



An applicant's guide to the shortened route to becoming a Chartered Scientist (CSci)

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1. WHAT IS THE SHORT ROUTE TO CHARTERED SCIENTIST (CSci)?

Chartered Scientist (CSci) is the hallmark of those practising science across disciplines. Not only do they demonstrate effective leadership, they use their specialist knowledge and broader scientific understanding to develop and improve the application of science and technology by scoping, planning and managing multifaceted projects. The Royal Society of Chemistry and the Science Council understand that many of these qualities are demonstrated by Chartered Chemist (CChem) status. This is why we are working together to offer eligible CChems a shorter route to gaining CSci, where they will only have to evidence the competencies not covered by their CChem application

This route reduces the number of competencies required for a CSci application from 15 to 4, plus a revalidation return in some cases. <u>Furthermore, CChem holders applying for CSci via this route will not have to supply a portfolio of evidence</u>.

You can see the competencies that need to be evidenced in a short application in section 6 of this guide.

By becoming a Chartered Scientist you'll be joining a worldwide community of cross-disciplinary professional scientists, and:

- demonstrate your commitment to maintaining high professional standards
- be entitled to use the designatory letters CSci after your name
- broaden your career potential by demonstrating that you have transferrable skills and are committed to improving them
- elevate your credibility and reputation in your field
- be included in the Science Council's CSci register
- demonstrate personal and professional integrity

2. ELIGIBILITY FOR THE SHORT ROUTE

We have an agreement with the Science Council for CChem holders who meet **all** the following criteria to apply this shortened application route.

CChem gained after January 2001

• currently employed (including part-time, self-employed and consultants) in a role that uses your scientific expertise

3. THE APPLICATION PROCESS

STEP 1

Contact csci@rsc.org to state your interest in this route and confirm your eligibility.

STEP 2

Identify an appropriate supporter and ask them if they would be happy to support your application. Your supporter should be a senior colleague who is very familiar with your work. This person is usually your line manager. The role of your supporter is to provide guidance on completing the form and to confirm that you are meeting or exceeding the competencies.

STEP 3

Work with your supporter to complete the application form. You will provide an example against each competency that demonstrates how you meet the criteria to become CSci. Make sure you sign the form (electronic signatures are accepted), and tick the declaration. If you gained your CChem more than two years ago and have not revalidated your CChem within the past two years, then you must complete section 5: CChem revalidation, within the application form.

STEP 4

Your application will be assessed by two members of the RSC Chartered Scientist Assessor Panel. This may take up to eight weeks. The assessors will share their comments, feedback and recommendation with the team at the RSC, who will forward this on to you as soon as possible. Your application might be accepted, rejected, or the assessors might ask for more information on certain areas of the application. If the assessors would like more information, you will be invited to revise your application accordingly. Once you have submitted your revised application, it will be sent for reassessment. This takes another two weeks.

STEP 5

We will inform you of the outcome of your application. If successful, you will be presented with a certificate and will be permitted to use the letters CSci after your name.

If you have any questions about the process, please email csci@rsc.org.

4. THE ROLE OF YOUR SUPPORTER

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

It is vital that your supporter provides a specific comment in support of each of the two competency areas, and if applicable, your CPD form before the completed application is returned to the RSC. They must also sign the declaration. Your supporter should ideally hold CSci or an equivalent professional registration (e.g. CChem or CEnv) and should ideally be a member of the Royal Society of Chemistry. However, we are aware that some people work in areas where finding a suitable supporter to meet the CSci and member requirements may be problematic. Therefore we apply discretion and consider those who are members of other professional bodies and hold other forms of Chartered Status (e.g. CBiol or CEng). Guidance is available at any stage of the process, to both applicants and supporters, from a member of our Accreditation and Qualifications Team. Please contact **csci@rsc.org** for support.

5. HOW TO WRITE EXAMPLES IN COMPETENCY BASED APPLICATION FORMS

In general, we encourage the use of the SHARE format when writing examples in competency based applications. Each letter in the word 'SHARE' represents a different component of a good competency example. Using this model helps you to make sure that you cover all the key information that the assessors will want to see.

