

# Fellow and Chartered Scientist

## Application Guidance



Independence



Integrity



Professionalism and sound science



# Your pathway to recognition as a Fellow and Chartered Scientist

## The Energy Institute

The Energy Institute is a professional body serving individuals and organisations engaged in all aspects of energy. It is a licensed member of the Engineering Council, Science Council, the Society for the Environment and a registered charity.

## Contents

These guidance notes will assist you in structuring your submission to attain recognition of your energy-related skills, responsible experience and achievements through the Energy Institute as a Fellow and the Science Council as a Chartered Scientist. They comprise:

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# Profile of a Fellow of the Energy Institute and a Chartered Scientist

As a Fellow and Chartered Scientist registrant with the Science Council, you will have:

## Academic requirements

You are required to have completed an accredited scientific Masters qualification or an assessed equivalent. This equivalent can be a combination of:

- A peer-reviewed scientific article
- Records from an assessed work-based learning programme
- A report of your high-level problem-solving experience of project for which you had technical responsibility.

If you have **not** completed a Masters-Level degree in a scientific subject you should provide:

- a) A module breakdown of the degree level qualification that you have completed, transcripts of the content of the modules and a copy of your final year dissertation **or**
- b) Any technical reports that you have been responsible for producing. This should highlight your ability to apply scientific method in reaching a conclusion. Please note that these will be treated in the strictest confidence. You must, however, obtain permission for them to be sent to the Energy Institute **or**
- c) A detailed technical summary of a scientific project that you have managed. You must obtain agreement from the Energy Institute that this will be sufficient prior to commencing the report. Your report, of about 5,000 words and will be assessed through a presentation at a Professional Interview. It should highlight your ability to:
  - Structure a report
  - Communicate effectively
  - Have a depth of knowledge in a particular subject area
  - Use the appropriate scientific methods
  - Analyse results
  - Design solutions and/or make sound recommendations.

## Professional Development

This is the other key part of developing competence. It is how potential Fellows and Chartered Scientists learn to apply their knowledge and understanding, and begin to apply professional judgment. It can happen at the same time as some of the formal education referred to above, for example through an industrial placement during a higher education course, or alongside part-time study.

Anyone seeking registration as a Fellow and Chartered Scientist should maintain a detailed record of their development, responsibilities and experience, verified by superiors or mentors, to provide best evidence for the Professional Review.

A Fellow is someone whose seniority in the industry is attested to by management responsibilities at a strategic level as well as an advanced level of knowledge about and experience in the energy industry. For this reason a Fellow is unlikely to have less than seven years' postgraduate experience with at least five of these being at a senior level.

### Maintaining competence

Candidates applying for registration as a Fellow and Chartered Scientist will be required to show evidence that they have a plan to continue to maintain their competence. This is an important part of recognition as a Chartered Scientist. It is for this reason that Chartered Scientists may only obtain and retain registration if they are members of one of the licensed professional institutions. It is important that candidates seeking registration recognise that this will entail obligations and an ongoing commitment.

### Professional behaviour

Fellows will be expected to observe the requirements of the Code of Conduct of the Energy Institute. We are obliged to respond to allegations of infringement of the code and may suspend or remove membership and registration if proven.

### Profile of a Chartered Scientist

A Chartered Scientist is characterised by his/her ability to develop appropriate solutions to scientific problems, using new or existing technologies, through a combination of high level knowledge, innovation and creativity. A Chartered Scientist is a professional for whom the knowledge and skills acquired in an accredited scientific Masters level degree (or equivalent) is critical to his/her job competence. Continued registration as a Chartered Scientist is dependent upon a mandatory requirement that a record of your professional development is maintained and submitted to the Energy Institute on an annual basis. The requirements for entry are:

- A minimum of 4 years' practical experience – This relates to the application of scientific method to delivering solutions and/or improving overall understanding of a subject;
- 2 years' responsible experience – This relates to being accountable for technical and/or commercial decisions, supervising practitioners and being accountable for processes and outputs;
- A Masters level academic qualification in a scientific subject.

