An applicant’s guide to becoming a Registered Scientist

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1. Introduction

The Royal Society of Chemistry (RSC) can award five professional designations: Chartered Chemist (CChem), Chartered Scientist (CSci), Chartered Science Teacher (CSciTeach), Registered Scientist (RSci) and Registered Science Technician (RSciTech). We have been granted the license by the Science Council to award CSci, CSciTeach, RSci and RSciTech. This guide contains everything you need to know to become a Registered Scientist.

RSci entry standards are based on the following;
• knowledge and understanding of chemical topics;
• professional competence and commitment to professional ethics; and
• professional conduct and continuing professional development (CPD).

Work-Based Awards

The registers are work-based professional awards which provide recognition for your contribution to the chemical sciences beyond qualifications. Learning does not stop at the last exam you took, and you are continually developing throughout your career. These awards provide peer-reviewed recognition for all the other skills which make you a successful contributor at work.

The registers are open to all those who can demonstrate they have undertaken appropriate work-based chemical science learning, regardless of their academic background.

You must submit a completed application form along with copies of your qualification certificates and your current curriculum vitae (CV).

What if I don’t have the right experience?

Affiliate members who do not have the required experience or qualifications may be eligible to apply for Registered Science Technician (RSciTech). If we feel you have the appropriate experience we may also recommend that you register for Chartered Chemist (CChem) or Chartered Scientist (CSci) status.

More information can be found online at the Science Council: http://www.professionalregisters.org
And on our website http://www.rsc.li/registers.
2. What is a Registered Scientist (RSci)?

The RSci register is owned by the Science Council and is a professional award providing recognition for those working in technical scientist roles. The RSci designation provides recognition in its own right but can also form a part of professional development towards chartered status.

Gaining RSci will prove that you have:

- demonstrated your professionalism to employers, colleagues and clients;
- transferable skills that allow you to work across different science sectors;
- built on your academic achievements and developed professional skills in a work environment;
- gained knowledge and awareness of your chosen area of the sciences;
- developed strong scientific skills and are committed to improving them;
- shown personal and professional integrity; and
- committed to developing your career, as well as advancing excellence in the sciences.

3. Eligibility requirements

To be eligible, you will be currently working in a chemical science based role.

Applications to become a Registered Scientist through the Royal Society of Chemistry are open to Affiliate and Associate Members (AMRSC) who demonstrate, through reflective statements, that they satisfy the required competences set out by the Science Council (see Section 5).

You will be working to or qualified to at least level 5 of the Qualification and Credit Framework QCF.

- Examples of qualifications at this level include Scottish and National Vocational Qualifications at level 4, Higher National Diplomas, Foundation degrees, Bachelor’s degrees and those completing a Masters in Chemistry degree with a year in industry.

I don’t have those types of qualifications, can I still become RSci?

Registered Scientist status is also available to scientists working in a chemical science environment who have considerable experience in the workplace, but do not hold formal chemical science qualifications or who have not previously had the opportunity to access AMRSC.

If you do not have qualifications at QCF level 5, then your experience gathered through your role is used to determine if you are working at the appropriate level. Therefore it is important to include in your CV as much information as you can about your current and previous roles and responsibilities, including any achievements.

A quick check tool from the Science Council is available online to help you determine if you are eligible, based on your education level and experience: http://www.professionalregisters.org/isthisforme

4. The application process and role of the supporter

Step 1
First, you become an Associate or Affiliate member of the RSC. Your affiliate membership may be upgraded to AMRSC if you are successful and have demonstrated that you work in the chemical science sector.

Step 2
Identify someone to be your supporter.

Step 3
Work with your supporter to complete the application form. You will complete the competence boxes, in which you describe how you have met each competence criteria. Your supporter will write a supportive statement. Make sure you sign the form (electronic signatures are accepted), and tick the declaration.

The form is available to download from the RSC website http://www.rsc.org/careers/cpd/practising-scientists/

Step 4
Email the completed form and your CV to the accreditation and qualifications team at registers@rsc.org. You may be asked for more information at this stage if we feel that your application is not yet of the required standard.

