

Supporting your chemists with a high-quality framework to sector-wide professional recognition

**ADVANCING CHEMISTRY. TOGETHER.** RSC.LI/ACCREDITATION

# DRIVING PROFESSIONAL EXCELLENCE

As the UK's professional body for chemical scientists, it is our mission to help everyone working within the chemical sciences and related disciplines to maximise their potential and fulfil their ambitions.

Our employer accreditation enables you to give employees a clear development path within an internationally recognised, high-quality framework, simultaneously improving your proposition to recruit and retain the best talent.

#### How to use this document

This guide will explain how we can work with you to enhance your training provision. Whether you wish to recognise existing training and development provision, or use our framework to develop something new, this is the best place to start.

#### Here to help you

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

# Email cchem@rsc.org Phone +44 (0)1223 432141

## Shape your training with our support

We accredit training of chemical scientists in employers of all sizes. Working with your existing development framework, we give employees a fully supported route to professional recognition through Chartered Chemist (CChem), Chartered Environmentalist (CEnv), Registered Scientist (RSci) and Registered Science Technician (RSciTech) status.

#### Our accreditation is:

- peer-reviewed to acknowledge high standards of professional practice.
- customisable so that we can support programmes of all types, including bespoke graduate schemes and apprenticeship programmes.

## Build on accreditation from other professional bodies

We already accredit chemical science employers in sectors including defence, energy, pharma and academia.

Many organisations already hold accreditation from other professional bodies, including the Institute for Mechanical Engineering (IMechE), and the Institute for Chemical Engineering (IChemE).

Adding our accreditation makes sure that everyone in chemistry-related roles can work to the same recognised levels of professional excellence as those in other, already accredited roles.



# STEP ONE: MAKING YOUR DECISION

# Our accreditation framework

Each of the professional awards available through our framework (RSciTech, RSci, CChem, CEnv) involves meeting a set of pre-defined attributes and competences.

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

#### Registered Science Technician (RSciTech) **AFFILIATE** For technicians, technical support staff and **MEMBER** advanced apprentices **Professional** registers Registered Scientist (RSci) For scientists, **ASSOCIATE ROYAL** higher apprentices, and those working in **MEMBER** (AMRSC) higher technical support roles **SOCIETY OF CHEMISTRY MEMBERSHIP Chartered Chemist (CChem)** Awarded to experienced, professional practising chemists **MEMBER** (MRSC) OR Chartered **FELLOW** status **Chartered Environmentalist (CEnv)** (FRSC) Awarded to experienced individuals working to mitigate and solve environmental challenges

#### How a typical scheme works

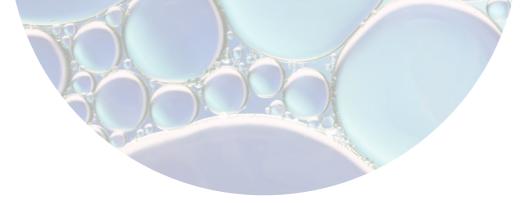
Employee's current qualifications	A-levels/ Apprenticeship	HND	BSc	MSc	PhD	6+ years experience (M-level)
Your current role	Band 1	Band 2	Band 3	Band 3	Band 4	Band 4
RSC Membership	Affiliate	Affiliate	AMRSC	AMRSC	MRSC	MRSC
Undertake a PDP*	2 years	2 years	2 years	1 year	2 years	CChem direct award
To achieve	RSCiTech	RSCi	RSCi	RSCi	CChem	
RSC Membership		AMRSC		MRSC		
Undertake a PDP*	2 years	2 years	2 years	2 years		
To achieve	RSCi			CChem		
RSC Membership	AMRSC	MRSC	MRSC			
Undertake a PDP*	2 years	2 years**	2 years**			
To achieve	MRSC	CChem	CChem			
Undertake a PDP*	2 years**					
To achieve	CChem					
Total minimum time	+7 years	5 years	4 years	3 years	2 years	

PDP\* = Professional Development Plan; structured development within workplace.

