

Australian National Crystal Growing Competition



NATIONAL CRYSTAL GROWING COMPETITION - 2019

JUDGING

The judging took place on Friday 15 November 2019 at the University of Queensland, School of Chemistry and Molecular Biosciences.

The crystals were judged by

- Associate Professor Jack Clegg FRACI CChem, (University of Queensland) - National Crystal Growing Competition Coordinator and Secretary of the Society of Crystallographers in Australia & New Zealand.
- Amy Thompson, University of Queensland
- Jacob Whittaker, University of Queensland

Crystals which had been forwarded by State groups were firstly grouped together by Division and Category - not by school or state/territory. Then each crystal was identified only by a number.

Each individual crystal was examined and ranked according to the following criteria: clarity, habit, colour and size. The winner and runners-up for each Division were selected. A number of Highly Commended awards were also determined.

All of the entries were of very good quality. The judging panel was particularly impressed with the size and habit of some of the samples entered. Overall, however, the most successful entries had very good clarity and habit (sharp edges and flat face) with no evidence of inclusions or cracking present. The clarity of samples can be increased by avoiding all movement (including breeze and temperature fluctuations), the use of smaller (or no!) seed crystals and slower crystallisation conditions.

The open competition ran again this year. The majority of samples submitted were copper(II) sulfate pentahydrate with a number of Chrome Alum entries. Some of which were of exceptional quality - the best examples of these crystals were significant in size, had sharp edges and good clarity - there were some smaller crystals, however, that were also competitive as their clarity was near perfect.

***Note:** The RACI can demonstrate to the fairness of the judging, and any perceived conflict of interest, as members of the National Judging Panel are not a member of the judging panel for any of the regional competitions.

ACKNOWLEDGEMENTS

Congratulations to all the students who participated in the competition. And thank you to all the teachers for supporting your students to participate.

Sincere thanks are extended to all those who assist in the organisation of the Crystal Growing Competition, including all the regional coordinators and judging panels, for all for your efforts with your state/territory competitions and for sending crystals for the National judging.

Associate Professor Jack Clegg FRACI CChem
RACI National Coordinator





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RESULTS

Crystals are judged in two (2) Divisions (PRIMARY & SECONDARY) and two (2) Categories (ALUM & OPEN)

See the photos of the winning crystals at the end of this report.

These results will also be published on RACI Chem Ed Central, the RACI's education portal.

For the Privacy and Protection of the students, only first names will be published on the internet for this competition.

[CLICK HERE TO VIEW](#)

The RACI offers a number of chemistry-related activities and competitions for school students, as well as chemistry resources available for purchase in our store.

PRIMARY DIVISION - all years up to Grade 6

ALUM Category

<u>PLACE</u>	<u>Student(s) (First Name only)</u>	<u>School Name</u>	<u>STATE</u>
1st Place	Aidan	Good Shepherd Lutheran College	NT
2nd Place	Natalie	Good Shepherd Lutheran College	NT
3rd Place	Daisy	Good Shepherd Lutheran College	NT
Highly Commended	Darleen Kiana Jane	Covenant Christian School	ACT
Highly Commended	Raashee	MacGregor State School	QLD
Highly Commended	Brodie	Table Cape Primary School	TAS
Highly Commended	Mya	Table Cape Primary School	TAS
Highly Commended	Taj	Table Cape Primary School	TAS

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PRIMARY DIVISION – all years up to Grade 6

OPEN Category

<u>PLACE</u>	<u>Student(s) (First Name only)</u>	<u>School Name</u>	<u>Substance</u>	<u>STATE</u>
1st Place	Roland	Covenant Christian School	Copper Sulfate	ACT
2nd Place	Xavier	Sutton Public School	Copper Sulfate	NSW
3rd Place	Daniel	Covenant Christian School	Chrome Alum	ACT
Highly Commended	Angus	Paramatta West Public School	Copper Sulfate	NSW
Highly Commended	Eric	Paramatta West Public School	Copper Sulfate	NSW

