# **Presentation Ceremony**

Friday 17 September











# The South Australian Science Teachers Association would like to thank the sponsors of the Oliphant Science Awards

### **Platinum Sponsors**







### **Gold Sponsors**





# Science Writing Category Sponsor





# Poster Category Sponsor









### **Silver Sponsors**







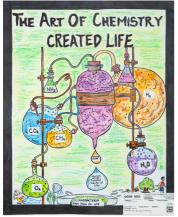
### **Bronze Sponsors**











# COUNTY TO A SECURITY OF THE PROPERTY OF THE PR



### **Contents**

A message from the SASTA President	3
Sir Mark Oliphant	4
Past Oliphant Trophy Winners	5
A message from the Convenors	7
Master of Ceremony for the evening	8
Oliphant Medal & Trophy	10
Platinum Sponsor Prizes	10
Gold Sponsor Prizes	11
Category Sponsor Prizes	11
Silver Sponsor Prizes	12
Category Prizes	13
Crystal Investigation	13
Games	14
Models & Inventions	15
Multimedia	17
Photography	19
Posters	21
Programming, Apps & Robotics	23
Science Writing	24
Scientific Inquiry	26







Rowe Scientific Pty Ltd congratulates all nominees and award recipients.

May your talent continue to build upon those who have walked before
you and along side you. May your scientific journey be enjoyable,
purposeful and speckled with those special 'eureka' moments and
perhaps even the rare prospect of a 'Nobel' event.

### www.rowe.com.au

We can help you with all of your laboratory chemicals, consumables and equipment. Online, by phone or face to face, we give you the choice.

- ✔ One Stop Shop
- ✓ 100% Australian
- ✔ Online ordering
- ✔ Phone ordering
- ✔ Account Managers
- ✓ Leading Brands
- ✓ Chemicals
- ✓ Consumables
- ✓ Equipment

### South Australia & NT

Ph: (08) 8186 0523 rowesa@rowe.com.au

### Queensland

Ph: (07) 3376 9411 rowegld@rowe.com.au

### Victoria & Tasmania

Ph: (03) 9701 7077 rowevic@rowe.com.au

### Western Australia

Ph: (08) 9302 1911 rowewa@rowe.com.au

### **New South Wales & ACT**

Ph: (02) 9603 1205 rowensw@rowe.com.au







A 100% Australian owned company since 1987.

X/Advertising/STA/ScienceOliphantAd260721

### A message from the SASTA President

The Oliphant Science Awards are conducted annually by the South Australian Science Teachers Association (SASTA) and were named in recognition of the contribution made to Science by SA scientist Sir Mark Oliphant. The Awards provide students with an opportunity to extend their scientific literacy, by showing interest in and understanding of the world around them, engaging in discussions about science, and being able to make informed choices about the environment and their own health and wellbeing.



Since the start of the Awards in 1981, participation has grown and students from all over South Australia now enter the competition. The wide range of interests and abilities of these students is catered for by the many categories and age groupings offered. Student participation is further encouraged because group entries are allowed in many categories.

The Oliphant Science Awards is one of the many activities organised each year by the South Australian Science Teachers Association to assist science education in schools and in our community. SASTA develops and maintains close links with education authorities, businesses, industry and the tertiary education sector. Working closely with such organisations allows us to develop resources, publications, programs and professional learning opportunities like workshops and conferences for SA teachers.

The support and sponsorship that SASTA receives from our partners also enables us to recognise and celebrate the excellent work of students in these Awards. With many prizes in each age group and category, this Ceremony is a testament to the huge effort made by students, often in close collaboration with their teachers. At the end of the ceremony, you will see the perpetual trophy that Sir Mark designed and crafted. The winning student holds this for one year, then the trophy is exchanged for an engraved medal at the following year's Ceremony.

SASTA's strength lies in our members, and in the many highly committed educators who volunteer their time out of school hours to ensure that we continue to serve the needs of all teachers of science. Our members are drawn from all education sectors, teaching all year levels across the state. We are also fortunate to have a group of excellent staff who form a permanent secretariat to ensure the continuing smooth functioning of all aspects of our business. Because of such strong support from our members and staff, SASTA has the capacity and expertise to be closely involved in developing ideas about how best to ensure that all students become enthusiastic learners of science.

At SASTA we are proud of our contribution to supporting learning for teachers and their students. We will continue our commitment to fostering an awareness and appreciation of the roles that science, technology and innovation play in our daily lives and in the future environmental and economic strength of the country.

Peter Beveridge, SASTA President

### Sir Mark Oliphant

1901-2000

The South Australian Science Teachers Association has been privileged to have had Sir Mark Oliphant as our Patron for the SASTA Oliphant Science Awards since their inception in 1981.

Like many of the recipients of these awards, Sir Mark was born in South Australia and received his primary and secondary education in state schools here. An outstanding student, Sir



Mark investigated a number of career pathways and eventually settled on the pursuit of science at the University of Adelaide. Sir Mark showed a love of tinkering and invention from an early age, and it was in the science laboratories in Adelaide that he started to make his own scientific apparatus. He was to become one of the leaders in the design and construction of revolutionary apparatus, including particle accelerators used to investigate the structure and interactions of the nuclei of atoms.

In 1927 a scholarship took Sir Mark to the famous Cavendish Laboratories in Cambridge, UK where he worked with Lord Rutherford, who was a pioneer in atomic physics.

Together with other great scientists including Fermi, Lawrence and Oppenheimer, Sir Mark created the brave new world of nuclear physics. His expertise in this area was to lead Sir Mark to the Manhattan Project in America and to his participation in the development of the first atomic bomb.

Sir Mark was always a champion of the peaceful uses of atomic energy, and in 1937 accepted his first professorship as head of the Physics Department at Birmingham University where he was to continue to push the boundaries of knowledge of nuclear physics. In this year he was elected as a 'Fellow of the Royal Society'.

In 1955 Sir Mark's reputation as scientist, research director and administrator were well established in the scientific community. This, together with his declared interest in establishing world class educational research facilities in Australia, led Sir Mark back to Australia at the request of the Government. In this year he founded the Research School of Physical Sciences at the newly established Australian National University in Canberra.

In the years after retirement from academic life, Sir Mark became a household name in South Australia where he gave distinguished service as our State Governor from 1971 to 1976.

A clear demonstration of his ongoing support of science and science education was provided to the science community in our state when Sir Mark agreed, in 1981, to lend his name as patron of the SASTA Oliphant Science Awards.

Sir Mark's legacy will live on in many ways, not least through the thousands of students and teachers who participate in these awards annually.