- S Situation: describe the situation, set the scene
- Hindrance: describe the problem or challenge that you needed to overcome, or the task you needed to complete
- Action: describe the action that YOU took to overcome the problem
- R Result: show how the action that you took was the correct one, and describe the outcome
- E Evaluation: how the situation turned out. You could even contrast it with what would have happened had you taken no action or a different course of action

You may find that you don't need to go through each part of the SHARE format in order. You might also combine some components within your narrative, eg the **result and evaluation**, or the **situation and the hindrance**. This isn't a problem, but it's important that each component part is there.

The key thing is that the assessors need to see **specific examples** from your work and understand **your personal level of responsibility and impact** in your workplace. For each competency, you should **focus on describing just one example** and, as a rough guide, you should aim for **somewhere between 200 and 400 words per competency example**. Example must be from your current role and **ideally** will be from within the past two years but **must** be from within the past five years. If you wish to use example from a previous role, please contact the team at **csci@rsc.org**.

In the following table is an example answer that could have been given in an application for CSci based on the SHARE format. We've described how it might have been strengthened to give assessors an accurate impression of how the applicant is working at the required competency level. This increases the chances of the application being successful in the first instance.

If you have any questions about your application, please contact csci@rsc.org

Competency E1 from CSci

Comply with and promote relevant codes of conduct and practice. e.g. how you have applied and promoted the codes of conduct under which you practice and the outcome.

Original example Commentary on what could be improved

I have committed to following the code of conduct and to uphold the highest standards when undertaking my professional activities.

To ensure that I meet these requirements I take the lead for all laboratory related H&S aspects. I am proactive in developing my skills in H&S.

I regularly liaise with all staff to ensure that they understand all associated risk(s) and follow the appropriate laboratory practices described in SOPs and risk assessments. This includes the Head of Operations (who I directly report to) as well as new students/graduates who join the team.

My commitment to ensuring compliance with the RSC code of conduct as well as my proactive mentality, has enabled me to develop and advance my H&S skills and knowledge. It is not clear which code of conduct is described – it needs to be specifically defined

 It would be helpful to know if a specific part of the code is followed eg anything that relates directly to the role. If so, why is that section of the code particularly important?

• In the ACTION section, specific details about a proactive approach is needed

• What is the impact of adherence to this code? How does following this code help colleagues and their work? Improved version of the example, with *changes highlighted* SHARE sections are shown for clarity, but would not be part of the <u>submitted example</u>

[SITUATION] As a member of the RSC, I have committed to following the code of conduct and to uphold the highest standards when undertaking my professional activities.

[SITUATION + HINDRANCE] While I follow the whole code, my role as Head Laboratory Technician means I have to pay particular attention to 'Environment, Health and safety and other legislation'. This states that 'Members must be aware of the general principles of law relating to health and safety and the environment, negligence, discrimination, data protection, and any other law relating to their field of scientific work'. This falls within my professional responsibilities as the Head of Health and Safety (H&S) at my laboratory.

[ACTION] To ensure that I meet these requirements I take the lead for all laboratory related H&S aspects, *from ensuring COSHH compliance for all laboratory occupants, to preparing risk assessments and standard operating procedures (SOP)*. I am proactive in developing my skills in H&S and, as such, *have attended a number of internal H&S courses and obtained the National Examination Board in Occupational Safety and Health (NEBOSH) Certificate in Occupational Health and Safety*. I regularly liaise with all staff to ensure that they understand all associated risk(s) and follow the appropriate laboratory practices described in SOPs and risk assessments. This includes the Head of Operations (who I directly report to) as well as new students/graduates who join the team.

[RESULT + EVALUATION] My commitment to ensuring compliance to the RSC code of conduct as well as my proactive mentality, has enabled me to develop and advance my H&S skills and knowledge, *receiving a NEBOSH certificate along the way. This benefits my colleagues and me as I am able to ensure that my team has a safe working environment. This means they are able to carry out their roles effectively, comfortably and responsibly.*

6. COMPETENCY EXAMPLES

The examples below will help you identify potential topics for you to discuss in your report form. They are designed to serve as inspiration rather than a complete answer. To make sure that you provide sufficient detail, write your answers for each competency (around **250-500 words**) in the SHARE format. Chartered Scientists work in many different settings. Here, we have provided examples of some industries and fields that previous applicants have been involved in (it is not an exhaustive list). However, many of these examples can apply to more than one sector so you might find it helpful to look over them all.

