

# An applicant's guide to becoming a Registered Scientist (RSci)

## CONTENTS

PAGE

### 1. WHAT IS A REGISTERED SCIENTIST (RSci)?

The RSci register is owned by the Science Council and is a professional award providing recognition for those working in technical scientist roles.

The RSci designation provides recognition in its own right but can also form a part of professional development towards chartered status.

Gaining RSci will prove that you have:

- demonstrated your professionalism to employers, colleagues and clients
- transferable skills that allow you to work across different science sectors
- built on your academic achievements and developed professional skills in a work environment
- gained knowledge and awareness of your chosen area of the sciences
- developed strong scientific skills and are committed to improving them
- shown personal and professional integrity
- committed to developing your career, as well as advising others

Gain recognition for your skills and expertise by becoming a Registered Scientist (RSci). The RSci register is owned by the Science Council and is a professional award providing recognition for those working in technical scientist roles. The RSci designation provides recognition in its own right but can also form a part of professional development towards chartered status. Gaining RSci will prove that you have:

### 3. THE APPLICATION PROCESS

First, you become a member of the RSC. Visit

Identify an appropriate supporter and ask them if they would be happy to support your application. Your supporter should be a senior colleague who is very familiar with your work. This person is usually your line manager. The role of your supporter is to provide guidance on completing the form and to confirm that you are meeting or exceeding the competencies.

Work with your supporter to complete the application form. You will provide an example against each competency that demonstrates how you meet the criteria to become RSci. Make sure you sign the form (electronic signatures are accepted) and tick the declaration.

The form is available to download from the RSC website

Email the completed form and your CV and evidence of your relevant qualification(s) to the team at . A member of the team will make an initial review of your application, and will work with you to make sure it is ready to go out for assessment.

Your application will be assessed by two members of the RSC's Professional Registration Assessor Panel. This takes up to eight weeks. The assessors will share their comments, feedback and recommendation with the team at the RSC, who will forward this on to you as soon as possible. Your application might be accepted, rejected, or the assessors might ask for more information on certain areas of the application. If the assessors would like more information, you will be invited to revise your application accordingly. Once you have submitted your revised application, it will be sent for reassessment. This takes another two weeks.

We will inform you of the outcome of your application. If successful, you will be presented with a certificate and will be permitted to use the letters RSci after your name. You will also be invited to appear on the Science Council's online register.

Email:

### 4. THE ROLE OF YOUR SUPPORTER

Your supporter should be a senior colleague who is very familiar with your work. This person is usually your line manager. The role of your supporter is to provide guidance completing the form and to confirm that you are meeting or exceeding the competencies.

It is vital that your supporter provides a specific comment in support of each of the five competency areas before the completed application is returned to the RSC. They must also sign the declaration.

Guidance is available at any stage of the process, to both applicants and supporters, from a member of our Accreditation and Qualifications team. Please contact for support.

### 5. HOW TO WRITE EXAMPLES IN COMPETENCY-BASED APPLICATION FORMS

In general, we encourage the use of the SHARE format when writing examples in competency-based applications. Each letter in the word 'SHARE' represents a different component of a good competency example. Using this model helps you to make sure that you cover all the key information that the assessors will want to see.

- S** describe the situation, set the scene
- H** describe the problem or challenge that you needed to overcome, or the task you needed to complete
- A** describe the action that YOU took to overcome the problem
- R** show how the action that you took was the correct one, and describe the outcome
- E** how the situation turned out. You could even contrast it with what would have happened had you taken no action or a different course of action

You may find that you don't need to go through each part of the SHARE format in order. You might also combine some components within your narrative, eg the , or the . This isn't a problem, but it's important that each component part is there.

The key thing is that the assessors need to see from your work and understand in your workplace. As a rough guide, you should aim for

Examples should ideally be from your current job, and no more than two years old.

In the following table is an example answer that could have been given in an application for RSci based on the SHARE format. We've described how it might have been strengthened to give assessors an accurate impression of how the applicant is working at the required competency level. This increases the chances of the application being successful in the first instance.

