



Titration Competition

Invitation to register for the 2020 Titration Competition

The Royal Australian Chemical Institute (RACI) Victorian Branch is pleased to invite your school to participate in the 2020 Titration Competition. Over 950 students from Victorian schools participated in the 2019 competition, and this year we hope to beat that record. The overwhelming response to the competition in recent years has been very positive, and we are sure that your students will enjoy the experience.

All secondary schools in Victoria are invited to participate. **The competition is open to all students enrolled in VCE Chemistry or IB Chemistry classes.** The students will compete in their school laboratories in teams of three. The members of a team may be from the same year level or from different year levels. Teams can include exchange students.

By participating in the competition, students have an opportunity to practise their science investigation skills by performing two series of acid-base titrations to determine the concentrations of supplied solutions of a strong base and hence the concentrations of supplied solutions of a weak acid.

Detailed instructions are provided and should be given to all participants. They must work under a time limit of 2 hours:

- 30 minutes to familiarise themselves with the experiment and set up the equipment; and
- 90 minutes to perform the analyses, process their results, check their calculations and report their findings on an online spreadsheet.

All students in a team will be responsible for determining the concentrations of each of three solutions of the weak acid and three solutions of the strong base that are provided to the school. They therefore must work together to agree on their measurements and calculations. Teams will be ranked on how close they get to the true concentration of each solution.

Once they have received the chemicals and online link, schools have until Friday 7th August to compete in the State Competition. The top 10 percent of teams in the State Competition will be invited to compete in the National Competition, which will take place later in the year. Prizes will be awarded to the top three teams in the State Competition and certificates of recognition will be sent to winning schools. The top-placed team in the Victorian Competition will be awarded the inaugural Jenny Sharwood Shield, which has been named by RACI in recognition of Jenny's lifetime service to chemistry education.

Schools going through to the National Competition will be required to carry out a further series of volumetric analyses, usually to determine the amount of a weakly acidic solid present in a solid mixture. Victorian schools have been well represented in the National Competition in the past and will be in competition with schools from across Australia. The top-placed Victorian team in the National Competition will be awarded the St Bernard's College Shield.

Key information

- There is no limit on the number of teams schools can sponsor.
- The entry fee per team is \$45.00.
- **The closing date for entry is Friday 27th March 2020.**

Please [Click Here](#) to Register

You will be sent the online link and information needed to compete, once registration and payment is complete. This will be sent no later than the first week of Term 2.

Solutions will be delivered to participating schools soon after the start of Term 2, so that the competition can be carried out at a time convenient for each school. Results must be submitted online by **Friday 7th August 2020**.

Based on the results achieved at the State level, teams will be notified if they are selected to take part in the National Competition, and will receive the required chemicals and instructions in August. Results for the National Competition are due in late September.

The RACI would like to acknowledge the ongoing support and sponsorship of [Rowe Scientific](#) for the RACI Titration Competition, and recommends that schools consider Rowe for the supply of laboratory equipment and chemicals.

Good luck!