### Assessment Criteria

Your application will be assessed against a series of competencies. The objective of this application form is to enable you to present, by illustrating the depth and breadth of your relevant experiences and achievements, your ability to:

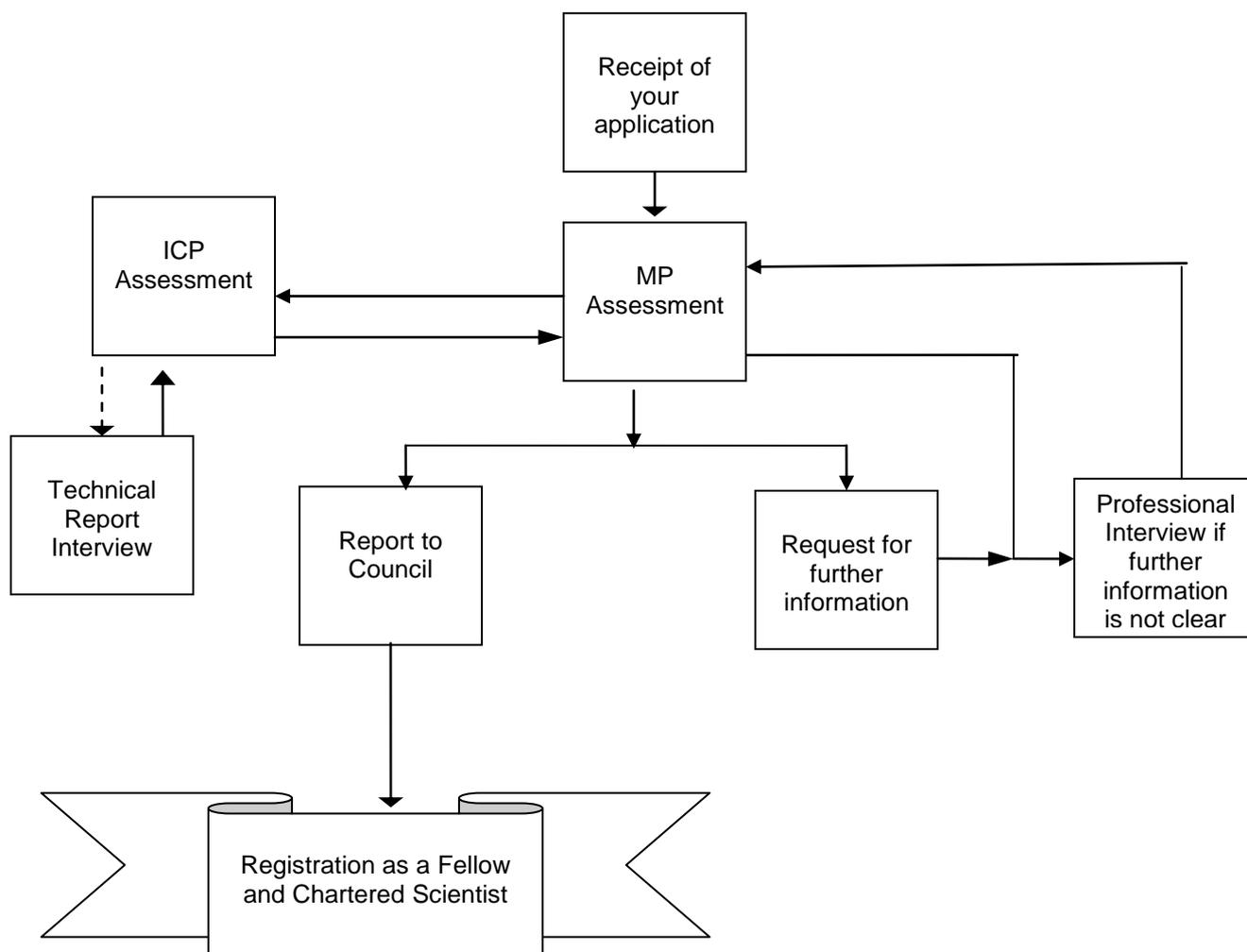
- Deal with complex issues, both systematically and creatively;
- Make sound judgements in the absence of complete data;
- Communicate conclusions clearly to specialist and non specialist audiences;
- Exercise self-direction and originality in solving problems;
- Exercise substantial personal autonomy in planning and implementing tasks at a professional level;
- Continue to advance their knowledge, understanding and competence to a high level.

