

# *NTWA South and East Auckland Science & Technology Fair Prize Giving Ceremony*

*Tuesday, 27 August 2019  
Elim Christian College Auditorium  
7 to 8:30 pm*

*Emcee: Richard Henty, Howick College*

<i>Welcome</i>	<i>Catherine Hunter</i>
<i>Presentation of Category Awards</i>	<i>Prize Sponsors</i>
<i>Musical Interlude</i>	<i>Elim Christian College students</i>
<i>Guest Speaker</i>	<i>John Chen, 2018 Premier Award Winner</i>
<i>Presentation of Special Awards</i>	<i>Prize Sponsors</i>
<i>Presentation of the Premier Award</i>	<i>Jonathan Moores, NTWA</i>
<i>Closing</i>	<i>Richard Henty</i>

*Your prize money comes in the form of a cheque which is found in your envelope. Please cash all cheques by December 31, 2019.*

# *Sponsor's Message*

A very warm welcome to the 2019 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 ensure its success.

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, but above all else they should be fun.

Naturally, 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, North Harbour, Waikato, Bay of Plenty, Wellington and Canterbury-Westland Science and 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 South and East Science & Technology Fair. Without you, this exciting event simply wouldn't happen.

Tracey Burton

NIWA Science Fairs Co-ordinator

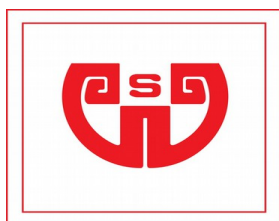


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# Presentation of Category Awards

## Category 1 – Years 7 and 8 Living World

Sponsored by Wai Shing Ltd.



