihu Waka\)](#), and [Te Kunenga ki Pūrehuroa Massey University](#). In this inaugural round, the Scheme will fund 12 doctoral-level research projects exploring the broad theme of energy research that is future-focused and grounded in Aotearoa New Zealand’s unique economic development goals, natural resources, emissions goals, and cultural values.

A range of disciplinary approaches—including interdisciplinary and transdisciplinary research—that contribute to renewable, equitable, and resilient energy solutions are welcome. These may be guided by Māori principles, like kaitiakitanga and manaakitanga, and aligned with the UN Sustainable Development Goals, especially in clean energy, climate action, and sustainable innovation. The closing date for this is the 27th of October. For more information <https://applieddoctorates.nz/calls/august-2025/>.

[Commercial Skill Building Seminar](#)

On 16 October we have [Naviscale](#) (Halliburton affiliate) presenting on: Scaling Risks and Insights from Manufacturing & Supply Chain. Their Houston-based engineering scale-up team will be talking us through

- Most common issues and risks associated with scaling up a new product or technology solution.
- Common best practices to help reduce the risks and improve success.
- Discuss approaches and debunking any potential myths around upscaling and product development.
- Scaling into a new market – entering the US from offshore
- Shared lessons learned from our 100 years of manufacturing expertise.

With examples relating to: decarb energy, green hydrogen, CO₂ and other gas capture, and oil and gas extraction.

Please contact kevin.sheehy@vuw.ac.nz for more info.

[Opo Bio](#) is opening its summer internship program for 2025/26 🌈 🌻
email hello@opobio.com. They are looking for students in Computer Science/Engineering looking to push themselves and try something new over the summer by applying machine learning and computer vision to cell culture microscopy images to analyse, classify, and predict cell characteristics.

[Mint Innovation are hiring:](#)

Mechanical Engineer

Senior Process Engineer

Senior Plant Chemist

[CEO job at start-up Captivate Technology:](#)

Captivate Technology HQ is in Palmerston North, the role could be based in Auckland, due to international access and visitor traffic, or potentially other major New Zealand locations. This role will involve international travel.

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Postdoctoral Research Funding Available – Dynamic Microfluidics Lab,
University of Auckland

There is funding available to work as a postdoctoral researcher in the [Dynamic Microfluidics Lab](#) at the [Waipapa Taumata Rau - University of Auckland](#). One year of funding (with possible extension) is available starting ASAP to support experimental work, and to develop the applicant's own research profile, collaborations, and career aspirations as appropriate. Suitable for a completed PhD student with a physics, engineering, or physical/analytical chemistry background. Please contact [Principal Investigator Professor Geoff Willmott](#) to discuss (g.willmott@auckland.ac.nz).

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.

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 Institute -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 Institute 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 [contact us](#).



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