



ROYAL SOCIETY
OF CHEMISTRY



A guide to accrediting your organisation's professional development scheme

Helping you give the chemical scientists in your company a fully supported route to industry recognised professional qualifications

www.rsc.org



As an externally awarded professional standard, the scheme demonstrates a commitment by the company to the continued professional development of our chemists beyond their academic achievements and as they progress through their chosen career.

The convenience of the scheme being integrated into the normal workload is a significant advantage. The candidate can receive recognition for their training and development, both through the company performance management process, and by achieving the award of Chartered Chemist from a recognised professional organisation.

Paul Sheehan CChem FRSC
Research Scientist & Scheme Coordinator
Eli Lilly Kinsale Limited



Driving professional excellence

As the UK's professional body for chemical scientists, we are committed to supporting everyone working within chemistry and related disciplines to enhance technical and transferable skills to achieve personal and organisational success.

By providing a route to an internationally recognised qualification, you are displaying your commitment to employee development while continuously enhancing professional standards in your organisation. This means that as well as giving employees a clear development framework, the company accreditation we offer will help you to recruit and retain talented people.

How to use this document

This toolkit is a guide to how to work with us.

Whether you wish to recognise existing training and development provision, or use our framework to develop something new, this toolkit can help.

Here to help you

Speak to the team to find out how we can support you and your company.

Email cchem@rsc.org or call **+44 (0) 1223 432141**

Shape your training with our support

We accredit training of chemical scientists in companies of all sizes - working with your existing development procedures or helping you create a new framework, we give employees a fully supported route to professional recognition through Chartered Chemist (CCChem), Registered Scientist (RSci) and Registered Science Technician (RSciTech) status.

Our accreditation is:

- peer-reviewed to acknowledge high standards of professional practice.
- flexible so that we can support programmes of all types, including bespoke graduate schemes and apprenticeship programmes.
- customisable to fit your current practices, organisational structure and confidentiality requirements.

Why choose accreditation?

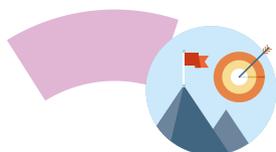
Both your organisation and your employees benefit when your training and development is accredited.

This clear commitment to staff development highlights your organisation to prospective employees and encourages the retention of existing employees. It builds the technical and transferable skills needed in your workforce, resulting in high quality staff. And this kind of excellence can help you attract customers, ensure wider external recognition and demonstrate competence to regulators.

For your chemical scientists, a defined route to professional development with the support of their professional body and employer makes achieving a range of industry recognised qualification accessible. This builds personal confidence and professional credibility, and can give them parity with colleagues from other disciplines.



Your path to accreditation



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Step one Making your decision