SECONDARY DIVISION – Grades 7 - 12

ALUM Category

<u>PLACE</u>	<u>Student(s) (First Name only)</u>	<u>School Name</u>	<u>STATE</u>
1st Place	Bradley	Good Shepherd Lutheran College	NT
2nd Place	Lauren Grace Hannah	Mt Saint Michael's College	QLD
3rd Place	Mia Emilija Qiaoxin (Jenna)	Mamre Anglican School	NSW
Highly Commended	Taeho	Covenant Christian School	ACT
Highly Commended	Taylor	Good Shepherd Lutheran College	NT
Highly Commended	Travis	Good Shepherd Lutheran College	NT
Highly Commended	Alice	Toolooa State High School	QLD
Highly Commended	Indigenous Crystal Team	Toolooa State High School	QLD

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SECONDARY DIVISION – Grades 7 - 12

OPEN Category

<u>PLACE</u>	<u>Student(s) (First Name only)</u>	<u>School Name</u>	<u>Substance</u>	<u>STATE</u>
1st Place	Annalies	Covenant Christian School	Chrome Alum	ACT
2nd Place	Jiahuan	Covenant Christian School	Copper Sulfate	ACT
3rd Place	Lauren Grace Hannah	Mt Saint Michael's College	Copper Sulfate	QLD
Highly Commended	Paris Ali Lara	Mt Saint Michael's College	Copper Sulfate	QLD
Highly Commended	Cody Rahil Prodyoto	Sunnybank State High School	Chrome Alum	QLD
Highly Commended	Ah-Young Ruiyan	The Illawara Grammar School	Copper Sulfate	NSW
Highly Commended	Tisaranee Caylee Kavish	Wyndham College	Chrome Alum	NSW



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FINALISTS

PRIMARY DIVISION - all years up to Grade 6

ALUM Category

<u>STATE</u>	<u>Student(s)</u> (First Name only)	<u>School Name</u>
ACT	Jaden	Covenant Christian School
ACT	Regan Abigail	Covenant Christian School
NSW	Tahlia	Lakes Grammar
NSW	Tatiana	Lakes Grammar
NSW	Brian	Paramatta West Public School
NSW	Chloe	Paramatta West Public School
NSW	Salaar	Paramatta West Public School
NSW	Seki	Paramatta West Public School
QLD	Chandraeesh	Macgregor State School
QLD	Josephine	Macgregor State School
QLD	Vincent	Macgregor State School
QLD	Holly	St Joseph's Catholic Primary School North Mackay
QLD	Sylvie	St Joseph's Catholic Primary School North Mackay
TAS	Ruby	Montello Primary School
TAS	Ryan	Montello Primary School
TAS	Xavier	Montello Primary School
TAS	Harland	Table Cape Primary School
VIC	<i>Name of student/s not published</i>	Lilydale Primary School
VIC	Noah	Maharishi School
VIC	Katerina	Maharishi School
VIC	Samaya	Maharishi School
VIC	Tristan	Maharishi School
VIC	Year 2	St Catherine's School
VIC	Grade 5/6	Tintern Grammar

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SECONDARY DIVISION - Grades 7 – 12 ALUM Category

