Continuing Professional Development

CPD evidence submission form

Please read the accompanying guidance notes before completing this form. You may find it helpful to read the examples before you complete the submission form.

IChemE will endeavour to respect the confidentiality of the information provided and your submission will be disclosed only to those IChemE Members dealing directly with the review.

Registrants are requested not to include or attach any company sensitive information within their submission.

Please note – There is hidden spell check functionality available on this form, please ensure you have macros enabled and to activate the spell check populate the date field in Section 3 to spell check the whole document.

<table>
<thead>
<tr>
<th>Family Name</th>
<th>Sandersson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Given Name</td>
<td>Penelope</td>
</tr>
<tr>
<td>IChemE Membership No:</td>
<td>7862515</td>
</tr>
<tr>
<td>Email Address:</td>
<td><a href="mailto:pdsandersson@email.com">pdsandersson@email.com</a></td>
</tr>
<tr>
<td>Registration CPD Evidence is provided for</td>
<td>☒ MIChemE / FIChemE / CEng</td>
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<td>☐ CEnv</td>
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</tbody>
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Section 1 – Status

Do you consider yourself to be professionally active* at this time?

☒ YES – Proceed to Section 2.

☐ NO – I am not professionally active and therefore exempt from the CPD requirements.

Please provide explanatory information of your status in the box below* and proceed to Section 3.

* See guidance notes for more details

Section 2 – CPD evidence

Please complete the table below, detailing the filenames and description of any accompanying documents that you will refer to in your submission. You are requested to include an up to date CV.
Please complete the following parts of the form as outlined in the guidance notes.

If the information is already contained within one of your attachments, there is no need to repeat or copy it into the boxes below, but you should explain where the information will be found. This should be done by clearly stating the filename and location within the attachment where the information is to be found (e.g. page number or section number).

The combination of your responses below is designed to show that you are meeting the IChemE’s CPD requirements. Please refer to the guidance notes for more details.

If using acronyms please use the full name when first mentioned and the acronym you are going to use in brackets.

### Part A – Planning your CPD (Requirement 1)

Please provide an outline of your CPD process, explaining how and when you review previous CPD activities, identify future needs and set your CPD objectives for the forthcoming cycle/period.

It is suggested that your summary is no longer than 300 words.

As a self employed consultant in the paper making industry, my CPD plan is tailored to making sure I have the skills needed to find and attract clients, and to carry out the work that I am contracted to do.

At the end of each year I carry out a review of the work which I have scheduled, or hope to win for the forthcoming year, and identify any gaps in my knowledge / experience that are needed to be filled. I also review what I did in the previous year to see if there is anything that didn’t get completed or needs to be repeated. This is supplemented by a review each time I win a piece of new work, to identify any CPD needs.

Every 6 months, I review my business strategy to identify how I should go about winning new business, and from this I also identify CPD needs, primarily on the business side of my work.

I also need to stay abreast of changes in my industry and therefore carry out general activities – such as attending conferences and exhibitions on a regular and on going basis.

### Part B – Previous CPD plan (Requirement 2)

Please give start and end date of your last completed CPD cycle.

<table>
<thead>
<tr>
<th>File</th>
<th>Description</th>
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<tbody>
<tr>
<td>P-Sanderson-CV.doc</td>
<td>Current CV</td>
</tr>
</tbody>
</table>

Jan – Dec 2015
For this last completed CPD cycle, please summarise the development objectives that you set and where appropriate explain:

- Why did you select those development objectives?
- What specific measures of success did you set for those objectives?
- What activities did you plan to carry out to meet the development objectives and why did you choose them?
- How you would know if you met the objectives you set yourself?

It is suggested that you use no more than 500 words.

There were no previous uncompleted CPD activities from 2014 that needed to be brought forward into 2015.

In January 2015 I had a number of planned jobs for the year, one of which was to carry out a review of metering arrangements at a paper mill, and determine what benefits might be gained from installation of newer technology metering. My awareness of this topic was limited, so I planned to carry out:

i. a literature review on the topic, via online and using past conference papers
ii. visits to a number of vendors of metering technologies to gain a wider understanding of the options available and to identify key contacts to assist me later.

In order to raise my profile within the industry I planned to submit a paper on management of filtration upgrade projects to an industry conference.

I plan to continue to read industry magazines and attend the aforementioned conference as part of maintaining my general industry awareness.

Part C – Reviewing and reflecting on previous CPD undertaken (Requirements 3 & 4)

For each objective provided in your previous CPD plan above, please summarise below the review and reflection you carried out for each objective including information such as:

- What you learnt from the development activities you completed?
- Did you meet the development objectives and any specific measures of success that had been set?
- What benefits you and your organisation gained from the development activities?