### FIRST PLACE

**Harrison Eagle and Bethany Eagle**

Howick Intermediate School

*Nuts About Calories*

### SECOND PLACE

**Niko McConnell and Ty Hatton**

Howick Intermediate School

*Are these EMFs roasting my beans?*

### THIRD PLACE

**Emma Segedin**

Farm Cove Intermediate School

*Antibacterial Native Plants*

### HIGHLY COMMENDED

**Abigail Neumann**

Elim Christian College

*To touch or not to touch?*

### HIGHLY COMMENDED

**Angela Clark**

Howick Intermediate School

*I always feel like somebody's watching me*

### HIGHLY COMMENDED

**Jack Want**

Somerville Intermediate School

*Diabetes in Action*

### HIGHLY COMMENDED

**Benjamin McLaren**

Somerville Intermediate School

*The Wormhole*

## Category 2 – Years 7 and 8 Physical and Material World

Sponsored by Auckland Science Teachers Association



### FIRST PLACE

**Olivia Dixon**

Somerville Intermediate School

*Too Loud!*

### SECOND PLACE

**Keagan Wolsky**

Elim Christian College

*The Big Ice Meltdown*

### THIRD PLACE

**Brayden Larcombe**

Farm Cove Intermediate School

*Rust wars*

### HIGHLY COMMENDED

**Kaydee Arundale**

Farm Cove Intermediate School

*Hard as a brick, soft as a feather*

### HIGHLY COMMENDED

**Ava Galloway**

Saint Kentigern College

*Fizzier or not?*

### HIGHLY COMMENDED

**Reilly Richardson**

Saint Kentigern College

*Feel the breeze*

# Presentation of Category Awards

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

Sponsored by NIWA



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### FIRST PLACE

**Lucy Waters**

Saint Kentigern College  
*Road Kill*

### SECOND PLACE

**Sofia Currie**

Somerville Intermediate School  
*How Clean Is My Beach*

### THIRD PLACE

**Hannah Anderson**

Saint Kentigern College  
*Protecting our Wai*

### HIGHLY COMMENDED

**Christopher Revell-Devlin**

Saint Kentigern College  
*The Final Straw*

### HIGHLY COMMENDED

**Luca Papesch and Joshua Ly**

Elim Christian College  
*Oil Spills*

## Category 4 – Years 7 and 8 Intermediate Consumer Science

Sponsored by the Kiwanis Club of Drury



### FIRST PLACE

**Aleisha Coleman**

Somerville Intermediate School  
*What's with all the Gluten-Free Waffles?*

### SECOND PLACE

**Rosie Ireland**

Mission Heights Junior College  
*Cake Tin Bake Off*

### THIRD PLACE

**Greer Gilhooly**

Saint Kentigern College  
*Organic? Non-Organic?*

### HIGHLY COMMENDED

**Mihika Pai, Abbie Yeung and Brita Chauhan**

Mission Heights Junior College  
*Playing with Fire*

# *Presentation of Category Awards*

## **Category 5 – Years 7 to 10 Technology / Innovations**

Sponsored by KP Group Ltd



### FIRST PLACE

**Reuben Martin**

Somerville Intermediate School

*Give Me a Brake, Car!*

### SECOND PLACE

**Alana Santoso**

Sancta Maria College

*Heart Rate Controlled Smart Light*

### THIRD PLACE

**Joe Thistlewaite and Camerone Chin**

Somerville Intermediate School

*Laptop Corner Protectors*

### HIGHLY COMMENDED

**Sophie Clark**

Pukekohe High School

*The slump and slip stopper*

### HIGHLY COMMENDED

**Mika Ramsing**

Mission Heights Junior College

*Hose Power*

## **Category 6 – Years 9 and 10 Living World**

Sponsored by Kiwanis Club of Waiau Pa-  
Clarks Beach



### FIRST PLACE EQUAL

**Helen Thai and John Thai**

Aorere College

*Creeping CO<sub>2</sub>*

### FIRST PLACE EQUAL

**Liam McCormick and Xander Snyman**

Howick College

*Fueled Fruits*

### THIRD PLACE

**Zachary McIvor and Caleb Therond**

Howick College

*Times and distractions*

### HIGHLY COMMENDED

**Amy Vongsaly, Arizana Wulf and Toafa  
Laurenson**

Aorere College

*The Heart of Music*

# *Presentation of Category Awards*

## **Category 7 – Years 9 and 10 Physical and Material World**

Sponsored by New Zealand Steel Ltd.