Step 5
Your application is reviewed by a panel of experienced fellows of the Royal Society of Chemistry (our Admissions Committee). Members of this committee come from many different disciplines in the chemical science sector, and are from both academia and industry.

Step 6
We will inform you of the decision. If successful, you will be presented with a certificate and will be permitted to use the letters RSci after your name.

If assessment determines that an applicant is not yet at the required level for RSci, they may be encouraged to apply to the Registered Science Technician (RSciTech) register instead, and work towards RSci for the future.

If you are a current applicant or just considering RSci and would like more information or support, please contact us.

Email: registers@rsc.org
Phone: 01223 432141
The form
The form lists the competences set out by the Science Council that must be met for the award of RSci and you should provide examples of how your
day-to-day work and training satisfies these requirements. One in-depth example of how you meet each particular competence as detailed on the form,
is required.
It is helpful to consider the STAR format for providing answers;

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<tr>
<th>S</th>
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<th>A</th>
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<tr>
<td>Set the situation</td>
<td>Describe the task and issue that you addressed</td>
<td>Describe the action you took</td>
<td>Tell us what the result of your actions was</td>
</tr>
</tbody>
</table>

It is recommended that you use the same example for no more than 3 competences. However, you should ensure you are clear on how each example
applies to the specific competence you are addressing.

The role of your supporter
Your supporter should be a senior colleague that is very familiar with your work. This person is usually your line manager. The role of the supporter is to
provide guidance to the applicant in completing the form and to confirm that the applicant is meeting or exceeding the competences.

It is vital that the supporter provides a specific comment in support of each of the five competence areas before the completed application is returned to
the RSC. They must also sign the declaration.

Guidance is available at any stage of the process, to both applicants and supporters, from a member of our Accreditation and Qualifications team.

Fees: the application fee for registration is £30, and there is an annual fee of £30 payable to maintain RSci, which will be collected together with your
membership subscription fees.

Email: registers@rsc.org
Phone: 01223 432141

5. The competences
The 16 competences which are set out by the Science Council and must be satisfied for the award of RSci are split into five categories as follows.

A: Application of knowledge and understanding:
Identify and use relevant scientific understanding, methods and skills to address broadly-defined, complex problems
A1: Develop, maintain and extend a sound theoretical approach to application of science and technology in practice
A2: Apply underlying scientific concepts, principles and techniques in the context of new and different areas of work
A3: Analyse, interpret and evaluate relevant scientific information, concepts and ideas and to propose solutions to problems

B: Personal responsibility:
Exercise personal responsibility in planning and implementing tasks
B1: Work autonomously while recognising limits of scope of practice
B2: Take responsibility for safe working practices and contribute to their evaluation and improvement
B3: Promote and ensure the application of quality standards
B4: Take responsibility for planning and developing courses of action as well as exercising autonomy and judgement within broad parameters

C: Interpersonal skills:
Demonstrate effective communication and interpersonal skills
C1: Demonstrate effective and appropriate communication skills
C2: Demonstrate interpersonal and behavioural skills
C3: Demonstrate productive working relationships and an ability to resolve problems

D: Professional practice:
Apply appropriate theoretical and practical methods
D1: Identify, review and select scientific techniques, procedures and methods to undertake tasks
D2: Contribute to the organisation of tasks and resources
D3: Participate in the design, development and implementation of solutions
D4: Contribute to continuous performance improvement

E: Professional standards:
Demonstrate a personal commitment to professional standards
E1: Comply with relevant codes of conduct and practice
E2: Maintain and enhance competence in own area of practice through professional development activity
6. What to include for your competences

For each competence statement, you need to write clear examples of the role that you play or the contribution that you make to a particular task or activity. To provide your examples with sufficient depth, it might be useful to explain what you did, how you went about it and why you did it. Your examples should be from within the last 3 years.