Of special significance is that Sir Mark, through his love of tinkering and invention, made the perpetual Oliphant Trophy himself.

### **Past Oliphant Trophy Winners**

1981	David Tilley, Mount Gambier High School
1982	Andrew McDowell, Oakbank Area School
1983	Stella Miller, Oakbank Area School
1984	Vernon Wells, Marryatville High School
1985	Eleanor Rainsford, St Peter's Collegiate Girls' School
1986	David Messenger and Darren Kelly, Glenunga High School
1987	Darin Lovett and Edward Dunstone, Prince Alfred College
1988	Frank Trimboli and Nikolaos Vogiatzis, Underdale High School
1989	Simon Ratcliffe, Henley High School
1990	Kingsley Storer, Prince Alfred College
1991	John Sanderson, Pulteney Grammar School
1992	William Greenrod and Michael Ashley, Pulteney Grammar School
1993	Mark Hodson and James Jolly, Modbury High School
1994	Mark Hodson, Modbury High School
1995	Kyra Reznikov, Annesley College
1996	Jamie Messner, Prince Alfred College
1997	Erik Procko, Marryatville High School
1998	Erik Procko, Marryatville High School
1999	Paul Philps, Lydia Rofe and Kristina Miller, Marryatville High School
2000	Andrew Royal, Faith Lutheran Secondary School
2001	Alexander Cichowski, Brighton Secondary School
2002	Samuel Teck Ern Wong, The Norwood Morialta High School
2003	Samuel Teck Ern Wong, The Norwood Morialta High School
2004	Alyssa Fitzpatrick, Loreto College
2005	Konrad Pilch, St Peter's College
2006	Finn Stokes, Australian Science and Mathematics School
2007	Finn Stokes Australian Science and Mathematics School



2019 Oliphant Trophy winner Phoebe Wood with Monica Oliphant



2018 Oliphant Trophy winner Sabrina Lin with Monica Oliphant

### **Past Oliphant Trophy Winners cont.**

2008 Michael Huxley, St John's Grammar School

2009 Benjamin Harrison, Urrbrae Agricultural High School

2010 Michael Huxley, St John's Grammar School

2011 Nina Mao, Glenunga International High School

2012 Will Russell, St John's Grammar School

2013 Madeleine Lilburn, Loreto College

2014 Sarah Damin, Isabelle Greco & Bridget Smart, Wilderness School

2015 Kee-An Seet, Glenunga International High School

2016 Alexandra Stephenson, Adelaide Hills Home School Group

2017 Amber Washington, Norwood Morialta High School

2018 Sabrina Lin, Glenunga International High School

2019 **Phoebe Wood**, Upper Sturt Primary School

2020 Raihanah Pranggono, Glenunga International High School



2015 Oliphant Trophy winner Kee-An Seet with Monica Oliphant and 2014 winners Bridget Smart, Sarah Damin & Isabelle Greco



2016 Oliphant Trophy winner Alexandra Stephenson with Monica Oliphant



2017 Oliphant Trophy winner Amber Washington



2013 Oliphant Trophy winner Madeleine Lilburn with Monica Oliphant



2020 Oliphant Trophy winner Raihanah Pranggono



### A message from the Convenors

The Oliphant Science Awards are conducted annually by the South Australian Science Teachers Association, and are named in honour of the late Sir Mark Oliphant, our former Patron, and in his time an outstanding supporter and promoter of our student science competition.

The Oliphant Science Awards commenced in 1981, with Sir Mark personally hand crafting the trophies for the best boy and girl entrants. Since then student participation has continued to grow, and very many students throughout South Australia now participate. The wide range of interests and abilities of these students is catered for by the many categories and age groupings that we offer. Students can enter individually or, for many of the categories, participate as part of a group. This year we are celebrating 40 years of the Oliphant Science Awards!

Sir Mark personally designed and crafted the titanium metal perpetual trophy that the annual winning student holds for one year. The trophy is then exchanged for an engraved medal at the following year's Presentation Ceremony.

The Oliphant Science Awards recognise outstanding student work with prizes in each age group and each category. Schools with many winning students are awarded a schools' prize. There are many prizes made available through the generosity of our Sponsors, who are an integral part of the success of our Awards. We acknowledge this support through their attendance at and participation in the Presentation Ceremony. Without our sponsors we could not offer such a successful student science competition.

This year we are pleased to acknowledge as our Platinum and Gold Sponsors, the South Australian Science Teachers Association, the Department for Education, Rowe Scientific, the Defence Science & Technology Group, BHP & CSIRO. As well as the Australian Institute of Energy as our Science Writing Category Sponsor, the University of South Australia as our Scientific Inquiry Category Sponsor and SA Country Fire Service & Australian Institute for Disaster Resilience as our joint Poster Category Sponsor.

An essential component of the Oliphant Science Awards is the judging. SASTA acknowledges and thanks the large group of dedicated teachers and supporters of science education who have volunteered to judge the thousands of entries that students prepared for this year's competition. This contribution to SASTA and to science education is greatly appreciated.

The Oliphant Science Awards have once again been a great success thanks to the participation of thousands of students. We know that this participation happens with the encouragement and support given by very many parents and teachers, and we thank you all for this support, coming as it does at a time when student engagement in Science has never been more critical. We also thank and acknowledge the hard work of the SASTA OSA Committee members and volunteers who make this project possible. And finally, we thank the SASTA Office staff for their dedicated commitment to the success of the Oliphant Science Awards. This is the largest project that our association undertakes annually.

Each of the eight Australian state and territory Science Teacher Associations offers student science competitions. At SASTA we are proud that in recent years, our Oliphant Science Awards has been the largest of these state competitions, a success built on the contributions of the many people listed above.

As with the other state and territory competitions, selected winners of the OSA Scientific Inquiry and Models and Inventions (Engineering) categories progress to the finals of the national BHP Billiton Foundation Science and Engineering competition. Each year we also nominate a Teacher Finalist to the national BHP Billiton Foundation Science and Engineering Awards.

Whatever your role is, we thank you for your contribution to this wonderful project.

Peter Turnbull and Gerald Little, Oliphant Science Awards Convenors, 2021

### Master of Ceremony for the evening

### **Dr Julie-Anne Popple**

Dr Julie-Anne Popple is a science communicator and qualified teacher who is passionate about sharing a love of all things STEM. She grew up chasing bugs which led to her studying glow-worms and locusts as an entomologist. Working in science education led her to discover a love of teaching and outreach. Julie-Anne is the SA State Outreach Officer working on the Tall Poppy Campaign for the Australian Institute of Policy and Science. She is also a space communicator at the Australian Space Discovery centre. She hopes to inspire others to pursue STEM careers.