\*\*Assessment needed to ensure mentee is working at the Master's (M) level.

Minimum timeframe of two years to progress through each stage.

Minimum of two years if the candidate proceeds through the development route.



#### Central features

#### The scheme

The accreditation fee includes:

- · Five years of accreditation
- UK employers: Your site assessment, plus expenses for assessors and Royal Society of Chemistry staff
  - International employers: Your site assessment. You will need to cover assessor and Royal Society of Chemistry staff expenses
- 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

#### Benefits to your organisation

- Autonomy to award professional designations through either: - Royal Society of Chemistry organised onsite 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 organisation 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.



JACK RILEY RSCI REMEDIATION TECHNICAL SUPPORT AT SELLAFIELD, AN ACCREDITED EMPLOYER

Starting his career in 2013 as an apprentice at Sellafield, Jack Riley now works within the remediation technical department, supporting Sellafield's mission of creating a clean and safe environment for future generations.

He joined the Royal Society of Chemistry as an Associate Member towards the end of his apprenticeship in 2015. Since then, he has demonstrated further professional skills, progressed to become Member, and achieving his Registered Scientist (RSci) accreditation. He is now working towards CChem status.



I would certainly encourage other people to join the RSC as I've never felt that I'm going into anything alone.

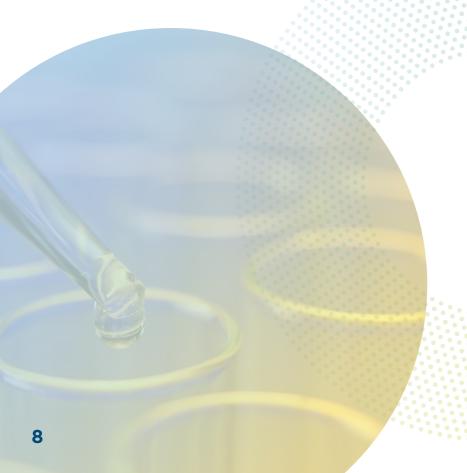
The personal contact you get really makes you feel part of the society. And then there's the network you build which is another huge advantage.

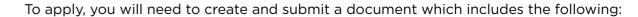
You know you can call upon a group of specialists anytime you have a question about something, and I think that's just fantastic."

# STEP TWO: PREPARING YOUR APPLICATION

#### The application

A dedicated professional standards specialist from the Royal Society of Chemistry will be on hand as you prepare this, supporting you through every step of your path to accreditation.





Section	Description
Overview of your organisation	Introduction to your employer and work
Training and development practices	Give details of the staff development activities to be accredited
Purpose and scope of scheme	Provide more detail about:
	<ul> <li>the motivation behind seeking accreditation</li> <li>your intended scheme participants (your mentors and mentees - see page 11)</li> </ul>
How your scheme will operate	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 10)
	Outline your RSciTech, RSci, MRSC and CChem/ CEnv development paths as applicable
Mapping	Provide a matrix of evidence for the required key skills, competencies and attributes (see page <b>13</b> )
Mentoring and mentee support	Detail the type and level of support those in mentoring roles will provide
Assessment method and quality assurance	Outline how you will:
	assess each stage
	<ul> <li>ensure consistency and quality of applications and suitability of candidates</li> </ul>
Managing the scheme	Indicate the key roles in your scheme and their intended responsibilities (see page <b>10</b> )
The Royal Society of Chemistry's role during accreditation	Outline how you would like us to engage with you and your scheme (to be agreed with your professional standards contact)
Appendices	Include any relevant appendices, including competency framework and mapping exercise.  See page <b>14</b> for an example



#### Scheme coordinator

The coordinator is our primary contact at your organisation 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, either 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
- 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

We will support the scheme coordinator throughout, from the first steps to prepare your accreditation document, through the assessment stages and onto managing the final successful development programme.

