



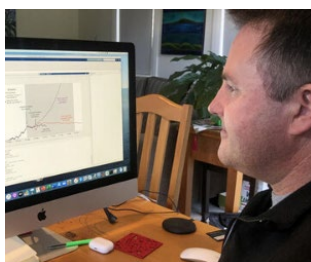
## The MacDiarmid Institute *for Advanced Materials and Nanotechnology*

During these unfamiliar times, independent science communication has come into its own. Here we celebrate the work of the scientist communicators working hard to help us keep ourselves and everyone around us safe.



### [Playful GIFs and animated graphs](#)

Microbiologist Dr Siouxsie Wiles and illustrator Toby Morris created playful GIFs and animated graphs – and they went viral.



### [Crunching the Covid-19 numbers](#)

Professor Shaun Hendy explains the math behind crunching the data on Covid-19.



### [How to tell it to kids](#)

Our Nanogirl Labs partner, nanoscientist and educator Dr Michelle Dickinson, helped us explain COVID to kids.

**Unite  
against  
COVID-19**

### [Independent Science Commentary and NZ's response win approval of PR professionals worldwide](#)

You may have seen the international PR industry survey citing 'independent science commentary' as the most credible source of public information on COVID19. The survey also selected New Zealand as having the most impressive response to the crisis

## Materials Science to tackle COVID



### [Anti-viral nano-engineered surfaces](#)

Our researchers Dr Jenny Malmström and Associate Professors Geoff Willmott and Volker Nock discussed future strategies for manipulating the chemical and biological nanostructure of surfaces (door handles, light-switches) so viruses like COVID-19 can't stick.



### **Pivoting cow research to human immunity**

MacDiarmid researchers Professors David Williams and Cather Simpson on how their start-up [Orbis Diagnostics](#) is shifting from testing cows' progesterone, and on raising \$5.3 million to help validate the diagnostic system, to rapidly test whether someone has immunity to Covid-19.

## **Climate Change Mitigation**



### **Fuelling NZ's future with smart catalysts**

Molecular chemists are looking to find a way to turn CO<sub>2</sub> into a liquid fuel, like methanol. Macdiarmid researcher Professor Sally Brooker is leading a new collaboration combining chemistry and engineering to help fuel New Zealand's future.



### **Taking essential metals into a zero carbon future**

Today steel is used in everything from roads to earthquake resilient buildings and electric vehicles. MacDiarmid researcher Dr Chris Bumby and his colleagues at the Robinson Research Institute are finding a new way to make iron that produces much less CO<sub>2</sub>.

## **Digital Resources for Teachers and Students**



### **#BetterWorkStories**

Our alumni are sharing their #BetterWorkStories explaining where science has taken them since graduating, with questions for students to reflect on. MacDiarmid Institute alumna Dr Bhuvana Kannan talks about nanofibre production and turning real science into a real product.



### **Physics of the Future**

We've partnered with the [New Zealand Institute of Physics](#) to create resources for science teachers and senior students. If you know year 12 and 13 students studying Physics, they might like to check out this ten-minute video of MacDiarmid researcher Dr Nate Davis speaking

about his solar cell research and the physics behind it.



### **RadioNZ Nights' Materials: Fact or Fiction**

In our partnership with RadioNZ Nights', our researchers are explaining the science behind fictional materials in Star Trek, Lord of the Rings, Spiderman and Dr Who.