# The application process

Upon receipt of your submission, the Membership Panel (MP) will conduct a review of your competencies and experience against the assessment criteria for registration as a Fellow and Chartered Scientist. If you have successfully demonstrated how you meet the criteria for registration, a recommendation will be made to the Professional Affairs Committee (PAC) for your registration as a Fellow and Chartered Scientist. Upon approval by the PAC, an Election Letter will be sent to you.

In instances where your application is inclusive, you will be required to provide additional information for review by the Membership Panel. If this additional information does not clarify your responsible experience and relevant achievements you will be required to perform a Professional Interview. The diagram below outlines the process.

If you do not have the appropriate academic base, you will either complete a Technical Report, which may include the need for a supporting Professional Interview. Alternatively, information about your qualifications will be sent to the Individual Case Procedure (ICP) Panel for review.



# Assessment criteria

Your application for recognition as a Fellow and Chartered Scientist will be assessed against the Competence and Commitment criteria listed below. You are required to demonstrate your compliance to the criteria in your **Professional Development Review**.

Information about structuring your Professional Development Review is contained on page 8.

## Standards of competence and commitment for Fellow and Chartered Scientist

**A Fellow and Chartered Scientist** is characterised by his/her ability to develop appropriate solutions to energy related scientific problems, using new or existing technologies, through a combination of high level knowledge, innovation and creativity. A Chartered Scientist is a professional for whom the knowledge and skills acquired in an accredited scientific Masters level degree (or equivalent) is critical to his/her job competence. Continued registration as a Chartered Scientist is dependent upon a mandatory requirement that a record of your professional development is maintained and submitted to the Energy Institute on an annual basis.

**Fellow Chartered Scientists** must be competent throughout their working life, by virtue of their education, training and experience, to:

**A Deal with complex energy related scientific issues, both systematically and creatively, making sound judgements in the absence of complex data and communicating conclusions clearly to specialist and non-specialist audiences.**

	The Standard	Typically in a scientific context this will include the ability and commitment to:
A1	<b>Use a combination of general knowledge, understanding and skills to optimise and engage in the application of existing and emerging energy related science and technology</b>	<ul style="list-style-type: none"> <li>• Identify potential projects and opportunities through a knowledge of the field of practice and current market needs</li> <li>• Conduct appropriate research to enable the design and development of scientific projects/processes</li> <li>• Know and manage personal strengths and weaknesses</li> <li>• Identify the limits of own personal knowledge and skills</li> <li>• Be confident and flexible in dealing with new and changing situations.</li> </ul>
A2	<b>Use theoretical and practical methods in the analysis and solution of problems</b>	<ul style="list-style-type: none"> <li>• Carry out experimental work and/or advise on and manage the work of others</li> <li>• Collect, analyse and evaluate relevant data and offer solutions</li> </ul>

<b>A3</b>	<b>Communicate effectively</b>	<ul style="list-style-type: none"> <li>• Present solutions to technical and non scientific audiences</li> <li>• Communicate with colleagues at all levels</li> <li>• Exchange information and give advice to scientific and non-scientific audiences</li> <li>• Prepare and deliver appropriate solutions</li> <li>• Prepare letter, reports and proposals</li> </ul>
<b>A4</b>	<b>Demonstrate a sound knowledge of the energy scene as it applies to your work and current and future developments</b>	<ul style="list-style-type: none"> <li>• Identify the limits of own personal knowledge and skills</li> <li>• Strive to extend own energy knowledge</li> <li>• Broaden and deepen own knowledge base through research and experimentation</li> </ul>