	Industry/field			
Competency and description	Water/Food	Technical/Engineering	Scientist	Academic
B4: Oversee the implementation of solutions and demonstrate an understanding of potential and actual impacts of your work on your organisation, on the profession and on the wider community. You should demonstrate an understanding of the potential and actual impacts of your work on your organisation, on the profession, on the general public and on the physical environment.	 Ensuring the appropriate management of waste Designing and implementing waste disposal methods Encouraging recycling of any kind Ensuring environmental standards are maintained Carrying audits and implementing reforms The running of STEM events 	 Finding alternatives for non-environmentally friendly processes or materials Managing resources effectively Identifying alternative testing measures 	 Detailing an incident response evaluation Designing new systems and methods used to maintain standards Investigating new processing techniques and their feasibility 	 Enacting responsible research innovation (RRI) projects Exploring the impact of research beyond the laboratory
C1: Demonstrate the ability to communicate effectively with specialist and non- specialist audiences. <i>A non-specialist audience</i> <i>is anyone working outside</i> of your particular area of <i>expertise, so it would not</i> <i>necessarily be a non-</i> <i>scientist. Your example(s)</i> <i>should indicate how you</i> <i>have communicated in a</i> <i>way that is effective to</i> <i>each type of audience.</i>	 Attendance and involvement in conferences, workshops or similar events Communicating to multi- disciplinary audiences (internal or external) Working with outside conservation trusts or organisations Detail any outreach activities you coordinate Detail how you work with stakeholders How you write and present training/ workshops 	 Training/educating colleagues from different teams Techniques used to communicate, encourage participation and encourage dialogue in meetings Presentation of technical information to a non- technical audience 	 Presenting at meetings, internal or external Presenting at careers events - work in industry Presenting to senior management and/or technology advisory teams 	 Initiating discussion with people from a range of backgrounds Maintaining interest in topics and events out of specialism Appropriate social media communications (eg scientific outreach
C2: Demonstrate effective leadership through the ability to guide, influence, inspire and empathise with others. <i>This competence is about understanding your</i> <i>leadership skills and is</i> <i>not reserved for those in</i> <i>management roles, it is</i> <i>applicable to all.</i>	 Detail your mentoring activities and their results Detail your work with studentship programs and/or school laboratory experience programs Designing and implementing new standards 	 How you maintain multi- disciplinary working relationships How you maintain your team's morale and productivity Line managing someone and encouraging their development Coordinating the merging of teams 	 Mentoring and leadership activities Detail how you initiate collaborations Identifying safety risks and designing solutions 	 Organising departmental/ institutional meetings Interest group coordination (RSC or other) Sourcing external help and technology
C3: Demonstrate the ability to mediate, develop and maintain positive working relationships. You should describe or define the "working relationship" and provide at least one example which focuses on your handling of a challenging interpersonal situation and demonstrates your ability to mediate and achieve a positive outcome. You should consider how through your approach you have changed or modified the behaviour or attitudes of others to positive effect.	 Building a laboratory/ re-purposing a laboratory or work room, taking into consideration a range of requirements (eg new equipment, water supply, ventilation, furniture, power supply) Encourage/enable effective discussions How you manage work relationships How you interact with non-scientific/technical colleagues Initiating lunch and learns or other inter- team development opportunities 	 Your process/technique for mediation between team members or groups Fostering mutually supportive working relationships Encouraging a supportive environment for problem fixing Ways of encouraging inter-department communication 	 Working with academic or other industrial partners Working with clients Inter-disciplinary projects 	 Liaising/working with external stakeholders Preparing for new research groups or laboratory moves How you conduct a laboratory move (room, building or institutions

7. CChem REVALIDATION

What is revalidation?

The requirements for holding a professional award include a commitment to keeping your skills and knowledge up to date through **continuing professional development** (CPD). CPD is any activity which helps you to learn new skills and knowledge or enhance existing skills and knowledge that enable you to develop as a professional. These include activities you undertake in your **day to day role** and additional duties or projects like sustainability initiatives, as well as **training or courses**.

