

*NIWA South and East Auckland
Science and Technology Fair
Prize Giving Ceremony*

Tuesday, 5 September 2017

Mission Heights Junior College Theatre

7 to 9 pm

<i>Welcome</i>	<i>Catherine Hunter, Convenor</i>
<i>Guest Speaker</i>	<i>Willow van As</i>
<i>Presentation of Category Awards</i>	<i>Prize Sponsors</i>
<i>Musical Interlude</i>	<i>Somerville Intermediate</i>
<i>Presentation of Special Awards</i>	<i>Prize Sponsors</i>
<i>Presentation of the Premier Award</i>	<i>Ken Becker, NIWA</i>
<i>Closing</i>	<i>Catherine Hunter</i>

Your prize money comes in the form of a cheque which is found in your envelope.

Please cash all cheques by December 31, 2017.

Sponsor's Message



A very warm welcome to the 2017 NIWA South and East Auckland Science & Technology Fair.

It's a great pleasure for NIWA to support this outstanding event once again, and we congratulate all the students, parents, teachers and supporters who have worked so hard to bring it to life.

NIWA Science & Technology Fairs are a wonderful opportunity for students to showcase their talent and enthusiasm for science, and to gain recognition for their excellence and innovation. Across the country, thousands of students have been involved in researching, constructing and presenting exhibits. Participation is, on its own, a powerful learning tool. The experience is all the greater because these Fairs are above all else, fantastic fun.

Of course NIWA has a vested interest in nurturing a passion for science and technology among young New Zealanders. Enhancing knowledge in NIWA's key areas of scientific focus – the atmosphere, the ocean, and freshwater – is critical to the sustainable growth of New Zealand as a nation. We need fresh enquiring minds to maintain this momentum. A career in science and technology is as rewarding as it is important – and right here is where we hope a spark may be lit.

NIWA is the main sponsor of the South and East Auckland, Auckland City, Wellington, Waikato, Bay of Plenty and Canterbury-Westland Science & Technology Fairs. These events form part of our long-term commitment to enhancing engagement with science and technology by young New Zealanders.

Thank you to the organising committee, judges, schools and other sponsors for your commitment and support in promoting the NIWA Waikato Science & Technology Fair. Without you, this exciting event simply wouldn't happen.

Tracey Burton
NIWA Science Fairs Co-ordinator

Message from the Convenor



Tēnā koutou, tēnā koutou, tēnā koutou katoa.

Congratulations to all the award winners we are celebrating tonight. After hours of hard work and determination these students have proven themselves to be the top student scientists from the South and East Auckland regions.

Every year the bar is raised as projects amaze the judges and get the public talking about the impressive results. No two projects are ever the same, as students bring their own perspective to the experimental design or technology brief. Without these unique ideas and viewpoints science and technology would come to a standstill. I always encourage students to carry on with their research after finishing a science fair project, asking themselves what questions have arisen from the collected data. Some researchers spend their entire careers on a niche area of science. There is nothing wrong with students doing the same, carrying on with their own projects, enhancing their findings each year.

Behind every student there are countless people supporting them. Thank you to mentors within the community, families, and teachers. Your continuous support ensures students have someone to get inspiration from, that there are sounding boards available when the unexpected pops up, or when they are in need of more glue sticks at 9 pm to finish gluing their boards together.

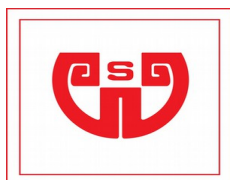
I would like to thank our incredibly generous sponsors and judges. Without their financial contributions or the time given for judging, we would not be here tonight. Lastly, many thanks to the Committee for your hard work and dedication to the Fair. Your advice and collaboration ensures we host a successful community event each year.

Catherine Hunter
Science Fair Convenor

Presentation of Category Awards

Category 1 – Years 7 and 8 Living World

Sponsored by Wai Shing Ltd.