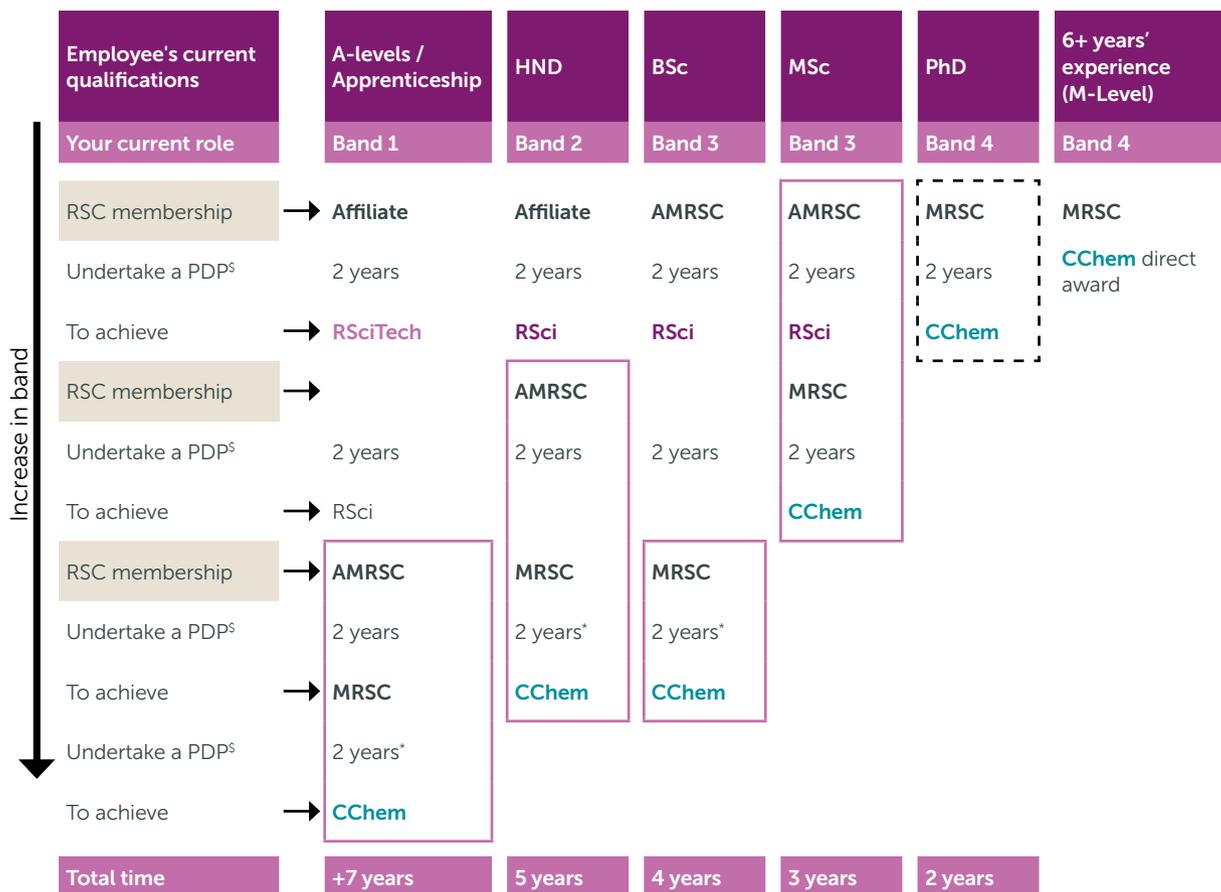
Our accreditation framework

Each professional award (RSciTech, RSci, CChem, CEnv) involves meeting a set of predefined attributes and competencies.

Accreditation simply means that your company training or development programme maps across to these attributes.



How a typical scheme works



[§]PDP = Professional Development Plan; structured development within workplace.

*Assessment needed to ensure mentee is working at the Masters (M) level.

Boxes = minimum timeframe of two years to progress through each stage. Broken line means it can be a minimum of two years if the candidate proceeds through the development route.

Central features

The scheme

The cost of implementing an accreditation scheme is £5000. This fee includes:

- five years of accreditation
- your site assessment visit
- first year's registration fees for everyone gaining registered or chartered status
- a shorter route to achieving awards and full Royal Society of Chemistry membership
- certificate of accreditation and use of Royal Society of Chemistry logo
- a £1000 deposit to begin your accreditation application. The remaining cost can be a one off payment or spread across the length of the accreditation

Benefits to your organisation

- Autonomy to award professional designations through either:
 - Royal Society of Chemistry organised on-site peer review interviews
 - internal autonomous assessment
- Assessment processes can be arranged with advice from Royal Society of Chemistry staff to accommodate your organisation's Intellectual Property (IP) and confidentiality requirements.

Our support

- Expert help from Royal Society of Chemistry staff throughout the process, from drafting the submission document to re-accreditation
- CChem mentor training sessions
- Membership talks
- Scheme Coordinator Group networking
- Assistance with Royal Society of Chemistry Fellow applications

Tailored, flexible accreditation

- As well as tailoring the programme itself, we also offer tailored options based on your company structure. The type of accreditation you apply for should be the best fit for your current practices and culture.
- If you are considering multi-site accreditation (including international sites) please email cchem@rsc.org to speak to our team.



