

The rolling lockdowns over the past few months has taken a toll on many. As we come to the end of the year, we take pause to reflect on the year that has been. In this issue, we <u>introduce our new logo</u> which marks the transition from our old contract to the new contract, we announce a <u>new international partnership</u>, and of course we celebrate you - our alumni and the amazing things you continue to achieve and contribute towards the MacDiarmid Institute legacy. Thank you for being part of our readership in the first year of this newsletter. Here at the MacDiarmid Institute, we wish you and yours a happy and safe holiday season!

As always, there are plenty of opportunities to stay connected with the MacDiarmid Institute whānau. So please stay in touch - 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.

News and Updates

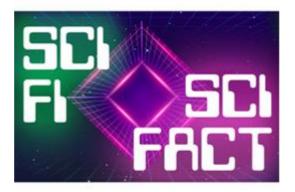


Alumna Dr Shalini Divya wins 2021 KiwiNet Breakthrough Innovator Award

Alumna Dr Shalini Divya won the <u>2021</u> <u>KiwiNet Breakthrough Innovator</u> <u>Award at the KiwiNet Research</u> <u>Commercialisation Awards</u> for her work on new aluminium-ion battery technology with affiliated spinout <u>Tasmanlon</u>. Alumnus Dr Matheus Vargas of affiliated spinout <u>Orbis</u> <u>Diagnostics</u> was also a finalist for the Breakthrough Innovator Award.







Alumni Business Scholarships

Dr Maryam Shojaei and Dr Samuel Martin Treceño were the <u>successful</u> recipients of our Alumni Business <u>Scholarships</u> for postgraduate study at the University of Canterbury and Victoria University in 2022! They will both be undertaking Postgraduate Certificates in Business, a formal start to the intersection of science & industry in their careers.

MacDiarmid alumni become new Associate Investigators We are delighted to welcome two MacDiarmid Institute alumni who have become Associate Investigators after consideration at the last Science Executive: <u>Dr Taniela Lolohea</u> (Lecturer in Chemistry, at AUT) and <u>Dr</u> Kannan Ridings (Lecturer in Physics, at the University of Auckland). They officially start their roles from 1 January 2022.

<u>RNZ Nights' Sci Fi / Sci Fact – new</u> <u>MacDiarmid Institute and RNZ</u> <u>collaboration</u>

Sci Fi / Sci Fact is a new series on <u>RNZ Nights</u> where a MacDiarmid Institute researcher takes an idea from pop culture to see how it stands up to scientific scrutiny. This is a spinoff of the popular science <u>Materials: Fact or</u> <u>Fiction</u> segment from RNZ's Nights with Brian Crump.



The MacDiarmid Institute for Advanced Materials and Nanotechnology

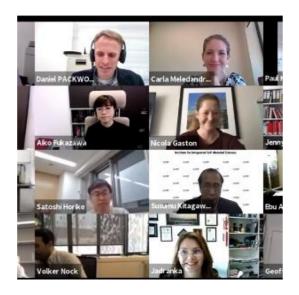
DISCOVERY Scholarship

The life of a logo

Everything has a life span, even a logo. Ahead of launching our new logo, we take a look at the whakapapa of our current one. Haere rā to our first logo - thank you for bringing us to where we are today.

Discovery Scholarship videos and co-sponsor

Applications for our <u>Discovery</u> <u>Scholarships for Māori and Pacific</u> <u>Island students</u> closed on 10 December. This year we filmed <u>seven videos about our Discovery</u> <u>Scholarship recipients</u> to inspire others to apply. We also welcomed GNS Science and the Aotearoa: Green Hydrogen Technology Platform on board as our first Discovery Scholarships co-sponsor. If you would like to enquire about supporting our cosponsor initiative, please email Vanessa Young.





New Kyoto University on-site lab opens at Te Herenga Waka— Victoria University of Wellington Kyoto University's Institute for Integrated Cell-Material Sciences (iCeMS) has opened an on-site lab in Wellington, operated jointly with the MacDiarmid Institute for Advanced Materials and Nanotechnology. A particular focus of the collaboration is solar photovoltaics (PVs) and other materials that respond to light.

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 <u>Kevin</u> <u>Sheehy</u>.



