

Becoming a Registered Scientist

Competence report – advice to applicants

Applicants for RSci will need to demonstrate competence across five areas. Guidance on what the assessors will be looking for is provided below each competence but the examples are just indicative – there will be many other valid examples you could choose

Here are some tips you should bear in mind when compiling your application:

- For each competence statement, you will need to provide clear examples of the role that **you** play or the contribution **you** make to a task or activity.
- The examples must have sufficient depth, the assessor should be able to visualise what you did from your description.
- You can use the same task or activity more than once, but you should be clear on how it applies to the specific competence you are addressing.
- Most of the examples provided should be recent (in the last three years) but you can draw on relevant experience further back in your career.

A: Application of knowledge and understanding

Identify and use relevant scientific understanding, methods and skills to complete tasks and address well defined problems

A1: Apply extended knowledge of underlying concepts and principles associated with area of work.

We are 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.

For instance, you may describe how you:

- take part in a journal/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
- undertake further academic / vocational / self-study or technical training in your current or advancing field of work

A2: Review, evaluate and apply underlying scientific concepts, principles and techniques in the context of new and different areas of work.

What we are looking for here is how you have taken techniques/principles and reviewed, evaluated and applied them in a new area of work.

Your example may for instance describe how you:

- work in a new subject, in a different discipline, area or with new material. You should be able to explain and describe in technical terms the main components/elements/tools/material etc. involved and why you are carrying out the new work.
- are involved in carrying out a new procedure, process, or design; you should be able to explain from a technical perspective why you are using this and why it is relevant to the new area of work.
- are involved in using different or new design or experimental model; you should be able to explain why you are using that model, how you are using it and what the results might mean

A3: Analyse, interpret and evaluate data, concepts and ideas to propose solutions to problems.

We are looking for an example of how you observe and interpret the results from your data to draw conclusions and inform your next steps.

Your example could show how you:

- enable others to be able to analyse and interpret your work and advise on how you may overcome problems.
- review a number of relevant literature/manuals/designs and present your findings to others.
- develop new methods/approach based on information or outcomes from previous work by others or themselves.

B: Personal Responsibility

Exercise personal responsibility in planning and implementing tasks according to prescribed protocols

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

We are looking for an example 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.

B2: Take responsibility for safe and sustainable working practices and contribute to your evaluation and improvement.

We are looking for an example of how you have taken responsibility for working safely and sustainably.

Your example could include:

- Identification of potential safety issues and recommending solutions
- 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.
- 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 (if relevant) a description of this could be included.

B3: Take responsibility for the quality of your work and also enable others to work to high standards.

This means that you can show how you are aware of the quality standards necessary for the work being carried out by themselves and others. You should be able to describe an example of how you enable these standards and ensure that you are applied.

You may for example:

- produce and communicate protocol standards (such as good laboratory/workshop/design practice)
- train others to recognise when something has not been carried out correctly and explain the impact this could have.
- contribute to the analysis of your own and others' work and explain the impact of good and bad data and outcomes

- recognise when your own and others' work needs to be repeated or the methodology updated and can communicate the reasons for this in terms of reproducibility or quality standards for example.

C: Interpersonal Skills

Demonstrate effective communication and interpersonal skills

C1: Demonstrate effective and appropriate communication skills.

What we are looking for here is an example that you are an effective communicator. The example can be through appropriate oral, written or electronic means.

This may include examples of:

- 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
- train, demonstrate or teach others in procedures or protocols
- play a part in staff development (e.g. carry out appraisals or staff reviews)
- carry out induction training

C2: Demonstrate effective interpersonal and behavioural skills.

This means that you can give 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.

C3: Demonstrate productive working relationships and an ability to resolve problems.

This means that you should be able to describe 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.

For instance, you may:

- be a member of a committee/group that is tasked with a safety aspect of the job and can 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)
- be a 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.

This means you can give an example of work that you have undertaken showing where and why the method/procedure used was chosen as the best (or most relevant) to use.

This might include:

- review of method – why is this one the best compared to others that are available
- cost effectiveness
- time taken
- IT considerations

D2: Contribute to the organisation of tasks and resources.

This means that you can give examples of how you have contributed to the running of the laboratory/workshop/section or other types of working environment.

.

For instance, this might mean:

- 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
- 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 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. Your example should show what your role was in understanding the problem and what your contribution achieved.

D4: Contribute to continuous process improvement.

This means that you can give 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.

Examples might be your role in:

- 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
- playing a role in procurement management

E: Professional Standards

Demonstrate a personal commitment to professional standards

E1: Comply with and promote relevant codes of conduct and practice.

This means that you can give an example of how you comply with a code of conduct (e.g. of your professional Body) or how you work within and promote all relevant legislative, regulatory and local requirements.

This means that you can give examples of how you, for instance:

- comply with your professional body's code of conduct
- 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.

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) and reflect on its impact on themselves and others. We 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)