Presented by Fair Committee Member,
on behalf of Wai Shing Ltd

FIRST PLACE

Exercise: Getting Results?

Josh Radford

Somerville Intermediate School

SECOND PLACE

Stressed Out

Matthew Jones

Farmcove Intermediate School

THIRD PLACE

Tamaki's Tiny Toxins

Luke Franich

Saint Kentigern College

HIGHLY COMMENDED

Fend off the finicky fruit fly

Sophie Clark

Pukekohe Intermediate School

Category 2 – Years 7 and 8 Physical and Material World

Sponsored by Gunac South Auckland GME Ltd.



Presented by Fair Committee Member,
on behalf of Gunac South Auckland GME Ltd.

FIRST PLACE

Don't Judge a Pool by it's Cover

Jessica Dixon

Somerville Intermediate School

SECOND PLACE

Electromagnetism

Gareth Choo

Somerville Intermediate School

THIRD PLACE

Don't Cry Over Spoilt Milk!

Vienna McDowell

Maratei Beach School

HIGHLY COMMENDED

Compression Obsession

Zoe Purvis

Howick Intermediate School

HIGHLY COMMENDED

The Pressure is On

Jesse Loubser

Elim Christian College

HIGHLY COMMENDED

What type of energy is the most efficient?

Sarah Stewart

Clevedon School

HIGHLY COMMENDED

Shake, Rattle and Roll

Mathilde Peace

Saint Kentigern College

Presentation of Category Awards

Category 3 – Years 7 and 8 Environmental Science / Planet Earth and Beyond

Sponsored by the Kiwanis Club of Papatoetoe



Presented by John Bell, President,
Kiwanis Club of Papatoetoe

FIRST PLACE

Food Waste Fuel

Thomas Donnell

Somerville Intermediate School

SECOND EQUAL

What's with the weather?

Lucas Pryce

Somerville Intermediate School

SECOND EQUAL

*What Goes Around Comes Around: A
Composting Trilogy*

Jack Buckingham

Somerville Intermediate School

HIGHLY COMMENDED

Wave Busters

Jake Welsh

Howick Intermediate School

Category 4 – Years 7 and 8 Intermediate Consumer Science

Sponsored by the Kiwanis Club of Drury



Presented by Fair Committee Member on behalf
of Kiwanis Club of Papatoetoe

FIRST PLACE

Who Knew? ShampHoo!

Brooke Conover

Somerville Intermediate School

SECOND PLACE

Don't Spoil the Oil

Finn Mayer

Saint Kentigern College

THIRD PLACE

What Wrap?

Archie Manning

Somerville Intermediate School

HIGHLY COMMENDED

The Burning Question

Daniel Osborne

Somerville Intermediate School

HIGHLY COMMENDED

Spintastic

Rohnan Nankivell

Howick Intermediate School

HIGHLY COMMENDED

Tempting Tempering

Hillary Zhong

Somerville Intermediate School

HIGHLY COMMENDED

Watt Survival

Sam Waiheke Leigh Cato

Pukekohe Intermediate School

Presentation of Category Awards

Category 5 – Years 7 to 10 Technology / Innovations

Sponsored by KP Group Ltd



Presented by Jacqui Davidson of
KP Group Ltd

FIRST PLACE

Hyper Hydro

Aadi Golchha and Ricky Bassano

Mission Heights Junior College

SECOND PLACE

XLJ The Future of Security

Xavier Burger and Josh Schreuder

Pukekohe High School

THIRD PLACE

Get in Behind

Jasmine Niederberger

Pukekohe High School

Category 6 – Years 9 and 10 Living World

Sponsored by Kiwanis Club of Waiau Pa-
Clarks Beach



Presented by Fair Committee Member on
behalf of Kiwanis Club of Waiau Pa-Clarks
Beach

FIRST PLACE

Dyslexic Dilemma

Leane Te Boekhorst and Solana

Carpenter

Mission Heights Junior College

SECOND PLACE

How Sweet Is It?