Internships

Dr Silvina Pugliese has secured a permanent role at EECA, and Dr Stephen Lo has secured a permanent position at UniServices. Both alumni had previously interned at these respective organisations. 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



Sci-Fi/Sci-Fact - Ironman's Arc Reactor

In our collaboration with RNZ Nights, James Rice is a PhD student at <u>Victoria University of</u> <u>Wellington's Robinson Research</u> <u>Institute</u>, supervised by <u>Principal</u> <u>Investigator, Dr. Chris Bumby</u>. In this episode he takes a look at the Arc Reactor from the Ironman franchise and Marvel Cinematic Universe (MCU).







Germans backing South Island Green Hydrogen Research Centre

A planned green hydrogen research centre in Dunedin now has the financial backing of both the New Zealand and German governments. Principal Investigator and chemistry <u>Professor</u> <u>Sally Brooker</u> from <u>University of Otago</u>, will co-lead the project with her German counterpart, <u>Dr Paul Jerabek</u>, from German research institute Helmholtz-Zentrum Hereon.

NZ company develops device to test Covid-19 immunity

MacDiarmid Institute affiliated biotech company Orbis Diagnostics is on the brink of releasing a device that can test people's immunity to Covid-19 in just 15 minutes. <u>Emeritus Investigator,</u> <u>Professor David Williams</u>, who is behind the device and is the scientific founder of Orbis, <u>spoke to</u> <u>RadioNZ</u> about the devices origins and it's potential. <u>Read the full story on</u> <u>RadioNZ</u>.

Climate change impact on Māori wellbeing and culture 'sobering' yet 'insightful'

He huringa āhuarangi, he huringa ao: A changing climate, a changing world, a multidisciplinary report from <u>Ngā</u> <u>Pae o te Māramatanga</u> (NPM) and <u>Manaaki Whenua Landcare</u> <u>Research</u> highlighted the effects climate change will have on Māori in the coming decades. <u>Principal</u> <u>Investigator Dr Pauline Harris</u>, coauthor and member of the advisory team said the report was a good concise summary of relevant major climate change issues from a Māori lens. <u>Read the full story on Stuff</u>.



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 <u>Vanessa Young</u> (ideally before the publication or announcement – we're used working with embargoed content).

Opportunities

liquium

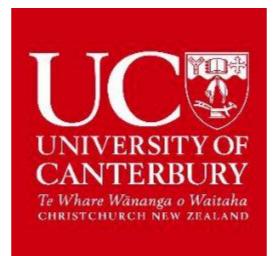


Materials Scientist and Engineer positions at Liquium (two-years fixedterm contract)

Liquium are looking for up to four materials scientists/chemical engineers that will be responsible for designing and developing catalyst materials for ammonia production and running experiments and trials with the new ammonia reactor. To apply, please send a cover letter and CV to franck.natali@befellows.org. If you have any questions about the role, please also get in touch.

<u>Otago Museum – 2x Science</u> <u>Engagement & 1x Science</u> <u>Communicator role</u>

Otago Museum have three roles available. 2x fulltime Science Engagement Coordinator roles and 1x fulltime Science Communicator role, with this role suited for recent graduates. Applications for close on Monday 13 December 2021. Apply via <u>Seek for the</u> <u>Science Engagement</u> roles and also via <u>Seek for the Science Communicator</u> role.



2x Permanent academic positions in solid state physics / nanotechnology, University of Christchurch

University of Canterbury is recruiting for 2x Lecturer/Senior Lecturer positions, to contribute to teaching in physics and materials science and collaborate with other academics in the School's teaching and research activities in Physics, Chemistry and Environmental Sciences. Applications close 16 January. To apply, visit the University of Canterbury recruitment website:

https://jobs.canterbury.ac.nz/jobdetails?j obmc=7868NJBS



researcher, we're always looking for volunteers to help with our educational outreach (<u>Regional Lecture Series</u>, events organised through our <u>museum</u> <u>partnerships</u>, and our <u>RNZ series</u> etc.) If outreach is your thing, and you'd like to stay involved with this, please contact us.

As you'll know from your time as a

MacDiarmid student or early career

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, highlights, a recent discovery, achievement, media appearance etc. and be in the next newsletter - <u>Contact us!</u> We'll take care to only share where and how you'd like us to.

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, and Business Scholarships and updates on the Techweek events etc.), please <u>contact us</u>.