## 6. COMPETENCY EXAMPLES

The examples below will help you identify potential topics for you to discuss in your application form. They are designed to serve as inspiration rather than a complete answer. To make sure that you provide sufficient detail, write your answers for each competency (around 200-400 words) in the format.

Registered Scientists work in many different settings. Here, we have provided examples of some industries and fields that previous applicants have been involved in (it is not an exhaustive list). However, many of these examples can apply to more than one sector so you might find it helpful to look over them all.

		<i>This includes examples from teaching, research and industry technicians</i>		
<p>Analyse, interpret and evaluate data, concepts and ideas to propose solutions to problems.</p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>Solving calibration issues with a lab instrument.</li> <li>Gathering considerable quality control (QC) data to ensure a particular method is performing well.</li> <li>Troubleshooting a failed instrument tune to identify a problem with one component, and carrying out maintenance and replacing components.</li> <li>Reviewing the analytical quality control results for a certain element on one of the instruments which was producing a high bias.</li> </ul>	<ul style="list-style-type: none"> <li>Conducting a literature review to find the best method of analysis of complex substances, and adapting it to the existing lab equipment.</li> <li>Proposing an upgrade to an existing, unreliable instrument by testing those from different manufacturers and reporting on cost, efficiency and potential student experience.</li> <li>Finding an alternative method of analysis for samples which were very small.</li> <li>Designing experiments to investigate all variables to identify unexpected results.</li> </ul>	<ul style="list-style-type: none"> <li>Observing low sample resolution and determining the cause as being due to the sample evaporating during scanning due to high volatility.</li> <li>Conducting an evaluation of pharmacopoeia methods of quantification to profile substances.</li> <li>Investigating anomalous results in accordance with in-house procedures to ensure reproducibility and reliability.</li> <li>Testing methodology by seeking out flaws or vague wording, and suggesting improvements for precision and reliability.</li> </ul>	<ul style="list-style-type: none"> <li>Investigating unexpected variation in specific analysis results by repeating the entire run with fresh reagents.</li> <li>Improving the procedure for restarting an instrument console which used to bring up a lot of errors when the units were switched on too quickly or the computer was restarted at the wrong point.</li> <li>Evaluating statistical data to propose suggestions to improve data quality and the data processing software.</li> <li>Noticing slow performance in a reaction then undertaking a literature review to improve performance.</li> </ul>
<p>Work autonomously while knowing when to escalate appropriately and recognising limits of scope of practice.</p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>Running an investigation when an instrument failed to produce quality control results – team leader and technical manager had to be consulted on the accreditation of a whole batch of samples.</li> <li>Managing a large workload, but also samples that have a two week turnaround and the limit of the number of samples that can be analysed in that time.</li> <li>Analysing drinking water samples and following an analytical method to provide results of a range of metals. If any issues arise during routine testing, the Team Leader and the Public Health and Standards department within the company are notified.</li> </ul>	<ul style="list-style-type: none"> <li>Configuring a method and adapting to new specific project conditions, together with advice given by an academic colleague to order suitable analytical standards.</li> <li>Day-to-day management of an analytical instrument in the teaching and research labs, which falls under the remit of the lab manager.</li> <li>Writing a standard operating procedure (SOP), and escalating the finished document to be uploaded to the online workspace for students and staff to access.</li> <li>Gathering data for a new project, while managing the new work alongside other higher priority projects.</li> </ul>	<ul style="list-style-type: none"> <li>Carrying out an impurities test and asking for guidance to run system suitability tests.</li> <li>Putting together workload schedules for reference, and adapting to equipment breakdowns or extended runtimes.</li> <li>Working to SOP to avoid moisture getting into a system, and escalating problems when replacement components need to be installed and re-equilibrated.</li> <li>Undertaking a project on new drug formulation, and finding existing methods were not suitable for the formulation.</li> </ul>	<ul style="list-style-type: none"> <li>Delivering all analyses as required, and asking for assistance from colleagues in order to deliver new drug formulations to students.</li> </ul> <p>[(int)1l theagues 0007-BDC ( )TJEMC</p>