The evidence and examples submitted by CChem holders in this revalidation form should demonstrate that their CPD activities meet the **Science Council's CPD standards**, which state that registrants must:

- 1. Maintain a continuous, up-to-date, accurate and reflective record of their CPD activities and be able to provide supporting evidence if requested;
- 2. Demonstrate that their CPD activities are a mixture of learning activities relevant to current or future practice;
- 3. Seek to ensure that their CPD has benefited the quality of their practice and reflect upon this;
- 4. Seek to ensure that their CPD has benefitted the users of their work (employee, customer, student etc.) and reflect upon this.

The revalidation section is structured to help you reflect on the CPD activities you have undertaken in the past 12 months and how these have helped to maintain or develop your professional skills and knowledge. These can be both formal and informal activities. Your CChem application contained elements of CPD activities, and now we need to know how you have built on that.

The RSC Pathfinder tool, available through your **members area**, can be used throughout the year to document any CPD activities undertaken. This can then be used for reference when completing the revalidation form. The report generated from this can also be submitted in conjunction with the revalidation form.

What is required?

Section one

In this section you list your professional development activities in at least three categories.

You may record **up to four** activities for each category. If you would like to submit a copy of a complete CPD record (for example, from your company or professional body) in conjunction with your application, please do so. This isn't mandatory but can help support your revalidation if available.

All activities provided need to be from within the past 12 months.

For each activity, you should record:

How the CPD activity has benefitted your work.

Explain how each CPD activity has impacted on the quality of your professional practice and / or service delivery. You should aim to write between 100-250 words.

Consider the following questions as prompts:

- how has the activity improved your work or benefitted the profession as a whole?
- has there been any impact/ influence on how you choose learning activities in the future?
- have you learned anything from the activity, and have you acted upon what you learned? If not, why not?

• How the CPD activity has benefitted the users of your work.

Describe how each activity has had a positive impact on the work you carry out, and the people you work with, e.g. colleagues, customers, or students. You should aim to write between 100-250 words.

Consider the following questions as prompts:

- Have any improvements to your work environment been brought about by the activity?
- What positive impact has it had on customers? Customers of your work include those outside your workplace, and those in the workplace who are dependent upon the results of your work
- How will you apply what you have gained from your CPD to help others?
- If you find it helpful, you may indicate which competencies or attributes from your original application for your professional award these activities support. This may help you to identify themes or trends in your CPD activities, which could inform your future CPD plans. The relevant award competencies can be found on the <u>RSC website</u>.

The **categories** for professional development activities are:

a) Work-based learning (e.g. supervising staff/students, training initiatives, report writing)

This section could include listing training or development courses you attended, such as workshops, briefings, master-classes or in-house training. Be specific, what was the course/training about?

Have you contributed to any energy-saving or environmental initiatives within your workplace?

Have you participated in any risk assessment processes, or written any reports?

b) Professional activity (e.g. involvement in a professional body, mentoring)

This can include being mentored, attending personal development sessions and any e-learning.

Have you mentored anyone?

Have you helped to guide any new starters at your workplace?

Have you supported your organisation to become accredited by the RSC?

Have you been involved with the Royal Society of Chemistry (RSC), with events, local sections or interest groups?

Have you done any outreach activities?

Are you involved with any other professional bodies?

c) Formal/Educational (e.g. writing articles/papers, further education, internal procedures/reports)

Are you studying any qualifications that are relevant to your job role? Have you contributed to any documents such as operating procedures and investigation reports?

d) Self-directed learning (e.g. reading journals, reviewing books or articles)

This includes reading **books**, **Chemistry World**, **journals**, and reports from your workplace which can include historical accounts. Self-directed learning can be about the science involved in your work, or about things that have a positive influence in your workplace such as learning about standards/regulations, professional practice, report writing or presentation skills.

e) Other work (e.g. voluntary work, public service)

This category includes all work which has given you skills which you can use in your work.

For example, do you volunteer for any charities?

Have you volunteered for any science-based activities such as the Big Bang fair?

Are you a STEM ambassador? Have you given a talk about your experiences and career so far to students at local schools and colleges?