This year we are celebrating 40 years of the Oliphant Science Awards!

You can view a range of articles from past participants and previous trophy winners on the Oliphant Science Awards blog: https://bit.ly/OSABlog



### **Reception to year 12**

### **Proud Platinum Sponsor**

### **South Australian Young Scientist Awards**

### R - 6 and 7 - 12

The Department for Education has been a sponsor of the Oliphant Science Awards since their inception in 1981.

The Oliphant Science Awards exemplify the inquiry based approach to teaching and learning of Science that is so important for engaging students, and for developing scientific understanding and processes that leads to improved scientific literacy.

Young children are naturally curious and agile explorers who examine carefully and closely the things they encounter. The challenge is to maintain an early interest in science throughout the primary and secondary years.

For educators and leaders, the department is producing a suite of new science curriculum resources to increase confidence and capability to deliver highly effective science teaching in our schools.

Schools are strengthening partnerships with business and industries to ensure science learning is relevant and contemporary and students have a greater awareness about potential career pathways.

We acknowledge the role that SASTA, through its many volunteers, plays in engaging students in science inquiry and remain a proud sponsor of this important initiative.

Watch the 'STEM – what is it for?' animation on the Department for Education's YouTube.

https://youtu.be/YRUItMn89T0



### **Oliphant Trophy Winner 2021**

For outstanding science content. Presented by Ms Monica Oliphant.

7-8 Eugene Lee, Pedare Christian College Models & Inventions: The Power in Bacteria: The Microbial Fuel Cells

### **Oliphant Medal**

Presented by Ms Monica Oliphant to the 2020 Oliphant Trophy Winner

11-12 Raihanah Pranggono, Glenunga International High School Scientific Inquiry: Investigating the Effects of Disaccharides and Monosaccharides on the Rate of Respiration in Saccharomyces cerevisiae

### **Platinum Sponsor Prizes**

### **Rowe Scientific Emerging Talent Award**

- 3-4 Alexander Jain, East Torrens Primary School Science Writing: Global Warming
- 5-6 Jasmine Tiplady, Salisbury Park Primary School Science Writing: Global Warming in 2021
- 9-10 Sienna Hill, Our Lady of the Sacred Heart College Scientific Inquiry: Neutralisation of Stomach Acid by Antacid Tablets
- 11-12 Toby Trenwith, Playford International College Multimedia: Time for a Rain Check



### Department for Education Young Scientist Awards R-6

- 1st Chloe Yaan Yuit Yew, Magill School Hyun-woo Cho, Burnside Primary School 2nd Rashmi Adiga, Mawson Lakes School
- Arjun Betti, Norwood Primary School
- 3rd Jasmine Tiplady, Salisbury Park Primary School Dherya Chousalkar, Pedare Christian College



Department for Education

### **Department for Education Young Scientist Awards 7–12**

- 1st Josephine Oehler, Seymour College
  Eugene Lee, Pedare Christian College
- 2nd Iknoor Khurana, Brighton Secondary School Toby Trenwith, Playford International College
- 3rd Priyanka Thavarajah, Seymour College Tarush Srivastava, Glenunga International High School

### **Defence Science & Technology's Secondary School Prizes**

### 7-10

1st Glenunga International High School2nd Walford Anglican School for Girls

### 11-12

1st Glenunga International High School

1st Seymour College



**Australian Government** 

**Department of Defence** 

### **Gold Sponsor Prize**



### **CSIRO Education/CREST Primary Prize**

Award for consistently high achievement and participation in the Scientific Inquiry and Models and Inventions categories.

Best non-CREST School: Immanuel Primary School

### **CSIRO Education/CREST Secondary Prize**

Award for consistently high achievement and participation in the Scientific Inquiry and Models and Inventions categories.

Best CREST School: Brighton Secondary School

Best non-CREST School: Walford Anglican School for Girls

### **Poster Category Sponsor Prizes**







### SA Country Fire Service & Australian Institute for Disaster Resilience Prizes R-12

For the most inspiring or innovative entry with a natural hazards and community safety theme.

- 5–6 Imogen Byrne, Crafers Primary School Posters: Prepare - Bushfire Safety
- 5-6 Kirra Lashmar, Kangaroo Island Community Education Games: Global Warning, Australia!

### **Science Writing Category Sponsor Prizes**



# AUSTRALIAN INSTITUTE OF ENERGY

**SOUTH AUSTRALIA** 

### Australian Institute of Energy Prizes R-12

Awarded to the best entry at each year level with a sustainable generation and uses of energy theme.

- 3-4 Rose Douglas, Rose Park Primary School Models & Inventions: How Colours are Affected by Heat
- 5–6 Zac Grice, Prince Alfred College Models & Inventions: Eco-duct
- 7-8 Eugene Lee, Pedare Christian College Models & Inventions: The Power in Bacteria: The Microbial Fuel Cells
- 9–10 Regan Nelson, Prince Alfred College Models & Inventions: Engineering the Galaxy
- 11-12 Josephine Oehler, Seymour College Science Writing: The Applications and Limitations of Algal bioreactors and Algae as fuel

### Scientific Inquiry Category Sponsor Prizes



### University of South Australia – Sustainable Future Prizes R-12

Awarded to the most inspiring entry highlighting the value of Information Technology, Engineering and Environmental Science to a Sustainable Future.

- 3-4 Connor Wallace, Scotch College Multimedia: Green Team Fun Facts
- 7-8 Zara Hutchinson, Walford Anglican School for Girls Models & Inventions: The EnviroJax

### Silver Sponsor Prizes



### **Catholic Education SA Primary School Prizes**

Awarded to the best two primary schools with high achievement and participation across a wide range of categories.

1st St Thomas School 2nd St Andrew's School



### Flinders University Environment Prize 7-12

Awarded to the most inspiring entry covering an environmental issue in South Australia.

7-8 Annabelle Fleming & Victoria Hayman, Walford Anglican School for Girls Games: Clear Waters



Awarded to the outstanding research-based entry in science.

Sienna Hill. Our Lady of the Sacred Heart College Scientific Inquiry: Neutralisation of Stomach Acid by Antacid Tablets

### Flinders STEM Academy Regional Student Prize R-12

For the most outstanding entry from a student in a regional area.

11-12 Brayden Wilson & Shakira Tremaine, Kangaroo Island Community Education Multimedia: How Will Quantum Dots in Solar PV Revolutionize the Solar Industry?



### The University of Adelaide, Faculty of Engineering, Computer & Mathematical Sciences Prize 7-12

Awarded to the most outstanding entry with an engineering, computing or mathematical science theme.