#### **Internal support**

Some scheme coordinators organise their own internal support group/members to assist with managing the scheme, i.e. mentee representative, or an assessment coordinator to provide administrative support.

#### Scheme sponsor

Important for embedding accreditation at an organisation, the remit of a scheme sponsor is also performed alongside normal responsibilities. This role is normally fulfilled by someone at senior level.

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

#### Scheme mentor

**CChem Mentor:** A mentor is required for everyone working towards CChem status. Mentors themselves should be chartered, either through us or another appropriate professional body.

**CEnv, RSci or RSciTech mentors:** Also known as supporters, these individuals are required for those 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 hold CEnv status.

A mentor will typically:

- Meet with their mentee at least four times a year
- Review the evidence the mentee gathers for award application
- Help with development opportunities for the mentee
- · Liaise with the mentee's manager
- Continually challenge 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.



#### A typical scheme structure

The below organogram shows how many of our accredited schemes are organised.

How you organise your own scheme is up to you; for example, 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 the Royal Society of Chemistry plays will be determined by the level of input you decide is suitable.

# Scheme Sponsor Scheme coordinator Scheme coordinator Royal Society of Chemistry staff Mentor Mentor Mentor Mentor Mentee Mentee CChem/CEnv/ RSci/RSciTech

#### Mapping your training provision

This is the most important part of your application. If you can show the standard features of the roles at your organisation map to the requirements for each stage of the accreditation framework, you've covered most 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 training and development practices naturally meet the high professional standards needed in an accredited employer.

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

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

List the features of each job role that provide evidence for each of the competency requirements outlined in the appendices (page 8 onwards).

Consider the development programmes/training you already have in place, and describe how they map to the requirements.

Include relevant sections from the role descriptors for each level against each award requirement.

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.

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.

#### Example: Mapping for two CChem attributes

CChem attribute	Evidence: role	Evidence: training	Evidence: job features
A1. Explain how your knowledge of the chemical sciences informs your decisions and impacts on your work.	Plan, design, coordinate, set priorities and at times, lead programmes of work to achieve project targets in a timely fashion and to agreed quality standards by applying technical knowledge and expertise.  Lead internal and external project work and other improvement activities.  Have a thorough understanding of the chemical sciences and how these contribute to and influence the research and development process.	Scientist development plan - stage la 'Furthering technical knowledge' course  Formal/informatraining that employees undertake.	fresents findings to leadership team annually.
B1. Show how you work with autonomy, accountability and integrity in your role.	Supervise reports/students/ technicians in their technical area.  Act as industrial supervisor to company sponsored PhD students.  Develops relationships with internal management, third party contractors and suppliers to provide effective technology solutions and support.	Scientist development plan-stage 2b 'Preparing for management' course	Research for patent application. Signatory for confidentiality agreements. 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 duties.

#### 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 of your chosen stages of the accreditation framework
- You have decided your assessment methods

# STEP THREE: ASSESSMENT

#### Your assessment

We will arrange an assessment 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 during the assessment to recommend accreditation or any changes prior to accreditation.