### FIRST PLACE

**Jahnavi Shah, Faatimah Nisa and Bonnie Ye**

Mission Heights Junior College

*LED there be light*

### SECOND PLACE

**Oliver Bergquist**

Pukekohe High School

*What is a Tuned Mass Damper*

### HIGHLY COMMENDED

**Tyler Sangster, Manveer Singh Saini and Daniel Twentyman**

Howick College

*Furious Flames*

### HIGHLY COMMENDED

**Aryan Kumar, Harshitha Surendran and Raiyan Khan**

Mission Heights Junior College

*Chocolicious*

### HIGHLY COMMENDED

**Matthew Clooney**

Pukekohe High School

*Bridge Busters*

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

Sponsored by Kiwanis Club of Papakura



### FIRST PLACE

**Navini Ariyasinghe**

Mission Heights Junior College

*Great Green Corridors*

# *Presentation of Category Awards*

## **Category 9 – Year 9 to 13 Secondary Consumer Science**

Sponsored by Auckland Science Teachers Association



### FIRST PLACE

**Sam Cato**

Pukekohe High School

*Super Glue...Weighing Them Up*

### SECOND PLACE

**David Narayanan**

Tyndale Park Christian School

*Power Up*

### THIRD PLACE

**Reed Snell, Zephaniah Grieg, Gabriel Batty**

Tangaroa College

*Boozy Kombucha*

## **Category 10 – Primary Science and Technology**

Sponsored by Storage King, Botany South



### FIRST PLACE

**Katie Migounoff**

Glenbrook School

*What's in Waiuku Water?*

### SECOND PLACE

**Alex Johnson and Blake Nankivell**

Botany Downs School

*Bottled Up Buoyancy*

### HIGHLY COMMENDED

**Euan Hooi and Jeremy Lee**

Elim Christian College

*Does playing Minecraft Education give you a better maths result?*

# *Presentation of Category Awards*

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

### **Science**

Sponsored by NIWA



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### FIRST PLACE

**Matthew Fleming and Joseph Fleming**

Pukekohe High School

*This Acid Rocks*

### SECOND PLACE

**Anna McCarthy and Abbie Reid**

Pukekohe High School

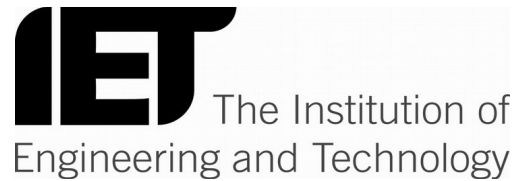
*Asteroids*



# *Presentation of Special Awards*

## **The IET Innovation Awards**

Sponsored by the Institution of  
Engineering and Technology



### JUNIOR AWARD

#### **Connor Nankivell**

Howick Intermediate School  
*Tops for Recycling – Part 2*

### SENIOR AWARD

#### **Alexander Coleman-Chaiman**

Pukekohe High School  
*Packing Problems*

## **Award for Best Application of Electronics**

Sponsored by NIWA



#### **Kishan Harry**

Somerville Intermediate School  
*How loud is it?*

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## **Science Award Trust (Years 7 and 8 Only)**

Sponsored by Science Award Trust



#### **Harrison Eagle and Bethany Eagle**

Howick Intermediate School  
*Nuts About Calories*

# *Presentation of Special Awards*

## **Best Project by a Maori Student**

Sponsored by Manukau Institute of Technology

### **Sam Cato**

Pukekohe High School

*Super Glue...Weighing Them Up*



## **Best Project by a Pasifika Student**

Sponsored by Manukau Institute of Technology

### **Amy Vongsaly, Arizana Wulf and Toafa Laurenson**

Aorere College

*The Heart of Music*



## **The Environment Award**

Sponsored by NIWA

### **Mika Ramsing**

Mission Heights Junior College

*Hose Power*



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## **Best Soil Science Related Project Award**

Sponsored by NZ Society for Soil Science

### **Benjamin McLaren**

Somerville Intermediate School

*The Wormhole*



# Presentation of Special Awards

## Auckland Transport Travelwise Award

Sponsored by Auckland Transport

### Kayan Lawyer

Somerville Intermediate School

*Blind Corner Warning Sign*



## Best Use of Flour Award

Sponsored by the Baking Industry Research Trust

### FIRST PLACE

#### Rosie Ireland

Mission Heights Junior College

*Cake Tin Bake Off*



BAKING INDUSTRY  
RESEARCH TRUST

### SECOND PLACE

#### Aleisha Coleman

Somerville Intermediate School

*What's with all the Gluten-Free Waffles?*

## Best Use of Statistics Award

Sponsored by the New Zealand Statistical Association



### Helen Thai and John Thai

Aorere College

*Creeping CO<sub>2</sub>*

## The School Encouragement Award

Sponsored by New Zealand Institute of Food Science and Technology



### Cockle Bay School

# *Presentation of Special Awards*

## **Prizes for Best Innovation, Invention, or Investigation by Year Level** Sponsored by NIWA

### Year 7

**Reuben Martin**

Somerville Intermediate School

*Give Me a Brake, Car!*

### Year 8

**Olivia Dixon**

Somerville Intermediate School

*Too Loud!*

### Year 9

**Navini Ariyasinghe**

Mission Heights Junior College

*Great Green Corridors*

### Year 10

**Helen Thai and John Thai**

Aorere College

*Creeping CO<sub>2</sub>*

### Year 11

*Not Awarded*

### Year 12

*Not Awarded*

### Year 13

*Not Awarded*



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# *Presentation of Special Awards*