7-8 Thomas Palmer, Pedare Christian College Programming, Apps & Robotics: Space X Starship Simulator

### The University of Adelaide, Faculty of Sciences Prize 7-12

Awarded to the most outstanding entry highlighting the benefits of scientific research to the community.

Eugene Lee, Pedare Christian College 7-8 Models & Inventions: The Power in Bacteria: The Microbial Fuel Cells

### **Category Prizes**

### **Crystal Investigation**

Orys	tai iiivostigation		
R-2			
1st	Alice Li, Clara Ruilin Liu, Edward Chun Yi Liu	St Andrew's School	Crystal Investigation
2nd	Beau Lambden	Walkerville Primary School	Bigger is Better
3rd	Annabella Kollis	Blackwood Primary School	Crystals
HC	Yuriy Paslavskyy	Grange Primary School	Crystal Investigation
HC	Agamdeep Sidhu	St Andrew's School	Crystal Investigation
3-4			
1st	Emma Ruiqi Liu	St Andrew's School	Crystal Investigation
2nd	Jason Ding, Viren Lindsay	Highgate School	Crystal Investigation
3rd	Vanessa Jeuken, Anna Hardman	Glen Osmond Primary School	Crystal Investigation
HC	Alba Priestley	Blackwood Primary School	Crystal Investigation
HC	Armaan Singh	Mawson Lakes School	Crystal Investigation
5-6			
1st	Aazeen Haider	Mawson Lakes School	Crystal Investigation
2nd	Emma Pho	Seymour College	Crystal Investigation
3rd	Ellie Doudle, Imogen Aplin	Trinity College - South	Coloured Crystal
HC	Isabella Dragani, Henry Scibberas, Troy Taylor	Star of the Sea School	Crystal Investigation
HC	Anika Hiriyanna	St Andrew's School	Crystal Investigation
HC	Chloe Lambden	Walkerville Primary School	ClarityClear is Better than Cloudy
7-8			
1st	Seida Fong, Areeba Rafia	Unley High School	Crystal Investigation
2nd	Rachel Richardson	Walford Anglican School for Girls	Growing Crystals
3rd	Matilda Barnett	Walford Anglican School for Girls	Crystals
9-10			
1st	Omar Haider	Pedare Christian College	Alum Crystal Investigation
2nd	Isabelle Pirakis	Brighton Secondary School	Crystal Investigation
3rd	Josie Hughes	Brighton Secondary School	Crystal Investigation
HC	Lian Mitchell	Concordia College	Clear as Crystal
11-12	2		
1st	Achsa Binu George	Unley High School	Crystal Investigation
2nd	Iknoor Khurana	Brighton Secondary School	Growing crystal







### Games

Gam	ies		
R-2			
1st	Amelia Colhoun	Walkerville Primary School	The Great Space Race
2nd	Indie Linsket, Aria Linsket	Virginia Primary School	Save The Environment
3rd	Sienna Healey	Vale Park Primary School	To the Moon
3rd	Amelie Khodadin, Zara-Rose Nicholls	Annesley Junior School	Animals Endangered
HC	Paige Durham	Annesley Junior School	Make a Rainbow
Paige	Durham is also recipient of the Au	stralian Institute of Physics (AIP) P	rize for the most
outst	anding entry with a physics theme.		
HC	Elise Hyde	Annesley Junior School	Dino Dudes: Matchy Matchy
HC	Sienna Raftery	Walkerville Primary School	Sienna's Super Science Game
HC	Nikunj Sinhal	St Andrew's School	Sciencepoly
3-4			
1st	Smit Jambhrunkar	Magill School	Beat the bugs
2nd	Cormac Rogers	Glen Osmond Primary School	Oumuamua
3rd	Sophie Adams	Lower Eyre Peninsula Home School Group	Tricky Sticky Fun
HC	Thaarani Muthukarthikeyan, Ka Hei Chan	Immanuel Primary School	Life on Earth
HC	Eliza Rizzuto, Lucy Le, Flora Braithwaite	Rose Park Primary School	90 Things to do with Science
HC	Owen Robbins	St John's Grammar School	States of Matter
HC	Elliott Webber, Hudson Wood	Highgate School	Flying Through Facts: Planet Edition
5-6			
1st	Milla Weeks	St Thomas School	The Element of Surprise
2nd	Oliver Brand, Emma Liang	East Adelaide School	In the Deep
3rd	Lola Dare	St Thomas School	Assemble Space
HC	Lucas Flores	Marryatville Primary School	Evolution
HC	Kirra Lashmar	Kangaroo Island Community Education	Global Warning, Australia!
HC	Zoe Wright, Ava Polcino, Grace Thomas	East Marden Primary School	Hop to it
7-8			
1st	Olivia Giotis, Georgina Raff	Walford Anglican School for Girls	Survival Diet
2nd	Phoebe Wood, Mili Schulkin	Mitcham Girls High School	Convergent Evolution
3rd	Asha Lawson, Oliver MacKinnon, Keira Francis-Nia Nia	Brighton Secondary School	Disease Hunter
HC	Annabelle Fleming, Victoria Hayman	Walford Anglican School for Girls	Clear Waters
HC	Alex Lee, Josh Henderson,	Scotch College	Chemistry Chaos



Will Jarvis

### The Australian Institute of Energy 'Leadership in Energy'

# AIE is proud to be associated with the Oliphant Science Awards

Visit the AIE website for independent quality information, online news, current activities and links on energy supply, energy utilisation and sustainability issues. <a href="https://www.aie.org.au">www.aie.org.au</a>



### **STEM LEARNING EXPERIENCES**

The Flinders STEM Academy supports passionate educators who bring Science, Technology, Engineering and Mathematics to inquiring minds. We believe in providing real-world and research-informed STEM learning experiences.

### **TEACHING MATERIALS & SUPPORT**

We are available to support and enhance your teaching approaches, create education materials and provide curriculum reviews. There are also opportunities to host teacher professional development workshops or get involved in STEM events.