Camryn Chetty and Jamini Patel

Mission Heights Junior College

THIRD PLACE

Ready, Set, Pineapple

Amelie Laing

Howick College

HIGHLY COMMENDED

I Must Admit, I've Been Curious

Trishika Nand, Caitlin Pillay and Ariel Kim

Mission Heights Junior College

HIGHLY COMMENDED

The Truth to the 'Five Second Rules'

Siying Huang

Howick College

Presentation of Category Awards

Category 7 – Years 9 and 10 Physical and Material World

Sponsored by New Zealand Steel Ltd.



Presented by John Escudero, Area Project Manager

FIRST PLACE

Achievable

Alex Coleman-Chaiman

Pukekohe High School

SECOND PLACE

To Drink Or Not To Drink

Krystal Lal

Howick College

Category 8 – Years 9 and 10 Environmental Science / Plant Earth and Beyond

Sponsored by Kiwanis Club of Papakura



Presented by Ewan Beck, Past Gov. NZSP District of Kiwanis International

FIRST PLACE

A fan of the fan worm?

Ethan McCormick

Howick College

SECOND PLACE

Sand Saver

Alyssa Thompson

Howick College

Presentation of Category Awards

Category 9 – Year 9 to 13 Secondary Consumer Science

Sponsored by Auckland Science Teachers
Association



Presented by Fair Committee Member on
behalf of the Association

FIRST PLACE

Roti Rules

Dania Shafiq

Manurewa High School

SECOND PLACE

How Happy is Your Burger?

Ann Rawinia Cato

Pukekohe High School

HIGHLY COMMENDED

Fluffin' Muffins 3

Joanne Ting

Mission Heights Junior College

HIGHLY COMMENDED

Myth and Go

Rajbir Sandhu

Mission Heights Junior College

HIGHLY COMMENDED

Protein Performance

Suhena Kumar

Manurewa High School

Category 10 – Years 7 to 13 Scientific Photography

Sponsored by Storage King, Botany South



Presented by Peter Limpus, Store Manager,
Storage King, Botany South

FIRST PLACE

Spintastic

Rohnan Nankivell

Howick Intermediate School

Presentation of Category Awards

**Category 11 – Years 11 to 13 Senior
Science**

Sponsored by NIWA



Presented by Ken Becker, Regional Manager

FIRST PLACE

Concussion Conundrum

Dylan Townsend

Ormiston Senior College

SECOND EQUAL

Predator Pressure

Atrena Youkhana

Manurewa High School

SECOND EQUAL

Fluorosensing Waiuku

Jojo Coleman-Chaiman

Pukekohe High School

THIRD PLACE

Water You Reading?

Marlene Iripa and Rida Basharat

Manurewa High School

HIGHLY COMMENDED

Save Our Soles

Latutama Finau, Sione Finau and

Amelia Pasikala

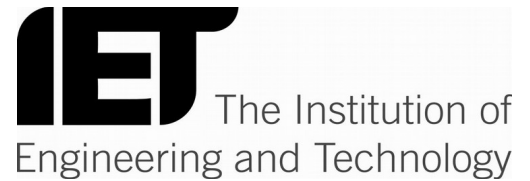
Manurewa High School

Presentation of Special Awards

The IET Innovation Awards

Sponsored by the Institution of Engineering and Technology

Presented by Andy Peacock, IET Member



Award for Best Application of Electronics

Sponsored by NIWA

Presented by Ken Becker, Regional Manager, NIWA



Science Award Trust (Years 7 and 8 Only)

