

# Science Council Registers Guidance

RSciTech, RSci, CSci, CSciTeach

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# What is professional registration?

Professional registration allows you to demonstrate your skills, knowledge and commitment to self-development at each stage of your career. The Royal Society of Biology (RSB) provides a range of professional registers for different career paths, and this document goes into detail about the registers we provide under a licence from the Science Council.

The Science Council are a membership organisation representing many different learned societies across the sciences, and they set the requirements for these professional registers; Registered Science Technician, Registered Scientist, Chartered Scientist and Chartered Science Teacher. By joining one of these registers, you are not only recognised by the RSB, but you also join the Science Council's community of registrants.

## What are the benefits?

- **Stand out:** capture on the job experience, show the level of competence you have as a biologist, and demonstrate your dedication to personal development
- **Demonstrate your credentials:** registration shows that you are working to high standards, in particular ethical standards and codes of conduct
- **Join your network:** through your registration, you may have the opportunity to meet new people and get involved with relevant networks and committees
- **Further your career:** with post nominal letters, and access to RSB continuing professional development and training which can help advance your career



*The RSB register has provided me with many benefits. Firstly, recognition of my skills as a professional scientist, in particular for the on-the-job experience alongside qualifications. The process allowed me an opportunity to reflect on the work I have done and has helped me appreciate how much I have learned over the past couple of years"*

**Steph Watkins, RSci**



*I run my own business as a science consultant, trainer and auditor for environmental health and medical laboratory services, and it's very important for me to demonstrate knowledge and commitment to high standards in industry"*

**Susan Alexander, CBiol, CSci**

# Choosing a professional register

The professional register you apply for depends on a few factors; your occupation, the amount of professional experience you have, and how you personally identify as a scientist, technician or teacher. The RSB recommends that you read the competency guidance for each option and reflect upon how you can use your skills and experience to answer each competency. If you need to demonstrate equivalency for your education level (e.g. you wish to apply for CSci but do not have a Level 7 qualification), please contact the team on [registers@rsb.org.uk](mailto:registers@rsb.org.uk) for guidance.

Brief descriptors of each registrant are given below:

<b>Registered Science Technician (RSciTech)</b>	<b>Registered Scientist (RSci)</b>
You work with minimal supervision in technical roles, delivering essential scientific services and support within laboratories, schools, universities, hospitals and many other workplaces. You will have at least a level 3 qualification, be an RSB affiliate member (or one of our professional grades) and have around one – two years of professional experience.	You apply your skills and knowledge whilst working autonomously. You have the ability to resolve problems and identify, review and select appropriate techniques, procedures and methods. You will have at least a level 5 qualification, be an RSB affiliate member (or higher grade), and have over two years of professional experience.
<b>Chartered Scientist (CSci)</b>	<b>Chartered Science Teacher (CSciTeach)</b>
You demonstrate effective leadership, using specialist knowledge and broader scientific understanding to develop and improve the application of science and technology by scoping, planning and managing multifaceted projects. You will have at least a level 7 qualification, be an RSB Member (or Fellow), and over five years of professional experience.	You combine your scientific knowledge and understanding with the skills and expertise required by individuals involved in the practices and advancement of teaching and learning. You will have at least a level 7 qualification, be an RSB Member (or Fellow), and have over five years of professional experience.

# How to apply and application tips

Applications for all RSB registers are taken through our online portal, [mySociety](#). If you are not yet a member of the RSB, please create an account on this site and apply for membership before starting a registers application. If you are already a member, simply log in with your existing details.

The online application will take you through a number of sections to complete, including personal details, employment details, qualification certificates, references, a career overview, and competency questions. You can save the progress on your application, so you do not have to complete it all in one sitting. The main area of your application to focus on is the written competences, and full competency guidance for each register can be found at the end of this document. When you are writing these you should ensure to give clear, structured examples and enough detail that someone outside of your work area can build up a picture of what you do.