For more information, email stemacademy@flinders.edu.au Scan QR code or visit flinders.edu.au/stemacademy



### **Games continued**

0	- 4	

3-10			
1st	Joshua Cartledge	Glenunga International High School	MolyTile
2nd	Michele Sylaidis, Hanna Gartrell	Walford Anglican School for Girls	<b>Human Evolution</b>
3rd	Nicole Hobbs	St John's Grammar School	Light it up
HC	Taylor Gasparin, Freja Abraham	Walford Anglican School for Girls	Let it Grow
HC	Gursimrat Kaur, Harshada	Our Lady of the Sacred Heart	Splendid Science
	Narayan	College	
HC	Jake Sparrow	Brighton Secondary School	Mars Escape
HC	Chloe Spears, Isabelle Hewitson	Walford Anglican School for Girls	Buzz

11-12

HC Taya Lewis, Chloe Baines Salisbury High School Puzzlemania. A game of Science Trivia







### **Models & Inventions**

### R-2

1st	Fraser Flint	Linden Park Primary School	Shadows
2nd	Liam Rathnaweerage	St Peter's College	Satellite Technology
3rd	William Harrison	Richmond Primary School	The Bubbler Boat
HC	Jasmine Kaur Dandiwal, William McCarthy	Glen Osmond Primary School	COVID19

### Models & Inventions continued

Mod	lels & Inventions continued	l	
3-4			
1st	Max Blairs	Grange Primary School	Hydraulic Bridge
2nd	Mukhlis Hasibuan, Haneef Hasibuan	Linden Park Primary School	Mukhlis' Robot Project
3rd	Isha Wechalekar, Maryam Cedra Sawad, Aayana Butt	Wilderness School	Growth Mindset Neuroplasticity
HC	Rose Douglas	Rose Park Primary School	How Colours are Affected by Heat
HC	Tobias Heidrich	Annesley Junior School	Pixel Power
HC	Jack Williams	Immanuel Primary School	The magic of the microscope
HC	Adeline Wilson, Lila Nassery	Wilderness School	Regeneration of Xanthorrhoea and Eucalyptus after bushfire
5-6			
1st	Dherya Chousalkar	Pedare Christian College	COVID Detection Dogs
2nd	Zac Grice	Prince Alfred College	Eco-duct
3rd	Anya Chawla, Alexander Smith, Ruby Billington	St Andrew's School	Future of Dragonfly Evolution
3rd	William Loffler, Noah Gehrig, Thomas Beresford	Pilgrim School	Wave of Destruction
3rd	Chloe Yaan Yuit Yew	Magill School	Pain Withdrawal Reflex Arc
HC	Lucinda Bell	St Thomas School	Tuned Mass Damper Model
HC	Dhhruv Dwivedi	Richmond Primary School	Sanitiser dispenser
HC	Chloe Roberts, Amity Dawes	Aldgate Primary School	Save the Whales
HC	Palash Shah	Richmond Primary School	Earthquakes
HC	Ludang Tligi	Trinity College - South	Plant Model
7-8			
1st	Zara Hutchinson	Walford Anglican School for Girls	The EnviroJax
1st	Eugene Lee	Pedare Christian College	The Power in Bacteria: The Microbial Fuel Cells
3rd	Sophia Lennard	Mitcham Girls High School	Hand
HC	Jaskanwar Dandiwal, Lithum Pallege, Oleg Volkov	Glen Osmond Primary School	Magnetic Train
HC	Saiesha Ganu	Walford Anglican School for Girls	The Eye and How it Works
HC	Mariam Joseph	Glen Osmond Primary School	Self-sustaining Greenhouse for endangered plants
HC	Sien Mitchell	Concordia College	Morse Messenger
HC	Jack Theakstone	Annesley Junior School	Sustainable House
HC	Shaun Tojo, Sourish Raghunath, Kritanu Rangari	Linden Park Primary School	Model







### **Models & Inventions continued**

### 9-10

1st Simran Bruce. **Brighton Secondary School** Spectroscopy Kostya Szarszewski

1st Steven Girgis Prescott College Southern Levitating Aerofoil

2nd Felix Lister, Xander Neeskens **Brighton Secondary School** The Falcon Heavy and the science behind rocketry Prince Alfred College

11-12

2nd

HC Nicole Chan, Furtuna Legesse, Charles Campbell College Clean Matters

Nhat Hoang Xuan Truong

Regan Nelson







Engineering the Galaxy

### Multimedia

### R-2

1st Isaac Ghan St Andrew's School COVID-19 2nd Charlotte Atkinson Virginia Primary School Walking Rainbows 3rd Olivia Holmes Scotch College Teaching patients using a video HC Mihika Gorey Magill School Oxygen Supports Burning HC Patrik Porter Scotch College String Harmonics

THE UNIVERSITY of ADELAIDE

# YOUNG SCIENTIST OF THE YEAR

### **WIN \$500 FOR YOU AND \$1000 FOR YOUR SCHOOL!**

Just make a short video on an environmental problem or solution in agriculture, energy and critical minerals or wildlife conservation. Entries close Friday, 29 October 2021.

Visit: careerswithstem.com.au/young-scientist-video-com

### **Multimedia continued**

IVIUI	timedia continued		
3-4			
1st	Isaac Khoo	Highgate School	How do magnets work?
2nd	Connor Wallace	Scotch College	Green Team Fun Facts
3rd	Zoe Staszynski, Alexa Staszynski	Virginia Primary School	The Lifecycle of a Monarch Butterfly
HC	Abigail Atkinson	Virginia Primary School	Candy Chemistry
5-6			
1st	Rashmi Adiga	Mawson Lakes School	How does slime work?
2nd	Oden Kruszynski	Allenby Gardens Primary School	What are archaea?
3rd	Haejun Ok	Walkerville Primary School	Fermentation Science
HC	Saheli Dissanayake	Seymour College	How vaccines work
HC	Samik Dua	Richmond Primary School	What is Relativity?
HC	Tilly Schammer	Hawthorndene Primary School	Science of Bubbles
7-8			
1st	Priyanka Thavarajah	Seymour College	Why do onions make you cry?
2nd	Cordelia Tonkin	Walford Anglican School for Girls	How a Model Airplane Works
3rd	Cristina Parletto	Walford Anglican School for Girls	Softball pitching, guess work or physics?
HC	Alina Batool, Haniyyah Haider	Mitcham Girls High School	Serendipitous Discoveries
HC	Lucy Economos	Walford Anglican School for Girls	Climate Change
HC	Scarlett Fisher	Aldgate Primary School	Spiders
НС	Giulio Zuckermann, Pranav Aromel	Glenunga International High School	The Cell Rap
9-10			
1st	Asira Suetrong	Glenunga International High School	Respiratory System
2nd	Ella Brechin	Trinity College - Gawler River	Horsing around with the electromagnetic spectrum
3rd	Isabel Keelan	Walford Anglican School for Girls	The Importance of Sleep
HC	Lily Tai	Walford Anglican School for Girls	Are We Alone in the Universe?
HC	Felicity Taylor	Walford Anglican School for Girls	Mending hearts using Nanotechnology
11-1	2		
1st	Toby Trenwith	Playford International College	Time for a Rain Check
2nd	Brayden Wilson, Shakira Tremaine	Kangaroo Island Community Education	How Will Quantum Dots in Solar PV Revolutionize the Solar







Industry?





