Becoming a Registered Scientist (RSci)

Competence report: advice to applicants and mentors

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

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

- For each competence statement, you will need to give 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
- 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 competence you are addressing
- Most 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.

A Application of knowledge & 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

This means that you can show that you have a sound theoretical understanding of the area in which you work, and that you also continuously keep up-to-date with developments in your field and are able to understand and apply new developments to your area of work. For instance your example 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 Apply underlying scientific concepts, principles and techniques in the context of new and different areas of work

This means that you can explain the major reasons for undertaking new and different 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 relevant scientific and technology information, concepts and ideas and to propose solutions to problems

This means that you can 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. Your example could show how you:

- Enable others to be able to analyse and interpret their work and advise on how they 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 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

This means that you can 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 certain work with no input from your line manager and describe how/what you report back in detail to them on completion.

B2 Take responsibility for safe working practices and contribute to their evaluation and improvement

This means that you can describe how you accept responsibility for working safely. How you may be responsible for the generation and communication of some of the following (but not limited to) and can give examples:

- 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 should be included.

B3 Promote and ensure the application of quality standards

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. You should be able to describe examples of how you promote these standards and ensure that they 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 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

This means that you can describe why and how you accept responsibility for planning and developing relevant courses of action within the required time frame. You should be able to give an example that demonstrates that you are able to do this with no supervision using your own judgement within the parameters of your broader role. This might include (but not be limited to) an example of:

- 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
- 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

This means that you can give examples of how you demonstrate effective and appropriate communication using oral, written and 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 interpersonal and behavioural skills

This means that you can give an example that demonstrates 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, as an external perspective is often very useful in this regard. Your example should also describe how you ensure your method of communication is appropriate for (but is not limited to):

- Interacting with students or trainees face to face
- Interacting with other professionals such as researchers, technicians, administrators, and other members of staff
- Interacting with external colleagues (such as manufacturers, suppliers, couriers, designers etc.).

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 conflict. 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 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)
- 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 and related areas. 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 performance 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 relevant codes of conduct and practice

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).

Note that you will need to comply with the Science Council CPD Standards for Registrants and you will be asked by your professional body from time to time to demonstrate evidence that you meet the standards.

If you need more help, get in touch:
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