## Application tips for competencies

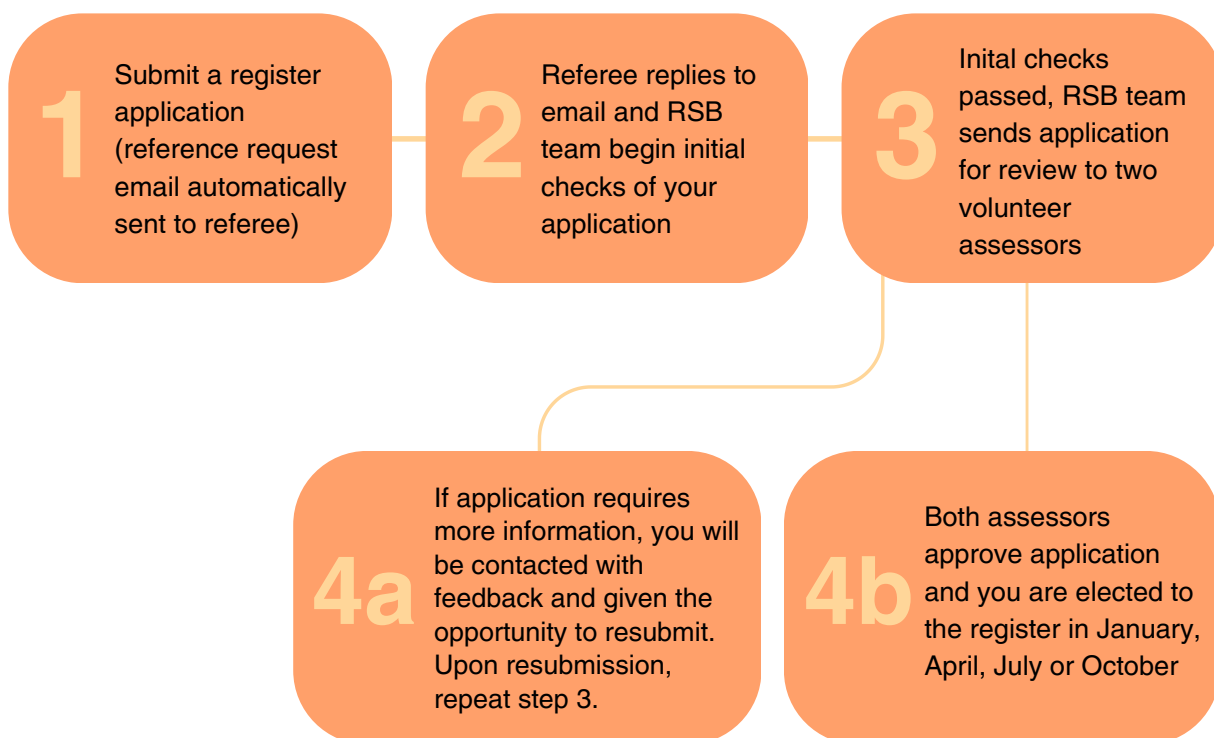
- Write in the 1st person; you will need to give clear examples of the role that you play or the contribution that you made to a particular task or activity.
- You may wish to use the STAR approach to structure your answers; Situation, Task, Action, Result.
- To provide examples with sufficient depth, it might be useful to explain what you did, how you went about it, and why you did it.
- Clearly explain/define any acronyms or abbreviations you use in your application.
- You may use the same task or activity more than once, but you should ensure you are clear on how it applies to the specific competency you are addressing.
- A majority of the examples you provide should be fairly recent (in the last three years) but you can also draw on relevant experience further back in your career.
- There is not a strict word count, but you should be aiming for 300-400 words per answer as a rough guide. If you are much over this, then consider making your answers more concise.

## Use of AI tools in applications

Register competencies are designed to facilitate effective review of an applicant's personal responsibility, competencies and skills within their professional experience.

In this context, the RSB acknowledges that Artificial Intelligence (AI) tools or large language models (such as ChatGPT) may appropriately and ethically be employed as aids in composing a register application (for example, for translation, spelling and grammar/restructuring purposes). Applicants bear responsibility for the originality, validity, and integrity of the content in their application, even when employing AI tools for certain elements. Unethical use of AI (for example, generating generic or untrue evidence statements that don't relate (or pertain) to the applicant's personal experiences) may result in a misconduct investigation.

## Application flow chart



## Example competency answers

While the specific competencies for RSciTech, RSci and CSci vary, clusters A to E typically address similar themes and the strongest answers follow a similar structure. Below, we give real-life examples of model answers from different Science Council registers and competency clusters. These are to be used as a guide, and for full examples, please visit the [Science Council website](#).

We have additional guidance documents with model applications to CSciTeach, either from a Higher Education or schools background. Please email [registers@rsb.org.uk](mailto:registers@rsb.org.uk) to request these documents.

## Cluster A: Application of knowledge and understanding

A2. Review and select appropriate scientific techniques and methods to undertake tasks

### ***Application for RSciTech***

“Within my role, I am looking at the effects of neonicotinoids on bees. I work with honey bees and bumblebees. Both species are different in the ways the studies need to be carried out. Bumblebees like to be close to each other as they are eusocial which is the highest level of organization of animal sociality. This is because they share the care of the brood, each having their own role in the nest, so studies need to be set up with this in mind. Honey bees also prefer to be in contact with other honey bees, but previous studies that have been carried out demonstrate that they act the same if they are caged with dead or living honey bees.

To test appropriate techniques to use to house the bees myself and my team carried out some preliminary research to determine possible options. Previously I had used delipots - plastic pots with lids - and put individual bees in each one, which had a glass feeder containing the neonicotinoids. After the research, I carried out a trial using hair curlers instead of deli pots. The hair curlers were stood in petri dishes so the bees couldn't escape and the glass feeder were in placed in the hair curler then individual bees were placed in the curlers, the thought being they will still be able to touch each other through the gaps. They were grouped within the treatments (i.e. Etoxazole 3.75µg/µl, 0.375 µg/µl, toxic ref, control), but I had bees that managed to escape through the gaps in the curlers, some then crawled into other curlers and some just flew to the windows in the lab.

I spoke to the National bee unit who advised me about Nicot queen rearing cages, which are very similar to hair curlers but are designed to house bees. Nicot queen cages are designed for placing over the queen cells on the 14th day to prevent damage by the first queen out.