Step two

Preparing your application

The application document

You will have a dedicated professional standards specialist as your Royal Society of Chemistry contact as you prepare this, keeping you on track for success. They will support you through every step of your path to accreditation.

To apply, you will need to create and submit a document which includes the following:

Section	Description
Overview of your organisation	Introduction to your company and work
Training and development practices	Give details of the staff development activities to be accredited Provide more detail about: <ul style="list-style-type: none">• the motivation behind seeking accreditation• your intended scheme participants (your mentors and mentees – see page 11)
Purpose and scope of scheme	Outline your proposed accredited scheme structure and the ways in which you will measure and celebrate success Indicate who will fulfil the roles of scheme coordinator and scheme sponsor (see page 11) Outline your RSciTech, RSci, MRSC and CChem/CEnv development paths as applicable
How your scheme will operate	Provide a matrix of evidence for the required key skills, competencies and attributes (see page 12)
Mapping	Detail the type and level of support those in mentoring roles will provide Outline how you will: <ul style="list-style-type: none">• assess each stage• ensure consistency and quality of applications and suitability of candidates
Mentoring and mentee support	Indicate the key roles in your scheme and their intended responsibilities (see page 11)
Assessment method and quality assurance	Outline how you would like us to engage with you and your scheme (to be agreed with your professional standards contact)
Managing the scheme	Include any relevant appendices, including competency framework and mapping exercise. See page 19 for an example
The Royal Society of Chemistry's role during accreditation	
Appendices	

Scheme management roles

Scheme coordinator

The coordinator is our primary contact at your company, and is responsible for implementing the accredited scheme and supporting everyone involved.

The role would usually be held by a chartered professional (or equivalent) and performed alongside their usual job. They could be based in a science role or in HR.

Typical responsibilities

- Sets the technical and professional standards required to join the development programme
- Gathers information and works with us to prepare application document
- Promotes participant achievements internally, informs Royal Society of Chemistry contact of new registrants and successful assessments
- Point of contact for scheme mentors, providing advice and support
- Arranges participant assessments and audits in partnership with us
- Joins the cross-accredited organisation Scheme Coordinator Group

Support from us

The scheme coordinator will have support from us throughout, from the initial stages of preparing your accreditation document, through the assessment stages and on into managing a successful development programme.

Internal support

Some scheme coordinators organise their own internal support group/members to assist with managing the scheme, ie mentee representative, assessment coordinator (providing administrative support).

Scheme sponsor

Important for embedding accreditation at a company, the remit of a scheme

sponsor is also performed alongside normal responsibilities, and usually given to someone at senior level.

We may also ask the scheme sponsor to provide input into the Royal Society of Chemistry and our associated activities, and liaise with our Strategic Partnerships team.

Scheme mentor

CChem mentor Required for everyone working towards Chartered Chemist (CChem) status. Mentors should be chartered themselves – either through us or another appropriate professional body.

CEnv, RSci or RSciTech mentors Also known as supporters, and required for everyone working towards Chartered Environmentalist (CEnv) or registered status. CEnv mentors should be a member of the Royal Society of Chemistry or another appropriate professional body, and ideally be CEnv themselves.

Typical responsibilities

- Meets regularly with their mentee (at least four times a year)
- Reviews the evidence that the mentee gathers for award application
- Helps with development opportunities for the mentee
- Liaises with mentee's manager
- Continually challenges the mentee to meet the attributes/competencies
- Supports the mentee's application for chartership or registration