# Catholic Education South Australia congratulates all of the entrants in the Oliphant Science Awards

We also acknowlege the contribution of the South Australian Science Teachers Association

### cesa.catholic.edu.au

### **Photography**

R-2			
1st	Elise Eddey	Coromandel Valley Primary School	ol Hidden World
2nd	Thomas Collins	Hawthorndene Primary School	Local Habitats
3rd	Brianna Cheong	East Adelaide School	Hidden World
НС	Mickayla Adams	Lower Eyre Peninsula Home School Group	Beautiful delicious awesome eggs
HC	Emma Andrews	Colonel Light Gardens Primary School	Fun Girl meets Fungi at Stringybark Forest
НС	Robert Boski	Southern Vales Christian College Morphett Vale	- Paddock to Plate
HC	Maisey Bruhn	Linden Park Primary School	Maisey's Micro Worlds
HC	Harper Nguyen	St Andrew's School	Hidden World
3-4			
1st	Zachary Summerton	Crafers Primary School	Science of Safety
2nd	Lila Nassery	Wilderness School	Local Habitats
3rd	Sienna Capitano, Charlotte Southwood	Burnside Primary School	Hidden World
HC	Emma Adams	Lower Eyre Peninsula Home School Group	Wheat on our Farm
HC	Sophie Adams	Lower Eyre Peninsula Home School Group	Lovely Lentils
HC	Zoe Dowdall	Grange Primary School	Local Habitats
HC	Avni Katdare	St Andrew's School	Local Habitats
HC	Gus Melville-Jones	Rose Park Primary School	Hidden World
HC	India Rodda	Magill School	Hidden World







### **Photography continued**

Pno	tograpny continued		
5-6			
1st	Hyun-woo Cho	Burnside Primary School	Hidden World
2nd	Joshua Clothier	Immanuel Primary School	Hidden World
3rd	Archie Lees	St Thomas School	From Grass to Glass
HC	Isla Balestrin	Wilderness School	Isla's Hidden Worlds
HC	Elizabeth Brown, Alice Brown	Mawson Lakes School	Local Habitats
HC	Remi Bubner	Hawthorndene Primary School	Hidden World
HC	Isla Church	Brighton Primary School	Local Habitats
HC	James Dibdin	Southern Vales Christian College Morphett Vale	- When Materials Fail?
HC	Zac Grice	Prince Alfred College - Prep	When Materials Fail?
HC	Elsie Jaensch	St Thomas School	Paddock to Plate
HC	Madison Kassulke, Jonte Kassulke, Charlie Murdock	Cobdogla Primary School	Paddock to Plate
7-8			
1st	Riley Wright	Adelaide Botanic High School	The Hidden World
2nd	Violet Newell	Salisbury Park Primary School	Hidden World
3rd	Willem Koehne	Pulteney Grammar School	When materials fail
3rd	Willem Koehne	Pulteney Grammar School	Hidden world
HC	Madison Craggs, Matthew Irvin, Manjaap Kaur	Prescott College Southern	Hidden World
HC	Ella Foster	Concordia College	The hidden world
HC	Maddison Hughes, Lana Duong, Abigail Gillman	Our Lady of the Sacred Heart College	The Hidden World
9-10			
1st	Kasimir Kellermann Williams	Glenunga International High School	The Hidden World
2nd	Omar Haider	Pedare Christian College	Hidden World
3rd	Caitlin Wood	Eynesbury Senior College	When Materials Fail
HC	Sophie Bedford	Glenunga International High School	When Materials Fail?
HC	Priti Jivtani, Eman Alaboody, Tahira Rezayee	Our Lady of the Sacred Heart College	Local Habitats
11-1	2		
1st	Iknoor Khurana	Brighton Secondary School	Using a SEM



Savin Dissanayake



Glenunga International High



Paddock to Plate

2nd

# **CFS Child & Youth Education Programs**

Empowering young people in bushfires and other emergencies.

(08) 8115 3324 cfs.sa.gov.au/child-and-youth







### **Posters**

R-2			
1st	Isaac Otten	Hawthorndene Primary School	The Art of Chemistry
2nd	Lucybella Chan	Highgate School	Superbugs
3rd	Parker Loi	Walkerville Primary School	Colours in Fireworks
HC	Raytheon Ho	East Adelaide School	Bug Safety
HC	Ella Morris	Bellevue Heights Primary School	Superbugs
HC	Nesaru Sripriyadarshan	Highgate School	Red Cabbage pH Indicator
HC	Nikita Vishwasrao	Magill School	Stay safe from Bushfires
HC	Olivia Zhong	Wilderness School	Bushfire Safety
3-4			
1st	Cora Lundie	Concordia College	The Art of Chemistry
1st	Oscar Raidel	St Thomas School	Superbugs
3rd	Ethan Du	Linden Park Primary School	Natural History illustration by Ethan
HC	Claire Evans	Linden Park Primary School	How to identify a European wasp versus a native wasp
HC	Jack Freney	Highgate School	Bushfire Safety
HC	Celestine Moeliana	Athelstone School	Sea Turtle Now and Then
HC	Samara Olsen	Kangaroo Island Community Education	Bushfire Safety
HC	Olivia Starvides	Immanuel Primary School	Bushfire Safety
HC	Jacob Tucker	Immanuel Primary School	Superbugs
5-6			
1st	Lea Lazzaro	St Thomas School	Extinct Animals In Australia (Natural History)
2nd	Dayan Govender	St Andrew's School	Sustainable Food Production
3rd	Imogen Byrne	Crafers Primary School	Prepare - Bushfire Safety
HC	Rashmi Adiga	Mawson Lakes School	Bushfire Safety
HC	Hyun-woo Cho	Burnside Primary School	The Art of Chemistry
HC	Ethan Morton	Emmaus Christian College	Australian Animals
HC	Ella Pham	East Adelaide School	The Art of Chemistry
HC	Aishu Thunaiselvam	Glen Osmond Primary School	Sustainable Food Production







### **Posters continued**

7-8			
1st	Erin Schofield	St Aloysius College	Superbugs 2
2nd	Samarbir Singh	Prince Alfred College	How Indigenous People manage Their land
3rd	Carla Campagnolo	St Aloysius College	Natural History Illustration
EA	Hannah Tourneur	St John's Grammar School	Superbugs - The Deadly Truth
9-10			
1st	Jan Naseer Kaur Banvet	Australian Science and Mathematics School	The Art of Chemistry
2nd	Stella Dimitropoulos	St John's Grammar School	Sustainable Food
3rd	Mille I alikawat	01.41 1 0.11 4	Fundi
	Milla Lokhorst	St Aloysius College	Fungi
11-1		St Aloysius College	rungi
<b>11-1</b> 1st		Seymour College	How we are making harmful bacteria stronger with antibiotics
	2	, ,	How we are making harmful bacteria stronger with
1st	<b>2</b> Josephine Oehler	Seymour College	How we are making harmful bacteria stronger with antibiotics