## **New Zealand Heritage Award**

Sponsored by NIWA

### **Navini Ariyasinghe**

Mission Heights Junior College  
*Great Green Corridors*



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## **Best Application of the Scientific Method**

Sponsored by the University of Otago

### **Alexander Coleman-Chaiman**

Pukekohe High School  
*Packing Problems*



*Te Whare Wānanga o Ōtāgo*

## **The Eric Clague Kiwanis Award**

Sponsored by Kiwanis Clubs of Counties Manukau

### **Olivia Dixon**

Somerville Intermediate School  
*Too Loud!*



## **Premier Award for Best Exhibit of the Fair**

Sponsored by NIWA

### **Helen Thai and John Thai**

Aorere College  
*Creeping CO<sub>2</sub>*



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# *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**

<b>Chief Judge:</b> Chandar Dewan, Tangaroa College	
<b>Aljo Anand</b> , University of Auckland	<b>Sneh Patel</b> , University of Auckland
<b>Ralph Thoroughgood</b>	<b>Karen Bishop</b> , University of Auckland
<b>Sarah Maessen</b> , Liggins Institute, UoA	<b>Jamie Chow</b> , IET
<b>Rayomand Shahlori</b> , Citizen Science	<b>Tim Koorey</b> , University of Auckland
<b>Stuti Misra</b> , University of Auckland	<b>Chris Quill</b> , Fisher & Paykel Healthcare
<b>Julie Zhou</b> , Fonterra Brands New Zealand	<b>Cheryl Frankis</b> , Vector Limited
<b>Shikha Pundir</b> , Liggins Institute, UoA	<b>Joshwin Lal</b> , Manukau Institute of Technology
<b>John Sluyter</b> , University of Auckland	<b>Lynn Dunbar</b> , Farm Cove Intermediate School
<b>Carol Duffield</b> , Somerville Intermediate School	<b>Ben Doughney</b> , Mission Heights Junior College
<b>Michael Browne</b> , University of Auckland	<b>Dion Cowley</b> , Mission Heights Junior College
<b>Richard Henty</b> , Howick College	<b>Angela Rees</b> , Elim Christian School
<b>Nishalia Maharaj</b> , Mission Heights Junior College	<b>Sarbjot Kaur</b> , University of Auckland
<b>Odette Jennings</b> , University of Auckland	<b>Ravi Telang</b> , University of Auckland
<b>Chief Judge:</b> Chandar Dewan, Tangaroa College	<b>Chief Judge:</b> Chandar Dewan, Tangaroa College
<b>Aljo Anand</b> , University of Auckland	<b>Sneh Patel</b> , University of Auckland

## **Science Fair Committee**

**Co-Convenors**  
**Secretary**  
**Treasurer**  
**Chief Judge**  
**Sponsorship**  
**Registration / Webmaster**

Richard Henty and Catherine Hunter  
Angela Rees  
Dion Cowley  
Chandar Dewan  
Melanie Kindley  
Ben Doughney

A special thanks to Mission Heights Junior College for hosting the Fair and to Elim Christian College for hosting the Prize Giving.

We would also like to thank teachers for their ongoing commitment in supporting students with their projects.

**Website: [www.sciencefairmanukau.org.nz](http://www.sciencefairmanukau.org.nz)**

## *2019 Participating Schools*

*Aorere College  
Botany Downs School  
Cockle Bay School  
Elim Christian College  
Farm Cove Intermediate School  
Glenbrook School  
Howick College  
Howick Intermediate School  
Mission Heights Junior College  
Pukekohe High School  
Pukekohe Hill School  
Pukekohe Intermediate School  
Saint Kentigern College  
Somerville Intermediate School  
Tangaroa College  
Tyndale Park Christian School*





# Thank you to our Sponsors



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*Te Whare Wānanga o Ōtāgo*



NEW ZEALAND  
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Auckland  
Transport  
An Auckland Council Organisation

