

# Registered Science Technicians (RSciTech) competences

## **A: Application of knowledge and understanding using relevant scientific understanding, methods and skills to address broadly defined complex problems**

### A1 Apply knowledge of underlying concepts and principles associated with your work

This means that you can explain the major reasons for undertaking your work.

You may be, for example:

Be working in a subject discipline in an applied science area. You should name and describe in technical detail how you use the main components, elements, materials, or designs involved in your work and why you are carrying it out.

### A2 Review and select appropriate scientific techniques, procedures and methods to undertake such tasks

This means that you can explain the underlying reasons for undertaking tasks and why a procedure, technique, or process is appropriate.

Your example may for instance describe the principles behind the activity that you are undertaking and any associated technology. The reasons behind the choice of method used to carry out the activity and the criteria which form the basis of what you need to achieve the result.

### A3 Interpret and evaluate data and make sound judgements in relation to scientific concepts

This means you can explain how you recognise when your activity appears to have been successfully carried out, or not, and what your data, observations, or measurements 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.

Examples may include where you have stated whether the activity has worked well or not: if successful, your example should describe the rationale/scientific basis behind this conclusion and why the data, observations, or measurements might mean this.

If not, how you gave reasons why the activity 'failed' and what you proposed to do next time to address this. Your example should also include how you explained/demonstrated the results of the activity. This could include comparing it with results from several different activities.

## **B Exercising personal responsibility in respect of planning and implementing tasks**

### B1 Work consistently and effectively with minimal supervision to appropriate standards and protocols

This means that you can show 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.

Your example should illustrate how, after you discussed the work with your supervisor and established a time frame, you then carried out the work with no or little further input, until discussing the outcome with your supervisor

### B2 Manage and apply safe working practices

This means that you can explain the safe working practices applicable to your area of work and describe how you follow them.

Your examples could include risk assessments associated with your work, relevant Health and Safety regulations, e.g. COSHH, Noise, Manual Handling and any safety training courses you have successfully completed for your laboratory role.

### B3 Accept responsibility for the quality of work of self and others

This means that you can describe how you accept responsibility for the quality of the work that you undertake and that of others – including if an activity does not work in the way that you expect.

For instance, your example could include how you: ensure that an activity is carried out to the agreed standard or protocol (e.g. good laboratory/workshop/design practice) and your example should provide evidence for this. Or understand when something might not have been carried out quite correctly and what impact it could have on the quality and reliability of the outcome.

### B4 Take responsibility for completing tasks and procedures as well as using judgement within defined parameters

This means that you can give an example that describes how you accept responsibility for completing a task/procedure to the required timeline and how you are proactive if the timeline might not be met.

For instance, this might be an example where:

- an experiment or process failed
- a critical piece of equipment or tooling failed
- a critical reagent or material running out
- a staff absence making it impossible to complete on time

In your example you should describe how you proactively judged how and when you communicate this 'negative news'. In addition, you should also describe how you overcame the problems and mitigated impact on the agreed timelines.

## **C Demonstrating effective communication and interpersonal skills**

### C1 Demonstrate effective and appropriate communication skills

This means that you can show that you are an effective communicator though using appropriate oral, written and electronic means.

Your examples should for instance include a description and details of:

- how you discuss and agree objectives with your supervisor
- how you discuss and agree objectives in team meetings
- how you describe or present your work or other aspects of lab, workshop, or section work (e.g. safety updates, method updates) to your supervisor or colleagues
- how you prepare written reports on your work
- how you train students or staff in the use of equipment or processes
- how you demonstrate the processes or systems the part that you play in induction of new staff or students

### C2 Demonstrate interpersonal and behavioural skills

This means that you can demonstrate 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 interaction is appropriate for:

- interacting with researchers, technicians or other members of staff
- interacting with students or trainees face to face
- interacting with external colleagues (such as suppliers, couriers etc)

### C3 Demonstrate an ability to work effectively with others

This means 'teamwork', 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 role was, and what the outcome was.

For instance, this might include:

- how you work with researchers, technicians or other members of staff

- how you work with students or trainees face to face
- how you work as part of a team, working group, or committee

## **D Applying appropriate theoretical and practical methods**

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

This means you need to describe an example which will demonstrate your understanding of the underlying principles of an activity and how, because of this understanding, you are then able to modify a process, programme, material, or machine sequence in the light of 'potential failure' to allow it to be 'successful'.

Your example should describe your understanding why this might have 'failed' and how you identified how you might alter your approach to address the problem. (Note: this does not mean altering a methodology that is sound when an unexpected result is achieved, only when the proper controls indicate the method is not working correctly.)

### D2 Identify, organise and use resources effectively to complete tasks

This means that you can give 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. This might include:

- cost effectiveness
- time taken
- IT considerations

### D3 Participate in 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:

- CPD activity that has informed changes and improvement to your practise
- reviewing procedures
- taking part in staff reviews

## **E Demonstrating 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, 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.