Mentees

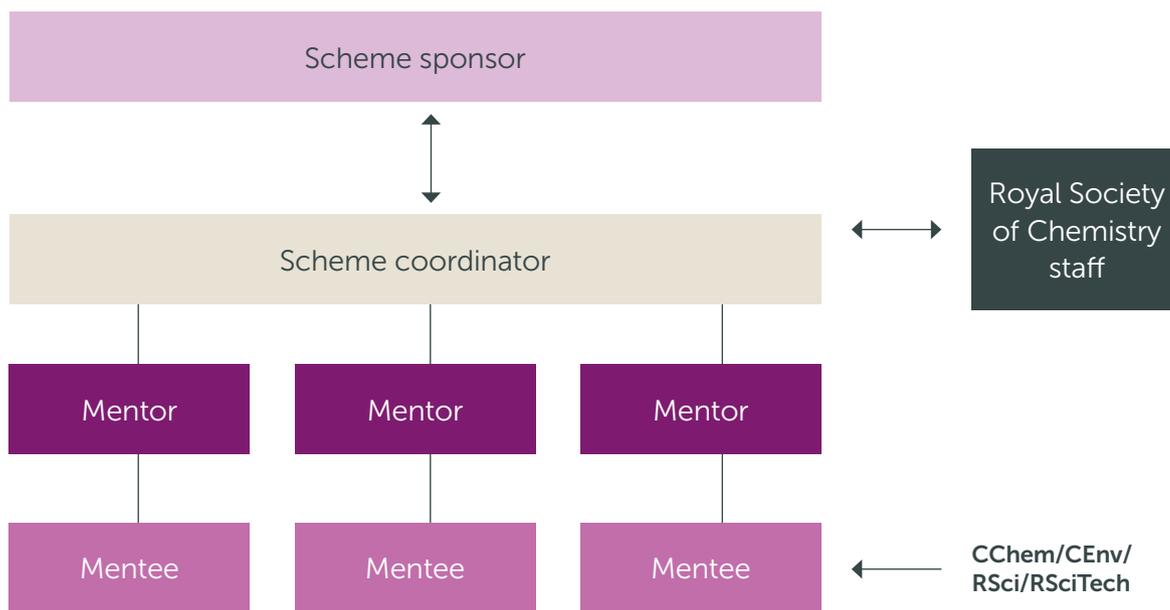
These are all of the candidates who fit your criteria for registered or chartered status. To join an accredited scheme, they need to be part of Royal Society of Chemistry membership. These mentees should be working within the chemical sciences.

An example scheme structure

This organogram shows how many of our accredited schemes are organised.

How you organise your own scheme is up to you, as you may wish to include additional internal supporting roles (such as a mentee or mentor representative), based on your requirements.

Schemes are internally run by the scheme coordinators – the role that we play will be determined by the level of input you decide is suitable.



How to map your training provision

This is the most important part of your application. If you can show that standard features of the roles at your company map to the requirements for each stage of the accreditation framework, you've covered the majority of our criteria.

Completing this mapping exercise will clearly show us that mentees can meet our requirements through the activities they carry out day to day.

For you, it will show that your company practices naturally meet the high professional standards needed in an accredited company.

For the mentee, it means that they can rely on their daily tasks and job description as the source of evidence for their development to meet the relative competencies or attributes.

For each part of the framework (registered status, professional body membership, chartered status):

- 1 List the features of each job role that provide evidence for each of the competency requirements outlined in the appendices (page 19 onwards)
- 2 Consider the development programmes/ training you already have in place, and describe how they map to the requirements
- 3 Include relevant sections from the role descriptors for each level against each award requirement
- 4 You might also like to include evidence that comes from day-to-day activities that form part of each role, but are not typically included in a broad job description
- 5 Some day-to-day activities are difficult to map to a specific attribute or competency. They can still be part of a mentee's evidence base, but because they aren't part of the mapped structure, each mentee may have to collect evidence individually.

