

South Australia's Science and Engineering Challenge 2018

Promoting STEM subjects in schools

"...the future prosperity of Australia depends very much on keeping up, in fact leading where possible, the world in science and technology."

Newsletter, January 2019

SEC - At A Glance...

2018 SA State Winner

St Peter's College

2018 National Winner

Launceston Christian School (TAS)

2019 Dates

Wed 19 June	Riverland
Fri 21 June	Mt Gambier
Mon 24 June	Adelaide Central
Wed 26 – Fri 28 June	Adelaide North
Tue 2 – Thu 4 July	Adelaide South
Mon 29 July	Kadina
Wed 31 July	Whyalla
Thu 1 August	Whyalla – Discovery Day

Thank you to our Major Sponsors

SA Government, Australian Gas Networks, SA Power Networks, ASC, Flinders University, The University of Adelaide, The University of South Australia, EnZen

All our other Valued Partners

Australian Institute of Energy, City Council of Mount Gambier, District Council of Grant, Defence Force Recruiting, ForestrySA, Kimberly-Clark Australia, Lions Club of Mannum, TAFE SA, Tenison Woods College, Timberlink Australia, Tonkin Consulting, Woolworths – Waikerie, Nippy's.

And, as always, to our Rotary Clubs state wide:

Adelaide, Berri, Loxton, Mawson Lakes, Mitcham, Mount Gambier, Mount Gambier Lakes, Mount Gambier West, Murray Bridge, Port Lincoln, Port Pine, Renmark, Waikerie, Whyalla.

We like to talk to you!

For more information visit our sites:

- Newcastle.edu.au/challenge
- adelaiderotary.com.au/index.php/take-action/explore-our-causes
- facebook.com/ScienceandEngineeringChallenge
- youtube.com/SciEngChallenge
- instagram.com/sciengchallenge

From the Chair

The Science and Engineering Challenge has been held in South Australia annually since 2001! It continues to grow State wide with the Rotary Club of Adelaide providing continuous support over that time.

This year 75 SA secondary schools participated, 2,000 + years 9 and 10 students attended, along with around 150 teachers and 170 volunteers. The volunteers came from Rotary, from our sponsors and the community generally as well as graduates and undergraduates from the three major Universities in SA. The Challenge continues to bring committed parties together in support of this important cause.

Nationally around 750 schools participated over 104 Challenge days attracting a total attendance of 22,000 students, teachers and volunteers, across Australia. Also, for the first time two Challenge days were held overseas, in New Zealand and Singapore.

The major objective remains the encouragement of years 9/10 students to continue to study the STEM subjects through year 12 to equip them to enter degree courses in science and engineering disciplines, recognised more than ever as critical to the future economic growth of Australia, and in particular, of South Australia. The importance of our objectives was strongly supported at the State Final when Hon Dennis Hood MLC attended, representing the Minister for Education - Hon John Gardner. Mr Hood spoke to the gathered students, teachers and volunteers, making the following points to the students:

"- It's estimated that 75% of the fastest growing industries require strong STEM skills, so by choosing to study these subjects you are giving yourselves the best possible start for your future careers

- The Challenge is a great opportunity to hone your "enterprise" skills - skills such as communication, teamwork, problem solving and creative and critical thinking

- These skills, together with a deep understanding and knowledge of science, technology, engineering and mathematics, are greatly in demand already and with the increasing investment in areas such as shipbuilding, other defence related industries and our many space industry start-ups, having a good basis in STEM is really worthwhile"

I cannot thank enough the sponsors and the SA Rotary Clubs who provide venues, funding, skills, bodies and so much more. And I'm delighted to record that our Event Coordinator, Ruth Conry, was this year recognised for her many years of involvement by the presentation of a prestigious Rotary award – The Paul Harris Fellowship!

I am looking forward to an even bigger 2019!

--Ollie Clark, AM - Chairman, SA Organising Committee

Full National Results

1	1320.20	Launceston Christian School (TAS)
2	1178.96	Whitefriars College (VIC)
3	1140.82	Darwin High School (NT)
4	920.38	St Peter's College (SA)
5	821.13	Riverside Christian College (QLD)
6	768.29	Perth College (WA)
7	764.55	St Phillip's College (NT)
8	626.90	Keira High School (NSW)



A Picture of Concentration



Professor Terry Burns of University of Newcastle and immediate past Director of the national Science and Engineering Challenge, and former BHERT award recipient Darren Straker of Vraytios with their Awards

BHERT!

The Science and Engineering Challenge (SEC) was recognised this year at the prestigious Business/Higher Education Round Table (BHERT) Awards in Melbourne. The awards reinforce the important role business and university partnerships play in driving innovation, research and teaching developments across the country. The SEC received the award for "Outstanding Collaboration in Community Engagement", which was one of only six awards presented on the night.