Posters is proudly sponsored by SA Country Fire Service and Australian Institute for Disaster Resilience









### **Programming, Apps & Robotics**

R-2			
1st	Eric Wang	St Peter's College	Lego Mindstorm - Ball Picker
2nd	Louie Ma, Samantha Paltridge	Linden Park Primary School	Intelligent Fire Fighting Robot
3rd	Anna Luo	St Andrew's School	Lego Robot Line Drawing
HC	Adelaide Donovan-Lawlor	Highgate School	COVID 19 Safe Halloween Lolly Dispenser
HC	Emika Ichinohe	Glen Osmond Primary School	Launch the Rocket!
3-4			
1st	Chengyuan Yu	Linden Park Primary School	4RSE
2nd	Jackson Burford	St John's Grammar School	Model Particle Accelerator
3rd	Tristan Vallance	Aldgate Primary School	Bee Bot - How a bee pollinates
HC	Louis Kent	Pembroke School	Al Image Classifier
HC	Beau Leon, Vincent Farnsworth	St Peter's College	Splendiferous Space Maze
HC	Pradyun Parikh	Richmond Primary School	Chembuzz Junior
5-6			
1st	Daniel Song	St Peter's College	Mind Inventor
2nd	Amelia Cavagnaro	Loreto College	What-A-Helper, Water sampler
3rd	Saheli Dissanayake	Seymour College	Speed Kills
HC	Bradley Ayles	Heathfield Primary School	Measurement of solar energy for control of loads
HC	Krishna Neelam	Pedare Christian College	Mars Rover Mission
HC	Charles Tang	East Marden Primary School	Intelligent Bin
7-8			
1st	Thomas Palmer	Pedare Christian College	Space X Starship Simulator
2nd	Riley Lorenz	Pedare Christian College	Super Space Calculator
HC	Muhammad Abu Bakr Baber	The Heights School	AuSSAF - Automatic Self- Sustaining Agriculture Farming
9-10			
HC	Caleb Tang	Prince Alfred College	Firefighter
11-1:	2		
HC	Savin Dissanayake	Glenunga International High	Safety Zone





School



Programming, Apps & Robotics is proudly sponsored by the Defence, Science and Technology Group



### **Science Writing**

R-2			
1st	Harris Zi-Rong Cheong	St Andrew's School	The World in 2050
2nd	Ivan Leong	St Andrew's School	Physics: the very tiny and the very large
3rd	Anna Luo	St Andrew's School	Playing with Light
3-4			
1st	Alexander Jain	East Torrens Primary School	Global Warming
2nd	Muhammad Affan Ali	Magill School	Physics - The very tiny and the very large
3rd	Flynn Wroniak	Vale Park Primary School	What happens to the International Space Station (ISS) after 2024?
5-6			
1st	Jasmine Tiplady	Salisbury Park Primary School	Global Warming in 2021
2nd	Chloe Lambden	Walkerville Primary School	Playing with Light
3rd	Shaya Ismail	Norwood Primary School	What happens to the International Space Station (ISS) after 2024?
HC	Chloe Freer	Salisbury Park Primary School	Global Warming is still so important - what is new in the field?
HC	Ruby Gosnell	St Thomas School	The World in 2050
HC	Zachary Lee	Burnside Primary School	The World in 2050
HC	Akshaya Thiru	Wilderness School	The World in 2050
HC	Scarlett Waters	Brighton Primary School	The World in 2050
HC	William Yoon	Burnside Primary School	World in 2050
7-8			
1st	Sara Zeitouneh	Glenunga International High School	The World in 2050
2nd	Amullya Madaan	Glenunga International High School	Playing with Light
3rd	Piyush Kumar	Glenunga International High School	Physics: the very tiny and very large!
HC	Zane Bament	Glenunga International High School	Global Warming is still so important - what is new in the field?
HC	Kyna Chauhan	Glenunga International High School	Global Warming
HC	Myra Chee	Glenunga International High School	The World in 2050
HC	Emma Choi	Loreto College	Playing with Light
HC	William Hu	Glenunga International High School	The World in 2050
HC	Victoria Kalinina	Glenunga International High School	The World in 2050
HC	Maliyat Khan	Glenunga International High School	Infrared Light - Its Past, Present and Future
HC	Ruby Marsh	Glenunga International High School	Global Warming is still so important - what is new in the field?
НС	Ella McDermott	St John's Grammar School	Global warming is still so important - What is new in the field?
НС	Samarbir Singh	Prince Alfred College	What happens to the International Space Station (ISS) after 2024?
HC	Yifan Wu	Glenunga International High School	Playing with Light
HC	Siming (Steve) Xin	St John's Grammar School	Johno's Adventure in the City of Light

Science Writing is proudly sponsored by the Australian Institute of Energy



# If a student can go here, where will you go?

adelaide.edu.au

Andy Thomas Professional Astronaut, Alumni, The University of Adelaide.



### **Science Writing continued**

Colonic Witting Continued			
9-10			
1st 2nd 3rd	Tarush Srivastava Dhriti Singh Tianyue Yang	Glenunga International High School Glenunga International High School Walford Anglican School for Girls	The World in 2050 The World in 2050 Global Warming is still so important - what is new in the field?
11-1	.2		
1st	Sahithya Paramasivam	Mitcham Girls High School	How has societal demand influenced the application of induced pluripotent stem cell and CRISPR-Cas9 technology as an autologous, combined cell and gene therapeutic treatment method for sickle cell disease?
2nd	Josephine Oehler	Seymour College	The Applications and Limitations of Algal bioreactors and Algae as fuel
3rd	Mark Gul	Glenunga International High School	Development of COVID-19 mRNA Vaccine
HC	Amy Huynh	Glenunga International High School	Fibrinogen In Clinical Trauma
HC	Dinan Perera	Prince Alfred College	CAR-T Cell Therapy
	'	nt of the Australian Society for Bioche a biochemistry or molecular biology	emistry and Molecular Biology Prize for theme.
HC	Zoe Steinberg	Immanuel College	How has lead mining affected Broken Hill and what is being done to reduce the Risks?
HC	Asira Suetrong	Glenunga International High School	The Applications and Limitations of Genetically Modified Aedes aegypti Mosquitoes as a Way of Preventing the Spread of Mosquito-Borne Diseases