Subsequently, I ran another trial using these nicot cages, which were placed on a tray so the bees were all next to each other. No bees escaped. Also instead of the glass feeders I used syringes which had been altered so the bee could get its tongue in to the nib, I cut the nib at a slight angle, these were placed through the top of the cage, and trays were placed in the incubator on a slight angle to minimise the risk of getting air bubbles in the syringe.”

## Cluster B: Personal responsibility

B1. Work autonomously while knowing when to escalate appropriately and recognising limits of scope of practice

### ***Application for RSci***

“I attend daily meetings with my line manager to consider projects-in-flight, developments that may be of interest and workload. I work autonomously on project deliverables and when complete, seek review of my work to be in keeping with the high standards expected by my employer and their clients. An example of where I worked autonomously was when I delivered a Quantitative Microbial Risk Assessment (QMRA) for a project that required a quick turnaround. Based on the project scope, I offered a screening level service to determine risk of recycled water for irrigation use. Due to unavailability of monitoring data, I adapted the QMRA to estimate concentration of pathogens using national epidemiological surveillance data and faecal shedding rates.

However, I also had to make certain assumptions based on best scientific judgment e.g., frequency and magnitude of an exposure event. This project showed my capability to recognise deadlines, challenges, and ability to adapt a deliverable that is still in keeping with the client’s requirements. I have successfully escalated delivery risks to my line manager by expressing my concerns over time and resource pressure for a client. By doing this, additional resources were allocated to the project which allowed the team to complete the project within schedule.

Recently I have also worked autonomously on a project investigating the potential microbial risk of using treated sewage effluent in a district cooling system in an international location. I conducted a literature review of reclaimed water scenarios to identify pathogens and nuisance micro-organisms that may require monitoring to validate treatment and safety of the proposed system. The work was highly innovative as multiple regulations, standards and guidance documents were required to inform a monitoring programme. The scope of the work is limited by the lack of data on an existing system. However, I proposed alternative approaches for assessing microbial risk, such as a QMRA, to sustain future work with the client. Any challenges regarding this project were communicated with my line manager, so that time constraints could be managed, and the client could be updated on potential avenues to progress the project.”



### Cluster C: Interpersonal skills

C2. Demonstrate effective leadership through the ability to guide, influence, inspire and empathise with others

#### ***Application for CSci***

“I have consistently demonstrated effective leadership since my promotion in 2008 and have been scored as “Highly Effective” in my latest job evaluation. My personal ethos is to lead by example, and I would never ask my team to undertake a task that I would not be prepared to do myself. I actively live this work style by supporting my team by undertaking their tasks (such as completing a seed order or setting up a difficult germination test) or working alongside with an individual, if they confide in me that they are struggling, for whatever reason. I am dynamic in my management approach and will react to my highly variable laboratory environment to meet the demands of the job, for example the arrival of a large overseas delivery or a last-minute tour/press event. I feel this inspires my team to behave in the same fashion and they have consistently risen to the occasion to host VIPs, train visitors, write blogs, give presentations and respond to demands, whenever they arise.

An additional example of this would be myself jointly leading the design and development of a Virtual Seed Bank tour for the Millennium Seed Bank with an external film company, which we hope will be accessed by a range of interested groups. I am not naturally comfortable being filmed so could not fully empathise with my team’s nerves, but I split the filming into tasks and worked with the team to allocate them a role that they would feel happy explaining. I also was filmed cleaning and x-raying to demonstrate my commitment and leading by example. Indeed, applying for this award and giving an explanatory talk about Registration and the Royal Society of Biology to the entire Kew Collection Team at the Jodrell Lecture Theatre, I hope demonstrates my willingness to guide, inspire and lead by example.”

## Cluster D: Professional practice

D1. Recognise problems and apply appropriate scientific methods to identify causes and achieve solutions

### ***Application for RSciTech***

“Pipettes are used daily within our lab. The pipettes are Gilson air displacement, which is where the air is taken out the pipette and replaced with the liquid. Sometimes they are used for weights and sometimes they are used for amounts. There have been several occasions of people using the incorrect pipette for a job, i.e. a dilution in a study required 20  $\mu\text{l}$  to be added, but the pipette used was a P200 which has a recommended use of 50  $\mu\text{l}$  - 200  $\mu\text{l}$ . After this error was spotted, I carried out a pipette check on the incorrect pipette, this is where I dispense a certain amount of liquid (water) 3 times and compared the results. The pipette did pass on the lower tolerance.

All pipettes can be used in a tolerance range, if used out of this tolerance it could affect the results of the study and will also be picked up by the Good Laboratory Practice (GLP) audit team. Compliance with the principles of GLP is a legal requirement for test facilities that undertake health and environmental safety studies, and some other testing, that will be submitted to regulatory authorities for the purposes of risk assessment. GLP facilitates the proper conduct of studies, promotes their full and accurate reporting and provides means whereby the validity and integrity of the studies can be verified. As GLP compliance is granted to the facility all work undertaken in a GLP facility (regulatory or not) must adhere to the principles of GLP; however GLP compliance can only be claimed for regulatory studies. After that incident I produced a chart for every pipette in the lab which clearly shows the tolerance for each one.”