This award not only recognises the University of Newcastle's innovative approach to STEM outreach and the professional and hardworking SEC team, but also the large pool of dedicated and selfless partner organisations and individuals right across Australia, that are the Science and Engineering Challenge. (source: Your Challenge, November 2018)

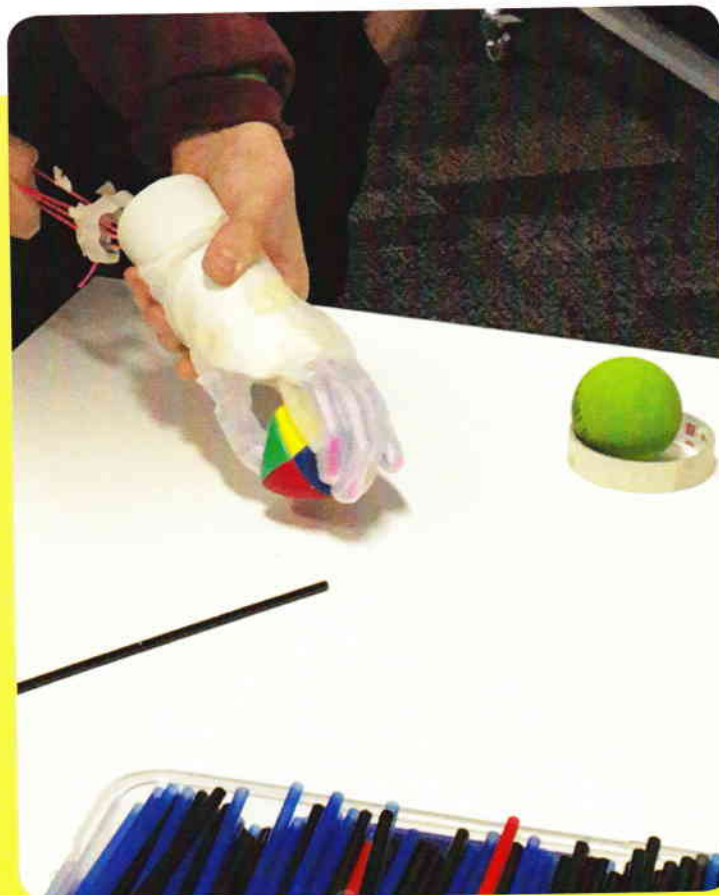
The Year that Was

Congratulations to St Peter's College which won the 2018 SA State Final. It was one of the 75 South Australian schools to take part in the event that challenged students to put their maths, science, project management and time management skills into practice. It was their chance to see how science connects with the real world.

St Peter's College went on to compete in the National Final which was held in Darwin, NT on Friday 9 November.

The challenges presented to students are all based on science, technology, engineering and maths (STEM) principles and give the teams a chance to add a hands-on approach to their theoretical knowledge and find out just how much fun working in one of the STEM industries can be. It takes teamwork, problem-solving skills and creativity to meet such challenges as building a catapult, a hovercraft, a bridge, and more.

On Challenge days the teams are scored on their performances, the school gaining the highest score being the overall winner on the day. Eight of the winning schools then compete for the SA State title, the winner going on to contest the National Final.



Things are picking up...

The Schools of the SA 2018 Science and Engineering Challenge

And a big thank you to all the schools who took part in 2018 (Winners are marked with 🏆)

MOUNT GAMBIER - Friday 22 June

Bordertown High School
Grant High* 🏆
Mt Gambier High School
Naracoorte High
Penola High / Kingston Community College
St Martin's College
Tenison Woods College

RIVERLAND - Monday 25 June

Glossop High School
Loxton High School
Mannum Community College
Renmark High School* 🏆
Walkerie High School

BEDFORD PARK - Wednesday 27 June

Eastern Fleurieu School
Le Fevre High School
Prince Alfred College
Reynella East College
Sunrise Christian School
Temple Christian College* 🏆
Urrbrae High School
Westminster School

BEDFORD PARK - Thursday 28 June

Aberfoyle Park High School
Blackwood High School
Cragmore High School
Encounter Lutheran College
Mount Barker High School
Sacred Heart College – Senior 🏆
St Mary's College
Tatachilla Lutheran College

BEDFORD PARK - Friday 29 June

Cardijn College
Cornerstone College
Emmaus Christian College* 🏆
Hamilton Secondary College
Kilcare College
Mitcham Girls High School
Unley High School
Woodville High School

PORT PIRIE - Monday 2 July

Clare High School
Gladstone High School
Jamestown Community School* 🏆
John Pirie Secondary College
Mid North Christian College
Port Broughton Area School
Orroroo Area School

PORT LINCOLN - Wednesday 4 July

Ceduna Area School
Cummins Area School* 🏆
Navigator College
Port Lincoln High School
St Joseph's School
Samaritan College
Tumby Bay Area School
Whyalla High School

SUPER-DROME - Wednesday 1 August

Banksia Park International High School
Faith Lutheran School
Henley High School
Immanuel College* 🏆
Nazareth Catholic College
Nuriotpa High School
Para Hills High School

SUPER-DROME - Thursday 2 August

Gleeson College
Golden Grove High School
Pedare Christian College
St George College
St Michael's College
St Peter's College* 🏆
Seaton High School
Underdale High School

SUPER-DROME - Friday 3 August

Endeavour College* 🏆
Hope Christian College
Mount Carmel College
Portside Christian College
Roma Mitchell Secondary College
St Dominic's Priory College
St Ignatius College
Trinity College - Gawler River

State Final

Titanium Arena - Thursday 30 August

Cummins Area School
Emmaus Christian College
Endeavour College
Grant High School
Jamestown Community School
Renmark High School
St Peter's College* 🏆
Temple Christian College



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