**B Exercise self-direction and originality in solving problems, and exercise substantial personal autonomy in planning and implementing tasks at a professional level**

	The Standard	Typically in a scientific context this will include the ability and commitment to:
<b>B1</b>	<b>Plan and organise projects effectively</b>	<ul style="list-style-type: none"> <li>• Identify potential projects and opportunities through a knowledge of the energy scene and current market needs</li> <li>• Identify factors affecting project implementation</li> <li>• Ensure necessary resources are in place for effect project implementation</li> <li>• Gather and evaluate feedback, acting where appropriate</li> </ul>
<b>B2</b>	<b>Work effectively in team</b>	<ul style="list-style-type: none"> <li>• Organise and lead work teams, coordinating project activities</li> <li>• Identify, agree and work towards collective goals</li> <li>• Create, maintain and enhance productive working relationships</li> <li>• Be aware of the needs and concerns of others</li> </ul>
<b>B3</b>	<b>Use effective influencing and negotiating skills</b>	<ul style="list-style-type: none"> <li>• Conduct appropriate research to influence the design and development of energy related scientific projects and processes</li> <li>• Have sound knowledge of project costs and the ability to negotiate appropriate project funding</li> </ul>
<b>B4</b>	<b>Demonstrate personal and social skills</b>	<ul style="list-style-type: none"> <li>• Know and manage own emotions, strengths and weaknesses</li> <li>• Be confident and flexible in dealing with new and changing interpersonal situations</li> </ul>

**C Continue to advance their knowledge, understanding and competence to a high level and demonstrate a commitment to CPD**

	The Standard	Typically in a scientific context this will include the ability and commitment to:
<b>C1</b>	<b>Maintains own competence through continuing professional development</b>	<ul style="list-style-type: none"> <li>• Extend own knowledge, understanding and energy related scientific capability</li> <li>• Broaden own knowledge base</li> <li>• Undertake reviews on own development needs</li> <li>• Maintain evidence of professional competence development</li> <li>• Assist others with their own CPD</li> </ul>

**D Demonstrate an understanding and commitment to Health and Safety and environmental issues related to employment**

	The Standard	Typically in a scientific context this will include the ability and commitment to:
<b>D1</b>	<b>Manages and applies safe systems of work using appropriate H&amp;S standards</b>	<ul style="list-style-type: none"> <li>• Operate and act responsibly, taking account of environmental and socio-economic factors</li> <li>• Identify and take responsibility for own obligations for health, safety and welfare issues</li> <li>• Ensure that systems satisfy health, safety and welfare requirements</li> <li>• Develop and implement appropriate hazard identification and risk management systems</li> <li>• Manage, evaluate and improve these systems as appropriate</li> </ul>
<b>D2</b>	<b>Undertake work activities in a way that contributes to sustainable development</b>	<ul style="list-style-type: none"> <li>• Use imagination, creativity and innovation to provide products and services which maintain and enhance the quality of the environment and community, and meet financial objectives</li> <li>• Understand and encourage stakeholder involvement</li> </ul>

**E Comply with the relevant Codes of Conduct**

	The Standard	Typically in a scientific context this will include the ability and commitment to:
<b>E1</b>	<b>Comply with relevant codes of conduct</b>	<ul style="list-style-type: none"> <li>• Comply with the Code of Professional Conduct of the Energy Institute;</li> <li>• Work constructively within all relevant legislation and regulatory frameworks; including social and employment legislation;</li> <li>• Apply professional work ethics</li> </ul>

# Structuring your Professional Development Review (PDR)

Your Professional Development Review (PDR) should provide a detailed overview of your energy related scientific professional experience, achievements and levels of seniority in energy sectors. It should demonstrate your compliance to the **Assessment criteria** listed on page 6. Your PDR should comprise:

## Introduction

- Please outline why you are seeking recognition of **your** energy related scientific experiences through the Energy Institute.
- You should provide an overview of **your** energy related scientific experiences, achievements and levels of seniority.