## Cluster E: Professionalism

E1. Demonstrate understanding and compliance with relevant codes of conduct

### ***Application for CSci***

“With a background in university research my own product specialty is the ELISA reader range and associated software packs. However, as it is a major part of our product portfolio I also lead on the support of evidential alcometers and ion drug detection equipment. This brings me into close contact with relevant regulators and with the Home Office, as well as end users. Since these are items of equipment used by individuals with almost no scientific background and perhaps minimal training, the risks are high. Individuals may end up in Court or worse depending on the results of analyses run on our machines. This, as well as compliance with relevant codes and standards, is a primary concern for us, and is the driver behind our constant drive for excellence.

I must adhere to the Company Codes of Professional Standards and of Health & Safety, as well as to all HR Codes of Conduct. I am first line manager for a small team and must also ensure their compliance. I must also ensure that my own work, and the work of my group, is compliant with overarching Health & Safety legislation including, among others, COSHH. We all comply with our customers’ relevant Codes and undertakings when visiting and working on their premises, and comply with data protection obligations to secure any personal data that may be held within instrument software systems.

I have been a member of the Royal Society of Biology for over 10 years and am happy to adhere to their rules and Code of Conduct. In accord with the additional expectation of Instrumon Industries (UK) plc, I adhere also to The UK Department for Business, Innovation & Skills (previously the Department of Trade and Industry (DTI)) Universal Ethical Code for Scientists.”

# Registered Science Technician Guidance

Please note, if you are applying as an apprentice, and wish to use the shortened application routes for approved apprentices, please refer to our website guidance.

<b>A) Application of Knowledge and Understanding</b>	
	<b>Explanatory Note</b>
<b>A1: Apply knowledge of underlying concepts and principles associated with your work</b>	Assessors are looking an example of how you apply your knowledge in your day to day work.
<b>A2: Review and select appropriate scientific techniques, procedures and methods to undertake such tasks</b>	Assessors will be looking for evidence to demonstrate that you can explain the underlying reasons for undertaking tasks and why a particular procedure, technique, or process is appropriate.
<b>A3: Interpret and evaluate data and make sound judgements in relation to scientific concepts</b>	This means you can explain how you recognise when your activity appears to have been successfully carried out, or not, and what data, observations, or measurements you are valuating mean, relating it to the underlying principles. You should also be able describe how you present information in an appropriate manner in order to explain your judgement.

## B) Personal Responsibility

	Explanatory Note
<b>B1: Work consistently and effectively with minimal supervision to appropriate standards and protocols, and know when to escalate appropriately</b>	<p>Assessors are looking for an example of how you carry out work with minimal input from your supervisor for certain key tasks, experiments or procedures associated with your role and completing them to the appropriate standards and time frame. We are also looking for evidence that you know when to escalate appropriately and that you are able to make a judgement on when to escalate.</p>
<b>B2: Demonstrate how you apply safe working practices</b>	<p>Assessors will be seeking explanations of safety practices applicable to your area of work and describe how you follow them.</p> <p>For example, if you are responsible for a particular area of safety training or monitoring, then a description of this should be included. It would also be useful here to list any relevant safety training courses that you have attended.</p>
<b>B3: Take responsibility for the quality of your work and the impact on others</b>	<p>Assessors will be looking for evidence which describes how you take responsibility for the quality of the work that you undertake and its impact on others within defined parameters and timelines— including if an activity does not work in the way that you expect.</p> <p>How did you manage your work and that of the person you supervise? Your evidence could include meeting minutes, action plans, project plans etc. If you do not have responsibility for work of others, then there may be instances where your actions have helped the work of others. For instance, you notice that a lab reagent has run out and you order more straight away such that the work of other people in your area is not affected.</p>

<b>C) Interpersonal Skills</b>	
	<b>Explanatory Note</b>
<b>C1: Demonstrate effective and appropriate communication skills</b>	Assessors will be looking for examples to show that you are an effective communicator. The examples can be through appropriate oral, written or electronic means.
<b>C2: Demonstrate effective interpersonal and behavioural skills</b>	Assessors will be looking for evidence that demonstrates skills that you use to interact with colleagues in a constructive way within the work setting. In these situations, it may be appropriate to discuss these with your supervisor, as an external perspective is often very useful in this regard.
<b>C3: Demonstrate an ability to work effectively with others</b>	Assessors will be looking for examples of 'team work', which can be in a large team or on a 1:1 basis. Your example should illustrate how you worked collectively with others, what your specific role was within the team, and what the outcome was.

