Professional Process Safety Engineer (PPSE)
Individual Case Procedure Reviewer (IEng/CEng)

Volunteer Role Descriptor

1. Reference
MQ/ICP/PPSE/1.0

2. Background

The Individual Case Procedure (ICP) assesses potential Chartered and Incorporated Chemical Engineer applicants’ academic knowledge and understanding (educational base) for Professional Process Safety Engineer, Incorporated Engineer (IEng) and Chartered Engineer (CEng) registration. The possible ways of satisfying the educational base requirements are shown at Annex 1.

The new PPSE ICP process will ensure that we provide a flexible, accessible pathway to all those who do not hold an accredited degree that meets in full the requirements of Engineering Council and IChemE at M-standard. Applicants without accredited qualifications will need to submit a Technical Biography which will then allow a more focussed assessment of the applicant’s background knowledge and permit a more tailored request for information against the requirements.

IChemE has set up a new process for PPSE ICP applications, details of which are given in Annex 2. PPSE ICP reviewers are involved in the process to assess the initial Technical Biography submitted by the applicant and later, to assess any Technical Report Questionnaire (TRQ) and to interview the applicant on its contents.

![Figure 1: The PPSE ICP process overview](image)

3. Main duties and responsibilities

IChemE PPSE ICP reviewers are academics or industrialists who give their time voluntarily to represent IChemE. PPSE ICP reviewers will be a Chartered Chemical Engineer or Professional Process Safety Engineer with IChemE at Member or Fellow grade.

PPSE ICP reviewers are required to work in small teams with other PPSE ICP reviewers:

- assess applicants against defined criteria. Discussions and decisions must be objective and comply with IChemE standards and requirements; they must not be based on personal views or prejudice
- assess an applicant’s Technical Biography and documentation and reach a mutual decision whether the applicant meets the educational base requirements against IChemE requirements on Learning Outcomes at Levels B and F to become a Professional Process Safety Engineer.
- where a Technical Report Questionnaire (TRQ) is required, assess, and conduct a TRQ Interview (TRQI) to confirm evidence
- if an applicant’s submission does not meet the requirements, agree with the co-reviewers, and provide feedback, based on the possible outcomes, on what the applicant needs to do to fulfil the requirements
- comply with PPSE ICP procedures and schedules to ensure all applications are dealt with in a timely manner
- communicate with co-reviewer and IChemE administrators
- undertake induction and refresher training as and when required
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Ref: ichem quals volunteer role descriptor PPSE ICP Reviewer v1.0

4. Appointment method

To apply for this role please contact volunteer@icheme.org. Suitably qualified individuals will be invited to complete induction training. Following completion of all training PPSE ICP reviewers will be approved by the ICP Panel.

5. Period of appointment

It is anticipated that PPSE ICP Reviewers will serve a minimum of three years in the role.

6. Commitment required

- expected time commitment: 3-4 hours per month
- expected reports received: No more than 8 PPSE ICP submissions per year. This includes any subsequent resubmissions or Technical Report Questionnaires and Interviews
- turn around: Target review period for each application is 2 weeks for Technical Biography and 2 weeks for the Technical Report Questionnaire.

7. Training

- all new reviewers are required to undertake online induction training and post training assessment
- all reviewers must be trained, and existing reviewers must attend refresher training as required
- other standard volunteer training, eg General Data Protection regulations (GDPR) training, will be required with annual updates

8. Person specification

- current Chartered Chemical Engineer or Professional Process Safety Engineer at Member or Fellow grade
- CEng registered
- PPSE ICP Reviewers, whether academics or from industry, are expected to have some understanding of Higher Education as applied to chemical and process safety engineering.

9. Others

Benefits of volunteering as an PPSE ICP reviewer:

- supports global engineers in their journey to IChemE Chartered Membership and PPSE registration
- maintains the global standards of the chemical and process safety engineering profession and IChemE
- allows an up-to-date understanding of the formation of chemical and process safety engineers and the implications of this for the profession and their employers.
- enhances volunteer’s own CPD for longer term career development and their professionalism in a wider context than their own specific job role.
- exposure to technical developments that may be outside the volunteer’s own experience.
- increased understanding of a range of chemical and process safety engineering applications in various industries.

Expenses for the activities:

This is a volunteer role with no significant expenses likely to be incurred. Exceptionally, any expenses to be claimed should be agreed in advance.
### 10. Additional details

| Area of interest that relates to the role: | education  
|                                           | professional development  
|                                           | membership  
| Is the role location specific?            | No  
| Total number of volunteers required for this role: | 30  

To apply for this role or further information, please contact volunteer@icheme.org, quoting the role and reference number at the top of this document. There is no specific closing date as recruitment is ongoing.

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Date: 04/08/2023
Annex 1: Educational base for Professional Process Safety Engineer Chartered Engineer membership (MIChemE) and Incorporated Engineer (IEng)

Educational base for Professional Process Safety Engineer membership (CEng MIChemE)

The educational base underpinning eligibility for Professional Process Safety Engineer is an IChemE-accredited ‘M-Standard’ degree or equivalent in chemical engineering.

Applicants with an M-standard accredited degree will have met the formal educational requirements for Chartered status membership in full (Standard Route 1 in Table 1 below).

Applicants with an accredited B-Standard degree will normally need to provide evidence of further learning to the equivalent of an M-Standard degree. This further learning can be achieved through completion of a relevant postgraduate (second cycle) qualification accredited to F-standard, such as MSc (Standard Route 2 in Table 1.)

The ICP provides an alternative route (ICP route in Table 1) where the educational base and knowledge gained through other qualifications and experience (the experiential route (on the job)) is assessed and for any gaps identified, further information is requested on these specific areas.

Table 1 Educational base for Professional Process Safety Engineer Membership (CEng MIChemE)

<table>
<thead>
<tr>
<th>Educational base</th>
<th>Qualification for Professional Process Safety Engineer Chartered Membership</th>
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<tbody>
<tr>
<td>Standard Route 1</td>
<td>Accredited IChemE M-Standard degree or existing Chartered Chemical Engineer</td>
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</table>
| Standard Route 2 | • Accredited IChemE B-Standard degree or  
                      • B-Standard degree accredited by any Professional Engineering Institution (PEI) or  
                      • B-Standard degree recognised by the Washington Accord or Engineers Europe (FEANI) |
| ICP Route        | Any qualifications not accredited as above |
|                  | + • Accredited IChemE F-Standard degree in Process Safety |

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Annex 2 to Individual Case Procedure Reviewer
Volunteer Role Descriptor

Annex 2: PPSE Individual Case Procedure (ICP) process

Applicants interested in achieving Professional Process Safety Engineer status who do not hold accredited qualifications that fully meet the required educational base need to have their academic qualifications appraised via the Individual Case Procedure (ICP).

Individual Case Procedure (ICP) application

PPSE ICP reviewers are required to work in pairs or in a team of three to conduct a full and expert review of an applicant’s qualifications against IChemE requirements on learning outcomes at levels B and F, based on guidance and training provided. The reviewer team comprises of at least one academic and usually one member from industry. Once completed, PPSE ICP reviewers must reach agreement and advise whether the applicant meets the educational base requirements.