#### Assessment timetable

#### 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

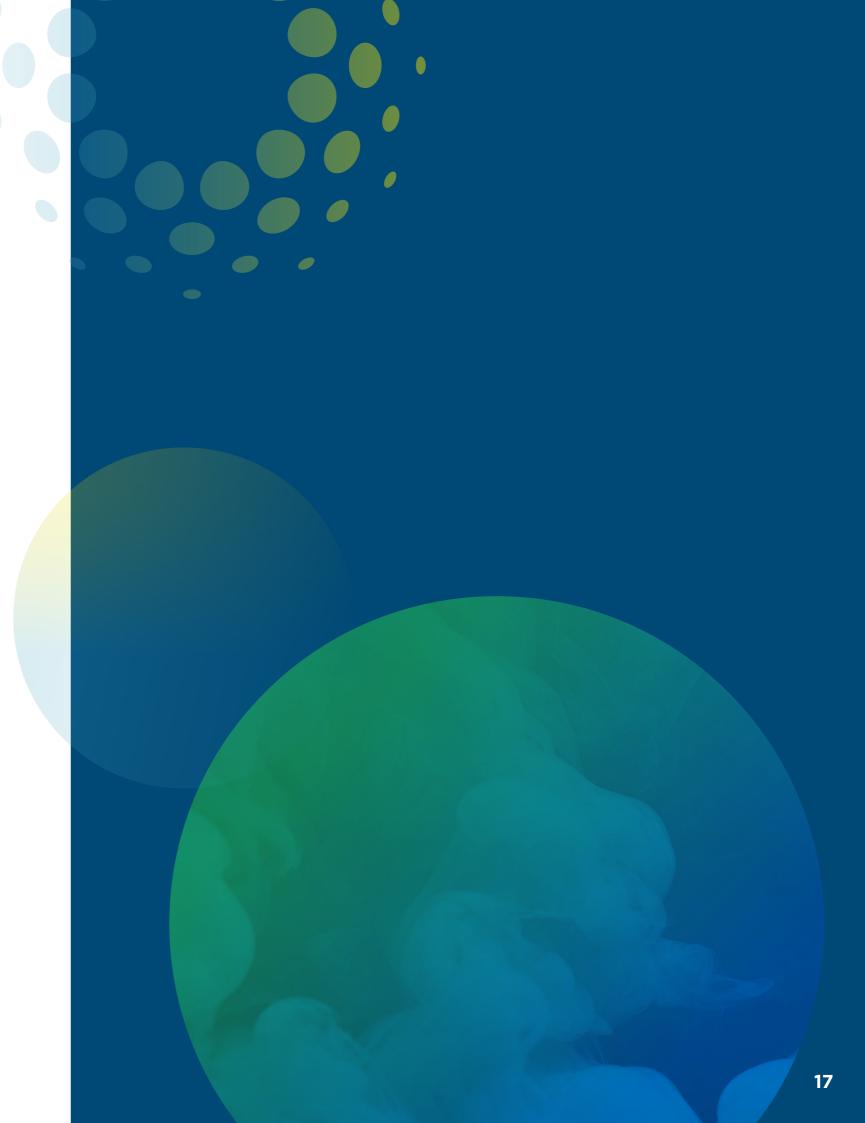
#### Private meeting for Royal Society of Chemistry assessors

Time to review the assessment 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.

- Royal Society of Chemistry staff will help you get mentees started on the scheme.
- Mentor training will be delivered so that your mentors can feel confident in their role.
- You will be kept up to date about development opportunities for your mentees and mentors.
- We will regularly review your accreditation scheme progress and share feedback from assessors with you, to help you meet your goals.

#### Making a wider impact

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

Give an example of how you have been an active member of the scientific community, either at work or outside work.

We want to understand how mentees contribute towards the chemical sciences and act as a good chemical science citizen. This can be done either at work or outside of work.

Most interpret this as science outreach, or public engagement, within the community, but 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 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.

Visit rsc.li/ed-coord for more details

## Employers 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.

## 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 you have the right support. If needed, we can sign confidentiality agreements with your company based on our level of involvement. After your employees have followed their professional development pathway, they will need to be assessed in order to gain their award.

Assessment can fall into three broad categories:

#### **Category 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 can be either non-confidential, or non-disclosure agreements can be signed.

#### **Category 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, non-disclosure agreements can be signed. Your scheme is subject to audit if internal assessments are used.

#### **Category C**

Internal assessment for all awards.

An internal panel of senior CChem, and CSci (or RSci) holders is required. Scheme subject to audit by the Royal Society of Chemistry. Evidence does not leave site.