Do you participate and organise any activities outside of your workplace, such as those to do with hobbies and interests?

Be specific, for all these activities, tell us how they relate to any of your core professional competences such as communication, organisation, networking, problem solving, risk assessment, independent and teamwork skills.

The assessors will be looking for

- specific CPD activities across the professional development categories, with dates and, if relevant, event or publication titles, references etc.
 a mixture of different types of activities
- activities that are spread across the previous 12 months
- your reflection on these activities and the impact they had on your work, for example, what did you learn from these activities; did you make any improvements to your practice as a result of these activities?
- your reflection on how the CPD activities have benefitted the users of your work.

Model example for the revalidation form

Section 1: Professional Development Activities

Include information of up to four activities in any three or more of the five categories (a-e) below. Complete two categories out of five (a-e) if you are retired.

	Approximate date(s)	for this activity available, if requested? If yes, please tick the check box	
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b) Professional activity (e.g. involvement in a professional body, mentoring)

e.g. Became an RSC assessor for professional awards	As part of the process to become an assessor, I had to attend training. This entailed I am now able to	As a result of becoming an award assessor, I am able to support colleagues in	C1: Demonstrate effective and appropriate communication skills	April 2020	√
Taking part in a mentoring scheme with BIG STEM Communicators Network	Through being paired with an experienced mentor with specialism in communication, I have learnt more about event management, project management, and understanding audi- ences. These subjects are directly applicable in my current job, and as this scheme is ongoing with monthly meetings, I have the opportunity to ask questions and secure my knowledge in an area rather than only having one brief inter- action. The mentoring scheme includes group meetings with the mentor, and also peer-to- peer mentoring where I meet with another early-career individual interested in science communication. This has also been valuable to be able to discuss and debrief about the group meetings, cement my understanding, and learn more about other people's experiences within science. Being part of this scheme has benefit- ted my practical skills, but also my confidence in these areas.	As my role includes organising and running events, I have found the mentoring support around engaging audiences and stakeholders particularly useful, which is beneficial for the users of this work who are the same audiences and stakeholders. This included differentiated between beneficiaries, stakeholders and funders, so I would be able to understand each audience to tailor my communication. We have also touched on the different stages of events, and I am organising a conference in September which has been directly influenced by this learning, benefitting the conference speakers, stakeholders, and attendees. Additionally, the peer-to-peer element of the mentoring has coincidentally been with someone who may benefit from my day-to- day role, so I have been able to signpost to RSC support and resources, and also reflect on my career development and offer advice; I have not had this kind of career advisory experience before, so I have found that a useful experience and feel more confident to support others in this area in future, who may be RSC members undertaking retraining, or apprentices or other young audiences.		March-Oct 2022	

8. MAINTAINING CSci STATUS

Everyone who holds CSci status commits to continuous professional development (CPD) to maintain their registered status – it's a mandatory requirement.

CPD enables you to take charge of your career. By keeping track of your professional development you can identify gaps in your knowledge and opportunities to learn new skills. And in a fast-changing world, keeping your skills up to date is essential. To make this easier, we offer our members a <u>free CPD recording tool</u>.

The fee to maintain CSci is paid annually along with your membership renewal fees.

Revalidation

A key requirement for holding chartered status is that you must demonstrate your commitment to continually maintaining and updating your professional expertise and competence. After being awarded CSci, you will be expected to revalidate your status annually by signing a declaration on your membership renewal form to confirm that you are maintaining accurate records of your CPD activities.

Every year a sample of CSci registrants will be asked to submit a CPD return, outlining the CPD activities they have conducted and the subsequent impact of these on the professional practice of both themselves and the users of their work.

Your CPD should be a mixture of learning and development activities. They should include activities in at least three (exceptionally two) of the following categories:

1. Work based learning (eg supervising staff/students, reflective practice)

- 2. Professional activity (eg involvement in a professional body, mentoring)
- 3. Formal/Educational (eg attending training courses, writing articles/papers)
- 4. Self-directed learning (eg reading journals or other relevant material)
- 5. Other (eg voluntary work, public service)

If you would like further advice, please contact us by email

Email: csci@rsc.org