It is suggested that you use no more than 500 words.

For the measurement knowledge CPD activity which I planned to carry out, I completed the following:

i. Carried out a literature review and found several on-line papers from previous conferences on the pros and cons of differing technologies which I purchased and reviewed

ii. I made visits to three manufacturers and suppliers of metering and spoke to two more at an equipment exhibition.

By carrying out these activities I was able to successfully take on and deliver the study I had been contracted to do. In doing this work, I significantly increased my knowledge of metering technologies.

My proposed paper was accepted by the conference, however only as a poster. I attended the conference, and whilst showing the poster was able to make multiple contacts and gained leads for new business. This activity has given me the chance to develop my interpersonal skills, and by watching other speakers, I am more confident in submitting papers for future conferences.

As well as the conference mentioned above, I also attended a number of other paper related events, such as equipment shows, which I used to keep me abreast of changes in the industry by listening to presentations, and speaking to suppliers and vendors.
During the second half of the year I was contracted to carry out a review of a client’s biological waste-water treatment facilities. Although I have knowledge of this topic, I needed to carry out research online and spoke to a handful of peers, to update my knowledge and ensure I could carry out the review successfully.

What information did you take from the review and reflection of your previous CPD activities described above, to carry forward into your next CPD plan?

It is recommended that you use no more than 200 words.

In carrying my CPD for 2015 I have increased and developed my knowledge in the areas of metering and biological treatment. I have identified that my analysis of the water treatment plan would have been helped if I had access to a mathematical model that I could use to run multiple simulations quicker than the spreadsheet model which I had built. I have identified a need in 2016 for me to seek out information on such models, identify the most suitable and to become trained to use it.

**Part D – Current CPD plan (Requirement 2)**

<table>
<thead>
<tr>
<th>Please give start and end date of your current CPD cycle.</th>
<th>Jan – Dec 2016</th>
</tr>
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</table>

For the current CPD cycle please summarise the development objectives that you set and where appropriate explain:

- Why did you select those development objectives?
- What specific measures of success did you set for those objectives?
- What activities did you plan to carry out to meet the development objectives and why did you choose them?
- How would you know if you met the objectives you set yourself?

It is suggested that you use no more than 500 words.

Software tool for modeling of waste water treatment. I have been awarded a further contract to review the waste water treatment of two plants owned by the same company that I did the review for in 2015 and so building upon the work I did in 2015 I need to;

i. research the market for potential mathematical software models
ii. select the most suitable model for my needs, taking into account functionality and cost
iii. carry out training in order to become a skilful user.

I have also identified a need to improve the marketing of my company and to raise the awareness of it in the industry. To this end I plan to attend a course/workshop for SMEs to increase my understanding of this topic and help me create a marketing plan that I can start to implement later in 2016.
### Part E – Supporting others (Requirement 5)

What have you done in the last 12 months that has supported the learning and development of others?

It is recommended that you use no more than 200 words.

In the last year I have:

i. showed a poster at a major industry conference and discussed the subject to those that attended.

ii. Mentored a young chemical engineer. I was asked by the technical manager of a firm I regularly do business with, to be the mentor for a young engineer they have hired, as they do not have anyone in-house that can fulfil the role at present.

iii. I gave a talk to the young members group of my local IChemE members group as part of an evening meeting about working as a self-employed consulting and how you go about setting up and running your own business.

### Part F – CPD activity types used

For the objectives you described in Parts B, and work described in Part E above, please fill in the table below to show the mix of activity types that were used.

<table>
<thead>
<tr>
<th>CPD objective/work</th>
<th>Work-based learning</th>
<th>Professional activity</th>
<th>Formal/educational</th>
<th>Self-directed learning</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metering technology awareness</td>
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<tr>
<td>Biological waste water treatment</td>
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<tr>
<td>Presenting poster at conference</td>
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<td>Giving talk to local member group</td>
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<tr>
<td>Mentoring younger engineer</td>
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### Section 3 – Declaration

I hereby agree that this CPD report represents a true account of my continuing professional development process and the information contained in this form is correct.

Please tick the box below, and enter your name and date to indicate your agreement to this declaration.
I agree to the declaration ☒

<table>
<thead>
<tr>
<th>Print Name:</th>
<th>Penelope Sandersson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date*:</td>
<td>24th April 2016</td>
</tr>
</tbody>
</table>

* The date field above has a hidden spell check functionality embedded via a macro, to use this please ensure you have macros enabled and to activate the spell check enter a date above and press the tab button.

Kuala Lumpur - London - Melbourne - Rugby - Singapore - Wellington
Contact details for IChemE global office locations can be found at [www.icheme.org/contactus](http://www.icheme.org/contactus)

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