<b>D) Professional Practice</b>	
	<b>Explanatory Note</b>
<b>D1: Recognise problems and apply appropriate scientific methods to identify causes and achieve solutions</b>	<p>Assessors will be looking for evidence of problem solving.</p> <p>Please give an example where you had a problem in your work and discuss how you recognised it, the methods used to investigate and the outcome.</p>
<b>D2: Demonstrate how you use resources effectively</b>	<p>Assessors will be looking for examples of work that you have undertaken where the method, procedure, programme, equipment, or materials used was chosen as the best (or most relevant) to use. Your example should describe how you planned and organised these to complete the task, and also how you reviewed choices – why the one you selected was the best compared to others that are available.</p>
<b>D3: Participate in continuous process improvement</b>	<p>Assessors will be looking for an example of how you have improved the efficiency of a way of working, for example this could include maintenance of stock levels, improved methods, new ways to increase throughput, health and safety or ways to increase cost-effectiveness.</p>

<b>E) Professional Standards</b>	
	<b>Explanatory Note</b>
<b>E1: Comply with relevant codes of conduct and practice</b>	Assessors will be looking for evidence of the codes of conduct (e.g. your professional body) and practice relevant to your work area and how these are incorporated into your day to day work. For instance it may be compliance with Safety Laws (such as COSHH), GLP guidelines, Home Office Regulations, Environmental Regulations etc.
<b>E2: Maintain and enhance competence in own areas of practice through professional development activity</b>	Assessors will be looking for an example of an activity you have undertaken to enhance your competence in your own area of practice i.e. Continuing Professional Development (CPD) and reflect on its impact on you and others. They are not looking for a list of courses here but evidence of how your CPD benefits your practice and benefits others. Your CPD may include work-based learning, professional activity, formal/educational, self-directed learning.  (Note registrants will need to comply with the Science Council CPD Standards)





# Registered Scientist Guidance

Please note, if you are applying as an apprentice, and wish to use the shortened application routes for approved apprentices, please refer to our website guidance.

<b>A) Application of Knowledge and Understanding</b>	
	<b>Explanatory Note</b>
<b>A1: Apply extended knowledge of underlying concepts and principles associated your area of work</b>	Assessors will be looking for an example of how you have used your extended knowledge within the area in which you work. This will include developments within your field and the ability to understand and apply new developments to your area of work.
<b>A2: Review, evaluate and apply underlying scientific concepts, principles and techniques in the context of new and different areas of work</b>	Assessors will be looking for evidence to demonstrate how you have taken techniques/principles and reviewed, evaluated and applied them in a new area of work.
<b>A3: Analyse, interpret and evaluate data, concepts and ideas and to propose solutions to problems</b>	<p>Assessors will be looking for an example of how you observe and interpret the results from your data to draw conclusions and inform your nextsteps.</p> <p>Your answer could include:</p> <ul style="list-style-type: none"><li>• Descriptions(s) of the methods and techniques you have used to analyse, interpret and evaluate your work.</li><li>• Description(s) of how you have used the above to analyse a problem occurring in your area of work, and informed your next steps.</li></ul>

## B) Personal Responsibility

	Explanatory Note
<b>B1: Work autonomously while knowing when to escalate appropriately and recognising limits of scope of practice</b>	Assessors will be looking for evidence of how you work with no supervision for certain key tasks, experiments or procedures associated with your role within required timeframes. You will also be able to demonstrate your understanding of when you need to seek input from either your supervisor or others, and when to escalate.
<b>B2: Take responsibility for safe and sustainable working practices and contribute to their evaluation and improvement</b>	Assessors will be looking for an example of how you have taken responsibility for working safely and sustainably.
<b>B3: Take responsibility for the quality of your work and also enable others to work to high standards</b>	This means that you can show how you are aware of the quality standards necessary for the work being carried out by you and others. Assessors will be looking for an example of how you enable these standards and ensure that they are applied.

### C) Interpersonal Skills

	<b>Explanatory Note</b>
<b>C1: Demonstrate effective and appropriate communication skills</b>	Assessors will be looking for examples that show you are an effective communicator. Examples can be through appropriate oral, written or electronic means.
<b>C2: Demonstrate effective interpersonal and behavioural skills</b>	Assessors are looking for an example that demonstrates the skills that you use to interact with colleagues in a constructive way within the work setting. In these situations it may be appropriate to discuss these with your supervisor, as an external perspective is often very useful in this regard.
<b>C3: Demonstrate productive working relationships and an ability to resolve problems</b>	Assessors are looking for descriptions of how, when working with others, you are able to demonstrate that you developed positive working relationships and resolved the problem. Your example should demonstrate how those working relationships were effective in resolving problems.

<b>D) Professional Practice</b>	
	<b>Explanatory Note</b>
<b>D1: Identify, review and select scientific techniques procedures and methods to undertake tasks</b>	Assessors will be looking for evidence of where you had to undertake research to identify a new method, procedure or technique in your work. Please give example(s) of how you tackled the work and why the method, procedure or technique used was chosen as the best (or most relevant) to use.
<b>D2: Contribute to the organisation of tasks and resources</b>	Assessors will be looking for evidence of how you have contributed to the running of the laboratory/workshop/section or other types of working environment.
<b>D3: Participate in the design, development and implementation of solutions</b>	<p>Assessors will be looking for an example of 'problem solving' that describes your specific role in helping to overcome a specific problem. For instance, it might mean that a process, programme, design, assay, or method suddenly stops working and you are involved in finding out the reason why.</p> <p>Your example should show what your role was in understanding the problem and what your contribution achieved.</p>
<b>D4: Contribute to continuous process improvement</b>	<p>Assessor will be looking for an example which shows how you are aware of progress in your area and seek ways of improving the efficiency of your work. It should describe how you seek to discuss with your supervisor the strategy for achieving this. For instance, this could include new and improved methods, new ways to increase throughput, or ways to increase cost-effectiveness.</p> <p>Please describe your suggestion and why you thought it necessary, the strategy chosen, your overall role and the outcome of your suggestion.</p>