Mapping exercise example for two CChem attributes (A1 and B1)

CChem attribute	Evidence: role	Evidence: training	Evidence: job features
A1. Make significant personal contributions to key tasks in your employment area and understand fully the objectives of your work as they relate to the chemical sciences	Plan, design, coordinate, set priorities and at times, lead programs of work to achieve project targets in a timely fashion and to agreed quality standards by applying technical knowledge and expertise.	Scientist development plan– stage 1a 'Furthering technical knowledge' course	Regularly write project reports
	Lead internal and external project work and other improvement activities.		Presents findings to leadership team annually
B1. Demonstrate reliability, integrity and respect for confidentiality on work related and personal matters	Have a thorough understanding of the chemical sciences and how these contribute to and influence the research and development process.	Scientist development Plan–stage 2b 'preparing for management' course	Research for patent application
	Supervise reports/students/technicians in their technical area. Act as Industrial Supervisor to company sponsored Ph.D. students.		Signatory for confidentiality agreements
	Develops relationships with internal management, third party contractors and suppliers to provide effective technology solutions and support.		Budget responsibility
	This is an extract from formal role profiles and/or company behaviours and characteristics		This is what the typical role holder is expected to do to fulfil their role

Formal/informal training that employees undertake

Ideas for fulfilling CChem attribute E

While this could be included in your mapping exercise, mentees often need to gather evidence for CChem attribute E separately. It asks that candidates:

'Demonstrate an interest in broader developments in the chemical sciences and make a contribution to the profession outside of your usual job remit'

We are looking at how mentees contribute to the chemical sciences outside of their standard job role. Most interpret this as science outreach, or public engagement, within the community. However attribute E may be fulfilled in other ways, including:

- playing an active part in Royal Society of Chemistry networks, including organising or participating in local section activities, arranging mixer meetings or helping to run interest groups
- joining science-related committees or interest groups, including regulatory or policy working groups
- working with schools, colleges or universities, supporting activities such as careers fairs, presentations, outreach programmes, facilitating work experience or mentoring
- being a STEMNET ambassador
- getting involved with Chemistry Week or giving presentations that aren't part of their day-to-day job role, usually to a new audience (ie not close colleagues)
- contributing to a chemical science publication (anything from journals and magazines to web pages and blog posts) or reviewing articles and books

Companies might support these activities by:

- making them part of your corporate social responsibility programme

- creating a series of activities that can be handled internally, making it easier to plan and manage time out of the office.
- getting to know our education coordinators. Based nationwide, they can let you know about activities in the local area, help you get involved and set up activities in partnership with your company. Visit rsc.li/ed-coord for more details.

How your assessment methods could work

You should discuss the type of assessment to go for with the Royal Society of Chemistry staff to make sure that you have the right support. If needed, we can sign confidentiality agreements with your company based on our level of involvement.

Assessment can fall into three broad categories:

Case study A

Complete portfolios assessed electronically or by interview (all awards and MRSC)

Interview/electronic submission assessed by Royal Society of Chemistry and Admissions Committee representative. Evidence must be non-confidential or non-disclosure – agreements can be signed

Case study B

Royal Society of Chemistry conducts interview with Admissions Committee representative (CChem/CEnv)

Evidence does not need to be shared electronically externally. We can conduct interviews on site or in Burlington House if confidential evidence is used (and sign non-disclosure agreements). Your scheme is subject to audit if internal assessments are used

Case study C

Internal assessment for all awards

An internal panel of senior CChem holders is required. Scheme subject to audit by the Royal Society of Chemistry. Evidence does not leave site



“What I particularly like about CChem is that it encourages development in different areas. I know that many people find the CChem competency related to ‘a contribution to chemical sciences outside direct work environment’ challenging but it can push you to step outside your comfort zone to discover a new area of science that you may find you are good at and even better, you enjoy.”

Pamela Maher MRSC, CChem candidate
Analytical Scientist, Defence Science and Technology
Laboratory (Dstl)

Submission checklist

- You have discussed the feasibility of accreditation with us
- You have chosen your scheme coordinator and scheme sponsor, and picked out the best people to fulfil the other roles in the scheme
- You have mapped your company’s role descriptors, training and development to the award requirements of each stage of the accreditation framework
- You have decided your assessment methods

Step three

Assessment

Your site visit

We will arrange a site visit for the Royal Society of Chemistry staff and your peer-assessor. Your peer-assessor will be professionally active within the chemical sciences and have knowledge of the professional awards. Your assessor will use the information gathered on this visit to recommend accreditation or any changes prior to accreditation.