<u>STATE</u>	<u>Student (s) (First Name Only)</u>	<u>School Name</u>
ACT	Emily	Alfred Deakin High School
ACT	Jill	Alfred Deakin High School
ACT	Rowan	Alfred Deakin High School
ACT	James	Covenant Christian School
ACT	Olivia Angela	Covenant Christian School
ACT	Taeho	Covenant Christian School
ACT	Brooke Kobold Siobhan	Lake Tugueranong College
ACT	Monika Yosif Bakal	Lake Tugueranong College
ACT	Sophie Rohan Connor	Lake Tugueranong College
NSW	Silby Zoe Caitlin	Georges River College Peakhurst
NSW	Clare	PLC Sydney
NSW	Abhi Annie Yumi	Redlands
NSW	Abhilek	Wollemi College
NSW	Nicholas	Wollemi College
NSW	Lenin Elvis Kurt	Wollongong High School of the Performing Arts
QLD	Alicia Samantha Keira	Mt Saint Michael's College
QLD	Maya	Mt Saint Michael's College
QLD	Vandun	Toooloa State High School
TAS	Lily C Lily M Aabha	Ogilvie High School
TAS	Tristan	St James Catholic College
VIC	Travis	Edinburgh College
VIC	Jana Eva	Our Lady of the Sacred Heart College Bentleigh
VIC	<i>Name of student/s not published</i>	Marian College

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SECONDARY DIVISION - Grades 7 – 12

OPEN Category

<u>STATE</u>	<u>Student(s) (First Name Only)</u>	<u>Substance</u>	<u>School Name</u>
ACT	Annalies	Copper Sulfate	Covenant Christian School
NSW	Sam	Copper Sulfate	Parkes High School
NSW	Nhi Seh	Copper Sulfate	The Illawara Grammar School
NSW	Zaynab	Copper Sulfate	The Illawara Grammar School
NSW	Michael Elijah	Copper Sulfate	The King's School
NSW	Kyran	Copper Sulfate	Wollondilly Anglican College
QLD	Alicia Samantha Keira	Copper Sulfate	Mt Saint Michael's College
QLD	Maya	Copper Sulfate	Mt Saint Michael's College
QLD	Aadi	Copper Sulfate	QASMT
QLD	Michelle	Copper Sulfate	QASMT



FIRST PLACE CRYSTAL – PRIMARY DIVISION – ALUM CATEGORY

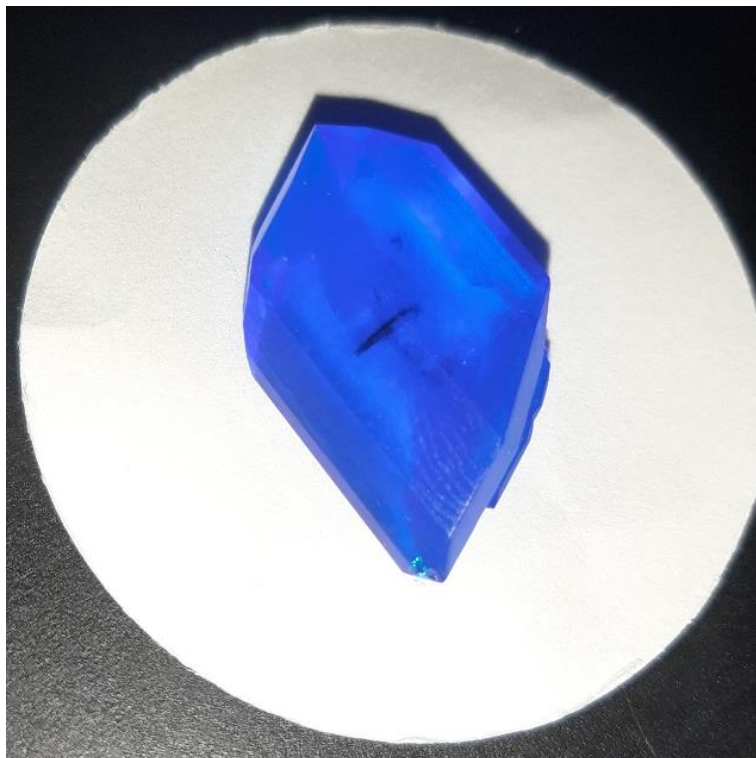


FIRST PLACE CRYSTAL – SECONDARY DIVISION – ALUM CATEGORY





FIRST PLACE CRYSTAL – PRIMARY DIVISION – OPEN CATEGORY



FIRST PLACE CRYSTAL – SECONDARY DIVISION – OPEN CATEGORY