<b>E) Professional Standards</b>	
	<b>Explanatory Note</b>
<b>E1: Comply with and promote relevant codes of conduct and practice</b>	Assessors will be looking for evidence of the codes of conduct (e.g. your professional body) and practice relevant to your work area and how these are incorporated into your day to day work. For instance it may be compliance with Safety Laws (such as COSHH), GLP guidelines, Home Office Regulations, Environmental Regulations etc.
<b>E2: Maintain and enhance competence in own areas of practice through professional development activity</b>	Assessors will be looking for an example of an activity you have undertaken to enhance your competence in your own area of practice i.e Continuing Professional Development (CPD) and reflect on its impact on you and others. They are not looking for a list of courses here but evidence of how your CPD benefits your practice and benefits others. Your CPD may include work-based learning, professional activity, formal/educational, self-directed learning.  (Note registrants will need to comply with the Science Council CPD Standards)



# Chartered Scientist Guidance

<b>A) Application of Knowledge and Understanding</b>	
	<b>Explanatory Note</b>
<p><b>A1: Demonstrate how you use knowledge, experience, skills and broader scientific understanding to optimise the application of existing and emerging science and technology</b></p>	<p>You should provide sufficient detail here to show your deep understanding of your specialist scientific subject and how you have applied it. Further to this, include any examples of where your broader scientific understanding is applied to your area of practice.</p> <p>Examples could include but are not limited to:</p> <ul style="list-style-type: none"> <li>• Writing and presenting internal paper reports or standards</li> <li>• Conducting appropriate research to facilitate design and development of scientific processes</li> <li>• Writing primary journal articles and patents</li> </ul>
<p><b>A2: Exercise sound judgement and understand principles of uncertainty in complex and unpredictable situations.</b></p>	<p>This competence is asking you to identify and be aware of the limit of your own knowledge and professional competence, to demonstrate an ability to manage your own strengths and weaknesses and to recognise the level of risk attached to your action.</p> <p>Examples could include but are not limited to:</p> <ul style="list-style-type: none"> <li>• When you have reacted and dealt with an unexpected outcome</li> <li>• When you have approached a piece of work or project flexibly and in a novel or different way, or reacted to an unexpected outcome.</li> </ul>
<p><b>A3: Demonstrate critical evaluation of relevant scientific information and concepts to propose solutions to problems</b></p>	<p>Assessors need to see an explanation of how you select the best methodology, subsequent data analysis, evaluations and conclusions you draw and how you overcome any barriers or issues.</p> <p>Examples could include but are not limited to:</p> <ul style="list-style-type: none"> <li>• How you engage in experimental design and testing</li> <li>• How you review relevant literature, databases, manuals or designs</li> <li>• Statistical analysis and numerical modelling</li> </ul>

<b>B) Personal Responsibility</b>	
	<b>Explanatory Note</b>
<b>B1: Work autonomously and take responsibility for the work of self and others</b>	<p>Assessors will be looking for description of your contribution, responsibility and impact on a certain task or project and make it clear what you personally have achieved i.e. "I" not "we".</p> <p>In formulating your answers and giving relevant examples, you should consider the following:</p> <ul style="list-style-type: none"> <li>• How you undertake your work without day-to-day supervision, so you should demonstrate that you are able to achieve this</li> <li>• You should demonstrate your understanding of when you may need to seek guidance from others and how you would obtain this guidance</li> <li>• If you are responsible for managing the work of others, you should clearly describe how you discharge those responsibilities</li> </ul>
<b>B2: Promote, implement and take responsibility for robust policies and protocols relating to health, safety and sustainability</b>	<p>You should demonstrate that you understand the policies and protocols related to health, safety and sustainability that apply to the work you are undertaking giving examples where you have implemented and promoted them and describe any responsibilities that you have related to this.</p> <p>In formulating your answers, you should consider the following:</p> <ul style="list-style-type: none"> <li>• Demonstrate that you know where these policies and protocols are documented, and that you are able to apply them in your practice</li> <li>• How your work contributes to the update and development of your departments/organisations policies and procedures</li> <li>• How you "promote" the awareness and application of these policies and protocols with others, especially peers and more junior colleagues.</li> </ul>