The following examples are provided by the Science Council

A: Application of knowledge and understanding
Identify and use relevant scientific understanding, methods and skills to complete tasks and address well defined problems

A1: Develop, maintain and extend a sound theoretical approach to application of science and technology in practice
Show that you have a sound theoretical understanding of the area in which you work and that you also keep up-to-date with developments in your field and are able to understand and apply new developments to your area of work. Examples include how you:
• take part in a journal or publication review group within the workplace;
• suggest updates to the way in which designs, prototypes, processes, programmes, experiments or procedures are approached and carried out based upon new knowledge of technology or underlying theoretical principles; and
• undertake further academic, vocational, self-study or technical training in your current field of work.

A2: Apply underlying scientific concepts, principles and techniques in the context of new and different areas of work
Explain the major reasons for undertaking new and different work. Examples include how you:
• work in a new subject, in a different discipline, or with new material. You should be able to explain in technical terms the main components, elements, tools or materials involved and why you are carrying out the new work;
• participate in performing a new procedure, process, or design; you will explain from a technical perspective why you are using this, and why it is relevant to the new area of work; and
• use a design or experimental model for new or different purposes; you will explain why you are using that model, how you are using it and what the results mean.

A3: Analyse, interpret and evaluate relevant scientific and technology information, concepts and ideas and to propose solutions to problems
You will describe how you observe the results or examples from your work and that of others and explain their relevance. How you are able to review the work and ideas of others and propose ways in which problems/difficulties may be overcome. Examples include how you:
• enable others to be able to analyse and interpret their work and help find solutions to problems;
• review a number of relevant literature, manuals, or designs, and present your findings to others and
• develop new methods based on information or outcomes from previous work by others; and or yourself.

B: Personal Responsibility
Exercise personal responsibility in planning and implementing tasks according to prescribed protocols

B1: Work autonomously while recognising limits of scope of practice
You show how you work with no supervision for certain key tasks, experiments or procedures associated with your role, whilst understanding when you need to seek input from either your supervisor or others.
• You should be able to explain how you carry out your work with little direct input from your line manager. You will describe how you report your results back in detail to them.

B2: Take responsibility for safe working practices and contribute to their evaluation and improvement
Describe how you accept responsibility for working safely and how you may be responsible for the creation and communication of some of the following:
• risk assessments associated with your work;
• relevant Health and Safety regulations, e.g. COSHH, Noise, Manual Handling, DSE;
• relevant Home Office Licences;
• safety training courses you have successfully completed for your laboratory role;
• any monitoring of safety within your work, e.g. for radioactivity, chemical exposure;
• safety equipment and control measures necessary to work safely and protect others; and
• carrying out safety inspections of premises and equipment, producing reports and making recommendations.
You may also be responsible for an aspect of ‘safety monitoring or training’ and you should include a description of this.

B3: Promote and ensure the application of quality standards
Show how you are aware of the quality standards necessary for the work being carried out by you and others. You will give examples of how you promote these standards, and ensure that they are applied. Examples include:
• producing and communicating protocol standards (such as good laboratory, workshop or design practice);
• training others to recognise when something has not been carried out correctly and explain the impact this could have;
• contributing to the analysis of your own and others’ work and explain the impact of good and bad data and outcomes; and
• recognising when your own and others’ work needs to be repeated or the methodology updated. You will be able to communicate the reasons for this in terms of reproducibility or quality standards for example.

B4: Take responsibility for planning and developing courses of action as well as exercising autonomy and judgement within broad parameters
Describe why and how you accept responsibility for planning and developing relevant courses of action within the required time frame. Your example should demonstrate that you are able to do this with no supervision using your own judgement within the parameters of your broader role. Examples include:
• devising contingency plans in the case of a safety breach (e.g. spillage of radioactive material);
• assessing the risks of equipment and plant failure on experiments, production, and procedures and how to deal with such situations;
• developing and planning training of personnel to cover essential tasks in the event of staff absence;
• determining which equipment/machine/tool needs regular maintenance and servicing and planning the timetable and personnel involved; and
• understanding what must be undertaken in terms of housekeeping in the laboratory/workshop/section, planning and developing appropriate methods and timetables to meet the requirements.
C: Interpersonal Skills
Demonstrate effective communication and interpersonal skills

C1: Demonstrate effective and appropriate communication skills
Show effective and appropriate communication using oral, written and electronic means. Examples include:
• discussing and agreeing objectives with your supervisor;
• discussing and agreeing objectives in team meetings;
• giving presentations of your work or other aspects of lab work (e.g. safety updates, method updates) to your supervisor and team;
• preparing written reports on your work;
• training others about procedures or protocols;
• playing a part in staff development (e.g. carry our appraisals or staff reviews); and
• carrying out induction training.