10:00–10:15

Welcome from scheme sponsor

10:15–11:00

Meet with scheme sponsor, scheme coordinator and supporting team

An outline of how your organisation develops its staff

11:00–11:30

Overview of submission document

A summary of your mapping exercise to explain how chemists at the company develop in line with our registration and chartership requirements

11:30–12:30

Question and answer session

You might like to use this time to provide a tour of your chemical science facilities

12:30–13:30

Lunch

An opportunity for informal discussions and networking between all parties – prospective mentees and mentors can attend

13:30–14.00

Meet with sample of mentors and mentees

Royal Society of Chemistry staff and peer-assessor meet mentors and mentees to highlight the importance of being involved in the scheme

14.00–14.30

Private meeting for Royal Society of Chemistry visitors

Time to review the visit and decide on recommendations

14.30–15.30

Report back

Royal Society of Chemistry staff and peer-assessor will confirm that the accreditation is recommended/not recommended and may make suggestions or comments about the scheme as they feel appropriate



Managing your accredited scheme

Getting your scheme started usually falls into two phases – establishment and ongoing management. The main thing to ensure is that you always have enough mentors available to support the programme.

Your Royal Society of Chemistry contact can provide advice and guidance throughout the process.



Appendices

MRSC, RSciTech, RSci, CEnv and CChem requirements that can be mapped

Appendix I

Five key skills for Member of the Royal Society of Chemistry (MRSC) mapping

- 1 Oral and written communication
- 2 Handling information
- 3 Improving performance and learning
- 4 Planning and organising
- 5 Working with others

Appendix II

12 attributes for Chartered Chemist (CChem) mapping

A. Demonstrate and develop your knowledge and experience of chemistry as well as analytical and scientific skills

- ✓ A.1 Make significant personal contributions to key tasks in your employment area and understand fully the objectives of your work as they relate to the chemical sciences.
- ✓ A.2 Demonstrate a high level of appropriate professional skills in the practice or advancement of the chemical sciences.
- ✓ A.3 Develop your chemistry and other professional skills as required for work undertaken and career development.
- ✓ A.4 Evaluate critically and draw conclusions from scientific and other data.

B. Exercise autonomy and professionalism in the workplace

- ✓ B.1 Demonstrate reliability, integrity and respect for confidentiality on work related and personal matters.
- ✓ B.2 Plan, organise and implement work systematically and deliver results or improvements.
- ✓ B.3 Demonstrate the ability to work as part of a team.

C. Communicate effectively and demonstrate influence in your role

- ✓ C.1 Demonstrate good communication skills by writing clear, concise and orderly documents and/or giving clear oral presentations.
- ✓ C.2 Discuss work convincingly and objectively with colleagues, customers and others, responding appropriately to alternative views.
- ✓ C.3 Exert effective influence.

D. Demonstrate an involvement in Environmental, Health and Safety matters and adhere to the relevant requirements relating to your role.

- ✓ E. Demonstrate an interest in broader developments in the chemical sciences and make a contribution to the profession outside your usual job remit.
-

✓ Denotes attributes that require evidence

Appendix III

Attributes for Chartered Environmentalist (CEnv) mapping

A: Application of knowledge and understanding of the environment to further the aims of sustainability

- ✓ A1 Have underpinning knowledge of sustainability principles in the management of the environment.
- ✓ A2 Apply environmental knowledge and principles in pursuit of sustainable environmental management in professional practice.
- ✓ A3 Analyse and evaluate problems from an environmental perspective, develop practical sustainable solutions and anticipate environmental trends to develop practical solutions.

B: Leading sustainable management of the environment

- ✓ B1 Promote behavioural and cultural change by influencing others in order to secure environmental improvements, that go beyond minimum statutory requirements.
- ✓ B2 Promote a strategic environmental approach.
- ✓ B3 Demonstrate leadership and management skills.