### **APPENDICES**

The requirements that can be mapped for MRSC, CChem, CEnv, RSci, and RSciTech. 20

#### **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 III**

# 14 ATTRIBUTES FOR CHARTERED CHEMIST (CChem) MAPPING

## A. DEMONSTRATE AND DEVELOP YOUR KNOWLEDGE OF THE CHEMICAL SCIENCES

- A1. Explain how your knowledge of the chemical sciences informs your decisions and impacts on your work.
- A2. Explain how you continue to develop your knowledge of the chemical sciences and how this supports your work.
- A3. Demonstrate how you solve problems and draw conclusions by interpreting data, using evidence-based judgement and critical thinking to develop courses of action.

#### **B. PROFESSIONALISM**

- **B1.** Show how you work with autonomy, accountability and integrity in your role.
- **B2.** Describe how you make a successful contribution as part of a team and its impact.
- **B3.** Demonstrate where you plan, organise and deliver work and manage resources to meet organisational requirements.
- **B4.** Describe how you contribute to continuous improvement by evaluating your work and displaying adaptability.

#### C. COMMUNICATION AND INFLUENCING SKILLS

- C1. Describe how you effectively convey information using both verbal and written forms.
- **C2.** Identify where you consider and respond to alternative views and the influence this has on your actions.
- C3. Explain how you exert influence in your role either directly or through networks.

#### D. RESPONSIBILITIES WITHIN YOUR WORKPLACE

- D1. Describe your personal contribution and impact to ensuring a healthy and safe working environment.
- **D2.** Explain how you contribute to a sustainable future.
- D3. Describe how you adhere to relevant codes of conduct including the RSC Code of Conduct, relating to fulfilling your duties in the workplace, and ensure you apply ethical practice to your role.

#### E. SUPPORTING THE PROFESSION

E1. Give an example of how you have been an active member of the scientific community, either at work or outside work.

#### A. APPLICATION OF KNOWLEDGE AND UNDERSTANDING OF THE ENVIRONMENT TO FURTHER THE AIMS OF SUSTAINABILITY

(CEnv) MAPPING

**ENVIRONMENTALIST** 

ATTRIBUTES FOR CHARTERED

- 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.

#### 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 V**

# COMPETENCES FOR REGISTERED SCIENTIST (RSci) MAPPING

#### A APPLICATION OF KNOWLEDGE AND UNDERSTANDING

- **A1.** Apply extended knowledge of underlying concepts and principles associated with area of work.
- **A2.** Review, evaluate and apply underlying scientific concepts, principles and techniques in the context of new and different areas of work.
- **A3.** Analyse, interpret and evaluate data, concepts and ideas to propose solutions to problems.

#### **B PERSONAL RESPONSIBILITY**

- **B1.** Work autonomously while knowing when to escalate appropriately and recognising limits of scope of practice.
- **B2.** Take responsibility for safe and sustainable working practices and contribute to their evaluation and improvement.
- **B3.** Take responsibility for the quality of your work and also enable others to work to high standards.

#### C INTERPERSONAL SKILLS

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

#### PROFESSIONAL PRACTICE

- **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 process improvement.

#### E PROFESSIONAL STANDARDS

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

#### A APPLICATION OF KNOWLEDGE AND UNDERSTANDING

**SCIENCE TECHNICIAN** 

(RSciTech) MAPPING

- 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**

- **B1.** Work consistently and effectively with minimal supervision to appropriate standards and protocols and know when to escalate appropriately.
- **B2.** Demonstrate how you apply safe working practices.
- **B3.** Take responsibility for the quality of your work and the impact on others.

#### **INTERPERSONAL SKILLS:**

COMPETENCES FOR REGISTERED

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

#### D PROFESSIONAL PRACTICE

- D1. Recognise problems and apply appropriate scientific methods to identify causes and achieve solutions.
- **D2.** Demonstrate how you use resources effectively.
- D3. Participate in continuous process improvement.

#### E 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.



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