

Week long Study group solving Industry Challenges

25-29 June 2018

Held at Auckland University of Technology  
Auckland CBD



World leading mathematicians work in Universities and crown research institutes across New Zealand.

These mathematicians are hungry to solve industry challenges to help New Zealand businesses innovate and grow.

The MINZ study group can help your company tap into this formidable problem solving capability.

During the one week MINZ study group meeting your industrial challenge will be worked on by a team of mathematicians.

This meeting is based on the highly successful Mathematics-in-Industry study group meetings which are run in 20 countries around the world.

## What we offer

MINZ Study Group is a resource that offers

- Methods to solve complex industrial problems.
- Links with applied mathematics and scientists from top universities and national laboratories across the country.
- Access to advanced computing solutions and environments.
- Highly cost effective access scientific advice.
- Fresh input of new idea

Efficient, Effective Innovation

Supported by



## Contact Us

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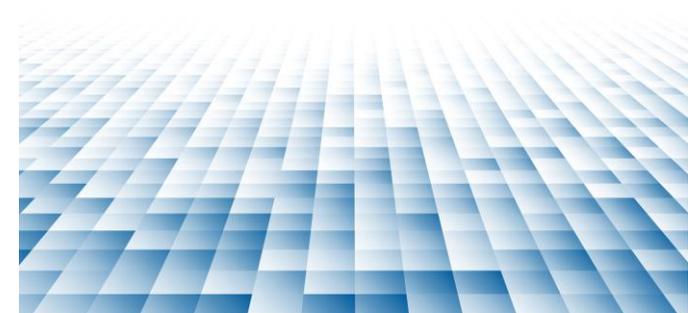
Visit us on the Web:  
[www.minz.org.nz](http://www.minz.org.nz)



# Mathematics in Industry NZ

## Does your business have a mathematical challenge to solve?

*World leading applied mathematicians  
from across New Zealand solve YOUR  
industry problems*





## About this event

The Mathematics in Industry NZ (MINZ) is a NZ focused activity of ANZIAM (Australia New Zealand Industrial and Applied Mathematics). It involves a collaborative approach to industry problem solving, where applied mathematicians tackle real life problems shared by companies.

## How does it work?

Prior to the event, MINZ representatives will work with each company to define their problem.

The first day of the meeting involves each company presenting their challenge to an audience of mathematicians.

The audience then form into teams that work with the company representatives. During the next few days the teams then work on identifying a solution, including carrying out any modelling, analysis and computation that is required.

On the final day the mathematicians will present results to the companies and outline a plan for any future work that is required.

## Past engaged Industry

New Zealand businesses and mathematicians have previously travelled to Australia to attend these events run by ANZIAM. Businesses that have participated in the past include:

*Transpower – Modelling power output from correlated wind farms*

*Fonterra – Predicting how cheese matures*

*Fisher & Paykel – Dynamic washing machine balancing system modelling*

*Compac Ltd – Optimal sorting of product into fixed weight packaging*

Case studies can be found at

[www.minz.org.nz/about](http://www.minz.org.nz/about)

## Focus on What You Do Best

Focus on your business operations and let the mathematicians focus on what they do best – solving your industry problems!

*“The support of the math group increased our confidence in the procedures we have in place met or exceeded international best practice. This event is an efficient process to have a large group of experts looking at a specific industry issue” - Fonterra*



## How to be involved

- Contact Graeme Wake for more information.
- A registration fee is \$7,000 per challenge is requested if your company is chosen to present a challenge at the event.
- A project representative from your company should attend the five-day workshop as an expert advisor

This is not-for-profit event, the registrations fee is used to run the weeklong event and feed the mathematicians. A summary and full technical report are prepared with the intention it will be published in the future.

## Workshop Details

Day 1 – 25<sup>th</sup> June 2018

*Problem Outline by Industries*

Day 2 – 26<sup>th</sup> June

*Problem Discussion with Industries*

Day 3 – 27<sup>th</sup> June

*Problem Formulating and Problem Solving. A keynote address with project interim progress reports*

Day 4 – 28<sup>th</sup> June

*Problem Solving and Conclusion*

Day 5 – 29<sup>th</sup> June

*Progress Presentation*