<p><b>B3: Promote and ensure compliance with all relevant regulatory requirements and quality standards.</b></p>	<p>You should demonstrate that you understand which regulatory requirements and quality standards apply to your area of work including data integrity and privacy.</p> <p>In formulating your answers and giving examples, you should consider the following:</p> <ul style="list-style-type: none"> <li>• Describe what you do to ensure that these requirements and standards are being followed for those activities for which you are responsible</li> <li>• Describe how you “promote” the awareness of regulatory requirements and quality standards amongst peers and more junior colleagues.</li> <li>• Describe how you safely store and handle data in line with national and international data protection and cyber security regulations.</li> </ul>
<p><b>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</b></p>	<p>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.</p> <p>Examples could include but are not limited to:</p> <ul style="list-style-type: none"> <li>• Indicating that you are aware of the sensitivity of your work and show how this understanding translates into the ways in which you carry out your work</li> <li>• Showing an awareness of how your profession is portrayed and viewed by the public at large, and how you take responsibility for recognising this in the work you do</li> <li>• Describing how you seek to avoid reputational damage related to the work you carry out</li> <li>• Explaining how you set a good example to others in the way you discharge the responsibilities related to the work you undertake and the benefits to the organisation</li> </ul>



### C) Interpersonal Skills

	<b>Explanatory Note</b>
<b>C1: Demonstrate the ability to communicate effectively with specialist and non-specialist audiences</b>	<p>A non-specialist audience is anyone working outside of your particular area of expertise, so it would not necessarily be a non-scientist.</p> <p>Your example(s) should indicate how you have communicated in a way that is effective to each type of audience.</p> <p>In formulating your answers and giving examples, you should consider the following:</p> <ul style="list-style-type: none"><li>• Not just the content of the message but also the mode or style of delivery that is adapted according to the audience</li><li>• The feedback loop to gauge understanding and improve future communications</li></ul>
<b>C2: Demonstrate effective leadership through the ability to guide, influence, inspire and empathise with others</b>	<p>Assessors need to see an explanation of your understanding of your leadership skill, not limited to those in management roles.</p> <p>Examples could include but are not limited to:</p> <ul style="list-style-type: none"><li>• Experiences of mentoring or coaching you have had; you should consider how effective this was and the overall impact</li><li>• Considering when you have managed change within your organisation or overseen the implementation of any new processes; you should consider how effective this was and the overall impact.</li></ul>
<b>C3: Demonstrate the ability to mediate, develop and maintain positive working relationships</b>	<p>Assessors are looking for an explanation of how you 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.</p> <p>Examples could include but are not limited to:</p> <ul style="list-style-type: none"><li>• How you have managed the merger or integration of different teams</li><li>• Managing working relationships across different departments or organisations</li><li>• Interactions with committees, working groups or other professional body activities</li><li>• How you have managed and resolved a difficult relationship situation between members of a team for which you are responsible</li></ul>

## D) Professional Practice

	<b>Explanatory Note</b>
<b>D1: Demonstrate how you scope, plan and manage projects</b>	<p>Assessors are looking for an example where you have developed a project scope with clearly defined boundaries and project plans. Any problem solving techniques used should be highlighted along with potential benefits of the project to the business. You should make it clear the level of autonomy you had while working on the project, especially when the project is large covering multiple areas and a significant time span. You should show how you contributed to determining the resulting courses of action.</p> <p>Examples could include but are not limited to:</p> <ul style="list-style-type: none"><li>• Lead an operational project utilising resources across several disciplines</li><li>• A change management project aligning processes across sites</li><li>• An industry-wide project establishing guidance on technical standards and requirements</li></ul>
<b>D2: Demonstrate the achievement of desired outcomes with the effective management of resources and risks</b>	<p>Using projects that you have been involved in as examples, you should describe your roles and responsibilities in managing the activities to achieve the desired outcomes.</p> <p>Examples could include but are not limited to:</p> <ul style="list-style-type: none"><li>• How you identify resources (people and/or money) need to undertake activities</li><li>• How you monitor and survey the progress of activities</li><li>• How you identify, evaluate and implement changes that may be needed to ensure the activities are successfully completed</li><li>• How you identify and manage risks that could impact on the successful completion of activities</li></ul>
<b>D3: Take responsibility for continuous improvement within a scientific or technical environment</b>	<p>Assessors are looking for examples that indicate what actions you take to make improvements to your organisation as a whole. This could be through encouraging the continuous development of junior staff or through improvements to processes within the organisation.</p> <p>Examples could include but are not limited to:</p> <ul style="list-style-type: none"><li>• Evaluation of the performance of specialist methods and tools used</li><li>• Development of recommendations for future enhancements or modifications to procedures or working practices in order to achieve performance improvements</li><li>• Description of examples where your actions have led to performance improvement by yourself or others.</li><li>• Identification of lessons learned from activities undertaken by yourself or by others for whom you are responsible, such as what went well, went badly or was lacking</li></ul>

