

Davidson Inventors Challenge - Volunteer Mentors

Volunteer Role Descriptor

1. Vacancy reference

DIC/2024/1.0

2. Background

We are seeking chemical engineer volunteers to support secondary schools (particularly state schools in rural or more deprived regions) as part of the annual Davidson Inventors Challenge.

The Davidson Inventors Challenge (DIC) is a collaborative school outreach initiative between Cambridge University Chemical Engineering department and the [Association of Science Technology and Innovation \(ASTI\) in Malaysia](#). It is aimed at Year 11 and 12 students in the UK interested in STEM.

Through a team project, participating students will get to use science, technology, engineering and mathematics (STEM) skills to research a problem and come up with a sustainable and innovative solution to tackle it. For more information about last years' competition see [Davidson Inventors Challenge 2022-2023](#).

Information about this year's finalists can be found [here](#)

Whilst a significant number of teams register for the competition a great many do not proceed due, in part, to a lack of ideas and support. We would like to see more state schools being given the support to submit competitive ideas in 2024.

3. Main duties and responsibilities

The Mentors will:

- support the student teams to come up with realistic ideas
- guide them through the competition including review of the feedback they will receive after their initial submission of ideas
- be available to answer technical questions related to the project idea likely via email

Do I need to have a school already in mind? Ideally yes but we may be able to find a local school if you are keen to volunteer.

4. Appointment method

To apply please register your interest [here](#) before 30 September 2023

5. Period of appointment

Between October 2023 and February 2024

6. Commitment required

What are the time commitments? Ideally in person mentoring of a student team on **at least two** occasions (online engagement can be substituted if 'in person' is not an option). More frequent sessions may be desirable depending on the school.

When? Between October 2023 and February 2024

Time? Dependent on the individual school but most likely after school around 4.00pm

7. Training

In October, the team from Cambridge University will run an online session to explain more about the competition and how you can support. You will also be supplied with an information booklet.

Do I need to be DBS checked? This will depend on the individual school and whether or not a teacher will be present at all times when you are working with the students.

8. Person specification

You will need to be:

- a chemical engineer, either individually or as part of a team of engineers
- be a member (any grade) of the Institution and abide by IChemE's By-laws.

9. Others

Benefits of volunteering

- personal satisfaction that your contribution helps to support and inspire future chemical engineers
- provides networking opportunities
- enhances your own CPD for longer term career development

Expenses

It is not anticipated that this volunteering will incur significant expenses. Volunteers will likely be working with a school within their UK locality or carrying out the role online. Any expenses will need to be agreed in advance.

10. Additional details

Area of interest that relates to the role:	<ul style="list-style-type: none"> ▪ <i>school engagement</i> ▪ <i>promotion of STEM activities</i>
Is the role location specific?	<ul style="list-style-type: none"> ▪ No
Total number of volunteers required for role:	Approx 20
Closing date:	31 October 2023

To apply for this role, please register your interest [here](#)

For any queries please contact Discoverchemeng@icheme.org

For other volunteering queries please contact volunteer@icheme.org

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