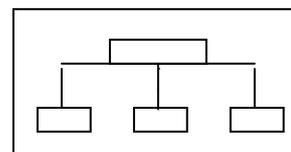
## Professional history

- For each period of employment please provide an insight into your roles and responsibilities as well as your achievements (projects that you have managed, personnel and/or systems that you have developed, and so on). This provides you with an opportunity to demonstrate how you applied your knowledge and understanding of energy related science.
- Please illustrate this section with examples of how you managed energy related projects with emphasis on the nature of the project, size of the project team, budgets and outcome.
- Please mention any technical societies/panels that you belong to with an insight into your achievements. Information of your membership of other professional bodies should also be recorded.
- The PDR should be between 1,000 – 4,000 words in English.
- As annexes you may provide your current roles and responsibilities, list technical/research papers you have authored and provide other information you feel will support your submission.

Professional Development Review	
<b>Introduction</b>	
I am seeking recognition of my scientific energy achievements through the Energy Institute because...	
<b>Professional History</b>	
03/99 – present	
Job title	Employer
I am responsible for....	
I have achieved .....	
I achieved this by....	
02/97 – 03/99	
Job title	Employer
I was responsible for	

## Preparing an organisational chart

- An Organisational Chart is a simple diagram that highlights **your position** with your current employer.
- It should clearly display to whom you report and departments / employees that report to you.
- If you work in a large organisation you should display the position of your team, your position and department with an overview of how the department fits into the whole organisation.



# Sponsors' references

- You require two sponsors, at an equivalent or higher grade, i.e. Fellow, of Professional Standing (such as your employer / line manager) who are familiar with your field of practise and can vouch and verify your assertions with respect to you knowledge, training and experience.
- Of Professional Standing means “is or could be a member of a professional body or learned society which elects their members through peer review or by examination” The judgement as to whether a sponsor is ‘of professional standing’ is at the discretion of the Membership Panel.
- Sponsors should not be someone who directly reports to you.
- Ideally your sponsors should be current Fellows of the Energy Institute.
- Completed forms can be sent with your application. Alternatively, sponsors may forward their completed forms directly to the Membership Officer.

# Subscription information

- The Fellow application fee is **£60**. This one-off, non-refundable payment does not form part of the annual membership subscription and should be sent with your submission.
- The transfer to Fellow fee (for Energy Institute members transferring to Fellow) is **£50**.
- The Fellow annual subscription fee is **£144**. This will be levied upon completion of the application process.
- The initial Chartered Scientist registration fee with the Science Council is **£30** and the annual Chartered Scientist fee is **£30**, which be levied on completion of the process

# Checklist for completed submissions

**We prefer electronic copies of your application and supporting documentation**  
Prior to submitting your application please ensure that your submission comprises:

- All relevant sections of the application form completed and signed
- PDR and organisational chart
- Sponsors' references – signed with comments
- Signed true and accurate copies of your academic certificates
- Signed true and accurate copy of photographic id showing signature and date of birth
- Relevant application fee / transfer fee / ICP assessment fee – can be paid cheque or credit / debit card


**Please submit your completed electronic application to:**

e: [membership@energyinst.org](mailto:membership@energyinst.org)

Alternatively, please send **four copies** of all documentation to:  
Professional Membership Manager

Energy Institute  
61 New Cavendish Street, London W1G 7AR, UK

t: +44 (0)20 7467 7100  
f: +44 (0)20 7467 7136