## Virtual Open Day now live!

Congratulations to this year's winners

www.oliphantscienceawards.com.au

### Scientific Inquiry is proudly sponsored by the University of South Australia



### **Scientific Inquiry**

0010	Coloniano inquiry			
R-2				
1st	Kabir Nanda, Rafael Tsangari	Immanuel Primary School	Paper Planes	
2nd	Aavyaan Anand	Immanuel Primary School	Effects of friction on hot wheels cars	
3rd	Sidney Young	St Thomas School	Hot Colours - Which colour is the hottest	
HC	Patrik Porter	Scotch College	Bicycle Gears	
3-4				
1st	Arjun Betti	Norwood Primary School	I "bag" for your attention. Have you made the right choice for your green bin?	
2nd	Jasmine Helwig	Highgate School	Say Bye Bye to Weeds	
3rd	Zoe Dowdall	Grange Primary School	Effects of Climate on Marshmallows	
3rd	Jack Williams	Immanuel Primary School	Hand washing Makes a difference	
HC	Abigail Atkinson	Virginia Primary School	Candy Chemistry	
HC	Gihana Noordeen, Henrietta Belmont- McDonnell	Seacliff Primary School	Boats and Fast Currents	
5-6				
1st	Chloe Yaan Yuit Yew	Magill School	An experiment on acids and bases: investigating the effect of vinegar on egg shell	
2nd	Rahini Phull	Highgate School	The Effects of Plastic on Plants Growth	
3rd	Levi Porter	Paringa Park Primary School	Helium Soccer Balls	
HC	Shaya Ismail	Norwood Primary School	Sugar and Acids! How healthy are our drinks?	

# Solve it, build it.

### Start your unstoppable career in **STEM**.

If you're interested in STEM, study with UniSA to see where your passions can take you.

At SA's No. 1 university for graduate careers in Science and Mathematics, your unstoppable career will start with a choice of degrees in Science, Engineering, Mathematics, Information Technology and more.

unisa.edu.au/study



### **Scientific Inquiry continued**

3010	nunc inquiry contin	iucu	
7-8			
1st	Eugene Lee	Pedare Christian College	The Power in Bacteria: The Microbial Fuel Cells
2nd	Darren Liu, Reuben Purcell	Pembroke School	If Practical Models of Spacetime with Strings Curve the Same Way as N-dimensional Spacetime
3rd	Priyanka Thavarajah	Seymour College	Ocean Acidification: Impacts of Increasing Concentrations of Dissolved Carbon Dioxide on Sea Shells
9-10			
1st	Sienna Hill	Our Lady of the Sacred Heart College	Neutralisation of Stomach Acid by Antacid Tablets
Sienna Hill is also the recipient of the Tall Poppy Award for Scientific Inquiry for a scientific inquiry project where clear and engaging communication features.			
2nd	Emily Estcourt Hughes	Walford Anglican School for Girls	Carbon Capture - Could This Be How We Save The Planet?
3rd	Madison Gurney-White, Sahib Kaur	Our Lady of the Sacred Heart College	Effectiveness of Antibacterial Agents in Hand Soaps on Microbial Growth
3rd	Liana Walters	Brighton Secondary School	The effect of hand sanitiser on hand bacteria
11-1	.2		
1st	Josephine Oehler	Seymour College	Modification of chocolate chip cookies with diverticular disease - sensory appeal
2nd	Samadhi Chandrasena	Glenunga International High School	Investigating How an Increase in Speed Shortens the Range of a Topspin Ball, Compared to That of a No-Spin Ball, Due to Magnus Force in Table Tennis
3rd	Wanran Zhang	Glenunga International High School	Investigation on the Effect of H2O2 (aq) and Cu(II) (aq) Concentration on the Induction Time of N-acetyl-L-cysteine-Inhibited Chemiluminescence

Wanran Zhang is also the recipient of the Royal Australian Chemical Institute (RACI) Prize for the most outstanding entry with a chemistry theme.

HC	Dinan Perera	Prince Alfred College	impact the "snowfall effect"
HC	Elise Westrich	Glenunga International High	The Effect of Cinnamon Oil on the
		School	Germination of Triticum Seeds

# Take the next step in your science and engineering journey with the BHP Foundation Science and Engineering Awards.

BHP Foundation Science and Engineering Awards recognise and reward the next generation of STEM leaders who have undertaken innovative science or engineering projects.

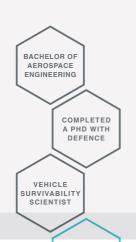
Projects from the Scientific Inquiry and Models and Inventions categories in the Oliphant Science Awards will be selected for nomination into the national BHP Foundation Science and Engineering Awards.

Once you have received a nomination, enter your project at www.scienceawards.org.au





# Find your STEM pathway with a Defence placement



DEFENCE SCIENCE AND TECHNOLOGY Long is testing ways to strengthen and lighten armour on Australia's tanks using the same material used to make plastic bags and water bottles.

Want to put your skills to use? A paid Industry Experience Placement could be the right pathway for you.

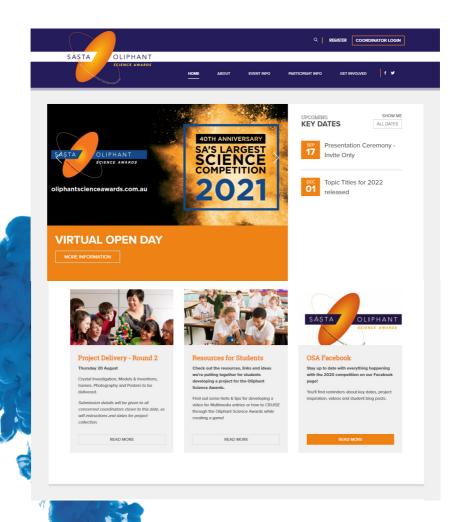
A STEM career in Defence offers unmatched technical resources, unique learning and development opportunities, and valuable mentoring by discipline experts. Innovation, creativity and problem solving will surround you as you work on a variety of internationally significant Defence projects.

Experience a dynamic and stimulating workplace, apply your university knowledge and immerse yourself in new and exciting challenges with Defence.

dst.defence.gov.au/students



# For all information about the Oliphant Science Awards www.oliphantscienceawards.com.au





www.facebook.com/oliphantscienceawards





### **Congratulations on your Award!**

To view and order your images online please visit:

www.eventphoto.com.au

Enter the following code in the orange box (case sensitive): oliphant21

If you require assistance, please call 1300 362 492 during office hours.