Sponsored by Science Award Trust

Presented by Fair Committee member,
on behalf of the Trust



MIT Engineering Award

Sponsored by Manukau Institute of Technology,
School of Engineering

Presented by Blake Wong-Ling,
Schools and Youth Liaison, MIT



Presentation of Special Awards

Best Project by a Maori Student

Sponsored by Manukau Institute of Technology

Presented by Blake Wong-Ling,
Schools and Youth Liaison, MIT



Best Project by a Pasifika Student

Sponsored by Manukau Institute of Technology

Presented by Blake Wong-Ling,
Schools and Youth Liaison, MIT

The Environment Award

Sponsored by NIWA

Presented by Ken Becker, Regional Manager, NIWA



Best Soil Science Related Project Award

Sponsored by NZ Society for Soil Science

Presented by Fair Committee member,
on behalf of the Society



Auckland Transport Travelwise Award

Sponsored by Auckland Transport

Presented by Eadaoin Butler,
Community Transport Co-ordinator, AT



Presentation of Special Awards

Best Use of Flour Award

Sponsored by the Baking Industry Research Trust

Presented by Fair Committee member,
on behalf of the Trust



**BAKING INDUSTRY
RESEARCH TRUST**

Prizes for Best Innovation, Invention, or Investigation by Year Level

Sponsored by NIWA

Presented by Ken Becker, Regional Manager, NIWA

Year 7

Year 8

Year 9 (Not Awarded)

Year 10

Year 11

Year 12 (Not Awarded)

Year 13



The Student Encouragement Award

Sponsored by New Zealand Institute of
Food Science and Technology

Presented by Nick Parker and Margie Hunt,
NZIFST



Presentation of Special Awards

New Zealand Heritage Award

Sponsored by NIWA

Presented by Ken Becker, Regional Manager



Best Application of the Scientific Method

Sponsored by the University of Otago

Presented by Xenia Bilton



The Eric Clague Kiwanis Award

Sponsored by Kiwanis Clubs of Counties Manukau

Presented by Ewan Beck on behalf of the Kiwanis Clubs of Counties Manukau



Premier Award for Best Exhibit of the Fair

Sponsored by NIWA

Presented by Ken Becker, Regional Manager, NIWA



Special Thanks to our Judges and Committee

Our team of judges are recognised as specialists in their fields. Judges are a mixture of professionals from local schools, universities, technology institutes and the science and technology industries.

Judges

Alastair Caine	Kipi Paea
Andy Peacock	Lynn Dunbar
Anna Ponnampalam	Matire Harwood
Bo Hensley	Michael Browne
Carol Duffield	Nataly Martini
Catherine Ma	Nicholas Kondal
Cheryl Frankis	Nishalia Maharaj
Chris Quill	Odette Jennings
Dorit Naot	Petr Tomek
Eryn Kwon	Sarah Morgan
Ira Mautner	Sarbjot Kaur
Irene Liang	Shannon Adams
Jamie Chow	Sophie Roberts
Jinfeng Zhao	Vanisha Patel
Jose Derraik	Xiaoying Guan
Karen Bishop	

Science Fair Committee

Convenor
Secretary
Treasurer
Chief Judge
Sponsorship
Registration / Webmaster

Catherine Hunter
Angela Rees
Dion Cowley
Chadar Dewar
Melanie Kindley
Ben Doughney

A special thanks to Mission Heights Junior College for hosting the Fair and Prize Giving, to Somerville Intermediate for providing the musical interlude at Prize Giving, and the Mission Heights Junior College Family and Friends for their support throughout the event.

We would also like to thank teachers for their ongoing commitment in supporting students entering the Fair.

Website: www.sciencefairmanukau.org.nz

2017 Participating Schools

Clevedon School
Elim Christian College
Farm Cove Intermediate School
Howick College
Howick Intermediate School
Maraetai Beach School
Manurewa High School
Mission Heights Junior College
Ormiston Senior College
Pukekohe High School
Pukekohe Intermediate School
Saint Kentigern College
Somerville Intermediate School
Tangaroa College
Tyndale Park Christian School
Waiuku College



Thank you to our Sponsors



UNIVERSITY
of
OTAGO



Te Whare Wānanga o Otago



NEW ZEALAND
STEEL



BAKING INDUSTRY
RESEARCH TRUST



Auckland
Transport
An Auckland Council Organisation

