

Northern Territory Titration Competition 2024

Dear Chemistry Teachers,

We are pleased to invite your students (Stage 1 and Stage 2) to take part in the 2024 Northern Territory Titration Competition.

The preliminary round will be run at schools. We will supply the known and unknown samples to schools, based on the number of teams from each school. The final round of the competition will be held at Charles Darwin University (CDU) labs.

Schools are invited to enter Year 11 and 12 students in teams of three into the Titration Competition. The aim of the competition is to encourage students who enjoy Chemistry and to recognise proficiency in the practical side. Leading teams in the preliminary round of the competition will be eligible to enter the Finals of the Competition. Entrants compete in teams of three (3).

Students can conduct the preliminary round of titration competition at their own school. A known amount of potassium hydrogen phthalate (KHP) and an unknown sample of KHP will be provided to schools for the preliminary round.

Details of the competition are as follows:

Dates:

- Preliminary round – Collection Monday/Tuesday the 9th and 10th of September
Schools (teachers or technicians) to collect samples between 1-2 pm from
Yellow 2 lab1, at Casuarina Campus, CDU
Results from teams to be collated and sent back to organiser by Friday 13th September, COB.
- Finals at CDU Casuarina Campus (Yellow 2 lab 2 , 3 and 4) – Saturday 12th October 2024, 9.30am to 12.30pm

Registrations Open: Wednesday 21st of August. Please register online [at the RACI-NT Titration Competition page.](#)



Registrations Close: Wednesday 4th of September, COB.

Entry Fee:

- \$30 per team (\$10 per student)
- \$20 per school if postage required
- An optional team set of 3 unknowns can be purchased for \$10 by schools as spares.

There are no additional costs for students who are successful in gaining a place in the finals.

Entry Fee to be paid online before collection of samples on September 9th, 2024.

Awards:

- All finalists get a gold or silver certificate.
- The gold medallion is awarded on individual excellence, not to a team. To gain a gold medal, the analyst must come within 1% of the true value for the sample.

Equipment/Glassware required per student (to be prepared and set up at your school)

200 mL of approx. 0.02 M NaOH solution (to be standardised)

Pipette Filler

Conical flasks (100 to 250mL) x 2

Beakers (100 to 200 mL) x 3

Volumetric Flasks (100ml) x2

Pipette (20 mL)

Burette (25 or 50 mL)

Burette stand

White tile

Small funnel

Wash bottle

PPE: Safety glasses, Lab coat, Marker pen

Samples we will provide per team (3 students):

3 vials with known amount of KHP (0.3-0.5g)

3 vials with unknown amount of KHP

Since there is no limitation of space, you can enter as many teams as you want, and we will supply the samples in vials based on teams entered (and fee paid). A flat \$20 per school will be charged if you require the samples to be posted to you.

Please be sure to register online by **Wednesday 4th of September, COB** [at the RACI-NT Titration Competition page](#). More details will be sent closer to the competition date. If you have further queries, please email RACI NT Committee <raci-ntcmt@raci.org.au>

**RACI, NT Branch
Executive Committee**