C: Effective communication and interpersonal skills

- ✓ C1 Communicate the environmental case, confidently, clearly, autonomously and competently.
- ✓ C2 Ability to liaise with, negotiate with, handle conflict and advise others, in individual and/or group environments (either as a leader or member).

D: Personal commitment to professional standards, recognising obligations to society, the profession and the environment

- ✓ D1 Encourage others to promote and advance a sustainable and resilient approach by understanding their responsibility for environmental damage and improvement.
- ✓ D2 Take responsibility for personal development and work towards and secure change and improvements for a sustainable future.
- ✓ D3 Demonstrate an understanding of environmental ethical dilemmas.
- ✓ D4 Comply with relevant codes of conduct and practice.

Appendix IV

Competences for Registered Scientist (RSci) mapping

A: Application of knowledge and understanding: Identify and use relevant scientific understanding, methods and skills to address broadly-defined, complex problems

- ✓ A1: Develop, maintain and extend a sound theoretical approach to application of science and technology in practice.
- ✓ A2: Apply underlying scientific concepts, principles and techniques in the context of new and different areas of work.
- ✓ A3: Analyse, interpret and evaluate relevant scientific information, concepts and ideas and to propose solutions to problems.

B: Personal responsibility: Exercise personal responsibility in planning and implementing tasks

- ✓ B1: Work autonomously while recognising limits of scope of practice.
- ✓ B2: Take responsibility for safe working practices and contribute to their evaluation and improvement.
- ✓ B3: Promote and ensure the application of quality standards.
- ✓ B4: Take responsibility for planning and developing courses of action as well as exercising autonomy and judgement within broad parameters.

C: Interpersonal skills: Demonstrate effective communication and interpersonal skills

- ✓ C1: Demonstrate effective and appropriate communication skills.
- ✓ C2: Demonstrate interpersonal and behavioural skills.
- ✓ C3: Demonstrate productive working relationships and an ability to resolve problems.

D: Professional practice: Apply appropriate theoretical and practical methods

- ✓ D1: Identify, review and select scientific techniques, procedures and methods to undertake tasks.
- ✓ D2: Contribute to the organisation of tasks and resources.
- ✓ D3: Participate in the design, development and implementation of solutions.
- ✓ D4: Contribute to continuous performance improvement.

E: Professional standards: Demonstrate a personal commitment to professional standards

- ✓ E1: Comply with relevant codes of conduct and practice.
- ✓ E2: Maintain and enhance competence in own area of practice through professional development activity.

Appendix V

Competences for Registered Science Technician (RSciTech) mapping

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 knowledge of underlying concepts and principles associated with area of work.
- ✓ A2: Review and select appropriate scientific techniques, procedures and methods to undertake tasks.
- ✓ A3: Interpret and evaluate data and make sound judgements in relation to scientific concepts.

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

- ✓ B1: Work consistently and effectively with minimal supervision to appropriate standards and protocols.
- ✓ B2: Manage and apply safe working practices.
- ✓ B3: Accept responsibility for the quality of work of self and others.
- ✓ B4: Take responsibility for completing tasks and procedures as well as using judgement within defined parameters.

C: Interpersonal skills: Demonstrate effective communication and interpersonal skills

- ✓ C1: Demonstrate effective and appropriate communication skills.
- ✓ C2: Demonstrate interpersonal and behavioural skills.
- ✓ C3: Demonstrate an ability to work effectively with others.

D: Professional practice: Apply appropriate theoretical and practical methods according to protocol

- ✓ D1: Recognise problems and apply appropriate scientific methods to identify causes and achieve solutions.
- ✓ D2: Identify, organise and use resources effectively to complete tasks.
- ✓ D3: Participate in continuous performance improvement.

E: Professional standards: Demonstrate a personal commitment to professional standards

- ✓ E1: Comply with relevant codes of conduct and practice.
- ✓ E2: Maintain and enhance competence in own area of practice within structured and managed environment.





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