C2: Demonstrate interpersonal and behavioural skills
Describe the skills that enhance your ability to interact with colleagues in the work setting. In these situations it may be appropriate to discuss these with your supervisor. You will show how you ensure your method of communication is appropriate. Examples include:
• interacting with students or trainees face to face;
• interacting with other professionals such as researchers, technicians, administrators, and other members of staff; and
• interacting with external colleagues (such as manufacturers, suppliers, couriers, designers etc).

C3: Demonstrate productive working relationships and an ability to resolve problems
Show how, when working with others, you demonstrate that you develop positive working relationships and resolved conflict. Your example should include how those working relationships were effective in resolving problems. For instance you may:
• be a member of a committee/group that is tasked with a particular safety aspect of the job and be able to demonstrate that together you made a difference that was useful and effective in the workplace;
• liaise with other groups within your organisation to effectively deal with problems (e.g. lack of or demand for training in a particular area); and
• be part of working group tasked with addressing specific problems or the need for change.

D: Professional Practice
Apply appropriate theoretical and practical methods

D1: Identify, review and select scientific techniques, procedures and methods to undertake tasks
Give an example of work that you have undertaken highlighting where and why the method used was chosen as the best or most relevant one to use. This might include:
• a review of method - why is this one the best compared to others that are available;
• cost effectiveness;
• time taken; and
• IT considerations.

D2: Contribute to the organisation of tasks and resources
Provide examples of how you have contributed to the running of the laboratory, workshop, section and related areas. Examples include:
• organisation of safety checks and inspections;
• ordering equipment, software, and materials;
• organisation of a rota for cleaning, maintenance, or machine time;
• organisation of human and physical resources when an issue arises; and
• organisation of statutory inspections, external/internal servicing, and maintenance of equipment or infrastructure.

D3: Participate in the design, development and implementation of solutions
This means that you can give an example of ‘problem solving’ that describes your specific role in helping to overcome a specific issue. For instance it might mean that a process, programme, design, assay, or method suddenly stops working and you play a central part in finding out the reason why. Your example should show what your role was in understanding the problem and what your contribution achieved.

D4: Contribute to continuous performance improvement
Show how you are aware of progress in your area and seek ways of improving the efficiency of your work. You will describe how you discuss the strategy for achieving this with your supervisor. Examples include using new and improved methods, new ways to increase throughput, or ways to increase cost-effectiveness. Examples include:
• taking part in staff reviews;
• working within time frames and using SMART objectives;
• contributing to operational plans;
• looking for cheaper resources;
• working within a budget; and
• playing a role in procurement management.

E: Professional Standards
Demonstrate a personal commitment to professional standards

E1: Comply with relevant codes of conduct and practice
Describe how you manage your work within all relevant legislative, regulatory and local requirements, frameworks such as Health and Safety Legislation, Home Office Regulations, Good Laboratory Practice (GLP), local Codes of Practice, etc.
Tell us:
• how you comply with the Royal Society of Chemistry’s code of conduct;
• what other codes of conduct do you adhere to in the workplace; and
• give a brief explanation of why it is important that you follow these codes of conduct.
E2: Maintain and enhance competence in own area of practice through professional development activity
This means that you undertake activities to enhance your competence in your own area of practice i.e. Continuing Professional Development (CPD). This can include:
• reading about your subject area to improve your own competence in it;
• achieving any qualifications relevant to your role;
• any training you have been on;
• any outreach activities you have been involved with; and
• any mentoring you have done of others such as new starters.

Note that you will need to comply with the Science Council CPD Standards for Registrants and you will be asked by the Royal Society of Chemistry from time to time to demonstrate evidence that you meet the standards via the CPD revalidation return.