<b>E) Professional Standards</b>	
	<b>Explanatory Note</b>
<b>E1: Comply with and promote relevant codes of conduct and practice</b>	<p>Assessors are looking for comprehensive examples of how you have applied and promoted the codes of conduct under which you practice and the outcome.</p> <p>Examples you may wish to include but are not limited to:</p> <ul style="list-style-type: none"> <li>• Equality</li> <li>• Diversity and inclusion</li> <li>• Reliability and integrity</li> <li>• Ethical practices</li> </ul>
<b>E2: Demonstrate a commitment to professional development through continuing advancement of your own knowledge, understanding and competence</b>	<p>Assessors are looking for specific examples of what you have already done in terms of continuing professional development (CPD) and your plans for the coming year. In your examples you must describe how your engagement in CPD has benefited your practice and the users of your work and reflect on its impact.</p> <p>Examples can be taken from any of the five categories of activity (work based learning, professional activity, formal/educational, self-directed learning and other).</p> <p>Details of and examples CPD can be found <a href="#">here</a>.</p> <p>Assessors are not looking for a list of courses here but evidence and reflection on how your CPD benefits your practice and benefits others.</p> <p>(Note registrants will need to comply with the Science Council CPD Standards)</p>



# Chartered Science Teacher Guidance

<b>A) Application of Knowledge and Understanding</b>	
	<b>Explanatory Note</b>
<b>A1: Demonstrate a broad and up to date knowledge and understanding of science and its impact on your work</b>	<p>In this section you should show how you keep your science subject knowledge up to date and the impact that this has on your teaching and student learning.</p> <p>This can include but is not restricted to:</p> <ul style="list-style-type: none"> <li>• Using information from current developments in science to extend the learning of others</li> </ul>
<b>A2: Demonstrate a broad and up to date knowledge and understanding of teaching, learning and assessment specifically related to science education</b>	<p>In this section you should demonstrate a broad knowledge and understanding of pedagogical techniques in terms of teaching learning and assessment.</p> <p>Typically this may include:</p> <ul style="list-style-type: none"> <li>• Evaluating and implementing different approaches to teaching and learning</li> </ul>
<b>A3: Demonstrate a knowledge and understanding of students and how different contextual factors can impact on their learning in science</b>	<p>In this section you should give an example of how a learning issue was identified and what steps were taken to mitigate its impact on science learning.</p>

<b>B) Personal Responsibility</b>	
	<b>Explanatory Note</b>
<b>B1: Planning coherent programmes of teaching in science that develop investigative skills and are intellectually challenging, emotionally supportive and physically safe</b>	<p>Typically, this may include:</p> <ul style="list-style-type: none"> <li>• Developing, monitoring and evaluating schemes of work appropriate to the students being taught</li> <li>• Maintaining a knowledge of health and safety requirements and enable students to develop the ability to assess risks involved in experimental work</li> <li>• Introducing activities and ideas which challenge the students' understanding of scientific concepts and evaluate their impact</li> <li>• Creating an inclusive and supportive learning environment</li> </ul>
<b>B2: Engaging students in the collection, analysis and evaluation of evidence to extend their scientific knowledge</b>	<p>Typically, this may include:</p> <ul style="list-style-type: none"> <li>• Enabling students to apply ideas to new situations and to suggest alternative interpretations of the evidence available</li> <li>• Demonstrating ways in which scientific principals underpin new technologies</li> </ul>
<b>B3: Developing students' confidence and their ability to understand and use scientific knowledge and processes in a range of scenarios</b>	<p>Typically, this may include:</p> <ul style="list-style-type: none"> <li>• Engaging students in debates about scientific ideas</li> <li>• Helping students to understand the application of science to their everyday life</li> </ul>
<b>B4: Assessing students learning and providing effective feedback</b>	<p>Typically, this may include:</p> <p>Monitoring student's progress</p> <ul style="list-style-type: none"> <li>• Developing strategies using formative assessment to enhance student learning</li> <li>• Using the outcomes of assessment to inform the curriculum</li> </ul>

<b>C) Interpersonal Skills</b>	
	<b>Explanatory Note</b>
<b>C1: Analysing, evaluating and refining teaching to improve student learning</b>	<p>Typically, this may include:</p> <ul style="list-style-type: none"> <li>• Selecting and interpreting evidence to identify ways to improve your teaching</li> </ul>
<b>C2: Collaborating with colleagues and the wider professional communities to improve the quality and effectiveness of science education</b>	<p>Typically, this may include:</p> <ul style="list-style-type: none"> <li>• Sharing and jointly evaluating teaching practices and methods</li> <li>• Supporting the development of others</li> </ul>
<b>C3: Taking responsibility for leadership, management and development of science teaching</b>	<p>Typically, this may include:</p> <ul style="list-style-type: none"> <li>• Leading colleagues in development of teaching</li> <li>• Acting as a mentor to newly qualified colleagues in order to help their professional development</li> </ul>



# Maintaining your registration

Registration is maintained through upkeep of RSB membership fees and register renewal fees which are collected annually. As a registrant, you are also required to keep an annual continued professional development (CPD) record.

There is a single CPD system for all Royal Society of Biology members, accessed through [mySociety](#), which is simple to use and a widely recognised system for professional registers. Our CPD scheme is points-based, with 50 points required to complete the year. These are achieved in sums of one to three points per hour depending on the activity. Almost any activity that develops your valuable skills as a life scientist qualifies for CPD. A small selection includes: the training of staff, the learning of a new practical technique, developing management skills, presenting at a conference and self-study in any area of biological interest.

For further information and guidance on CPD please click [here](#).