		<i>This includes examples from teaching, research and industry technicians</i>		
<p>Demonstrate effective and appropriate communication skills.</p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• Demonstrating how to complete a new software process when no training time had been allocated.</li> <li>• Communicating to late shift workers about the work done that day using digital recording systems and a shared whiteboard.</li> <li>• Producing prospective costing information for a new method into an Excel spreadsheet and a visual document.</li> <li>• Introducing and conducting weekly meetings to keep analysts up to date with what's happening each week and things to be aware of.</li> <li>• Running instrument demonstrations for lab visitors, go5 (er429Td[(spr)22 (eadssr)21 (ngs t)15At)15At-1.2 Td(and descriptb 10.1 (or lab ))juu .1pr)22 (opria)5.1 [d.EMC ns, go5</li> </ul>			





		<i>This includes examples from teaching, research and industry technicians</i>		
<p>Contribute to the organisation of tasks and resources.</p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• When a new pH meter was installed, completing a new equipment file, relevant control charts, and coordinating training.</li> <li>• In anticipation of a new piece of equipment being installed in a lab – arranging quotes and invoices, making sure there is appropriate space and appropriate access to things like water lines.</li> <li>• Managing a group of analysts and arranging how the work is divided to ensure the vital areas are kept running.</li> <li>• Due to illness and annual leave, organising the team to make sure every method had someone to analyse samples.</li> </ul>	<ul style="list-style-type: none"> <li>• Creating log books for all instruments in a lab to present important information clearly and be able to identify problems in future.</li> <li>• Giving induction training and fire safety training to students at the start of the lab courses.</li> <li>• Creating internal web pages to include information on shared equipment, the responsible contact, how to order consumables and how to book instrument training.</li> <li>• Developing and updating a working schedule when multiple projects are running in a lab to ensure the most efficient usage of heavily used equipment.</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-emptively requesting an order for extra consumables to prevent the possibility of a shortage during a period of increased testing.</li> <li>• Making sure required chemical reagents and standards are within their expiry dates and that any relevant equipment can be made available before commencing any work.</li> <li>• During a lengthy test run, scheduling in other tasks to complete during the time.</li> </ul>	<ul style="list-style-type: none"> <li>• Organising a weekly rota for filling complex instruments with liquid nitrogen.</li> <li>• Creating a raw material tracker spreadsheet on the shared online area which contained all the details of the materials such as lot numbers, location and stock levels.</li> <li>• Streamlining the lab chemical inventory by removing unnecessary columns and adding in hyperlinks and colour codes to flag low stock.</li> <li>• Transferring paper-based records to an electronic system to contribute to making lab systems more environmentally friendly.</li> </ul>
<p>Participate in the design, development and implementation of solutions.</p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• Investigating the cause of sample and QC failures and implementing a change in the cleaning rota to avoid the issue in future.</li> <li>• Reviewing the batch reporting procedure and developing software to automate steps as appropriate to streamline the process.</li> <li>• Improving a calibration standard preparation procedure to increase reliability and accuracy.</li> <li>• Noticing there was a historic issue of certain element results being high from AQC samples so taking the initiative to resolve this by investigating all possible sources in testing processes.</li> </ul>	<ul style="list-style-type: none"> <li>• Troubleshooting issues which arise when transmitting a method from one instrument to another.</li> <li>• Noticing an issue with a vacuum pump so designing a solution with assistance from Estates to minimise exposure to hazardous substances.</li> <li>• Developing an online booking system for shared instruments.</li> <li>• Running multiple experiments and using statistical analysis software to determine the most effective conditions to fully utilise a particular chemical.</li> </ul>	<ul style="list-style-type: none"> <li>• Noticing an issue with low peak response caused by sample residue build up and trialling a long term solution to increase syringe washes.</li> <li>• Implementing the use of a more efficient solvent in a testing process.</li> <li>• Providing clarity on a procedure when a pharmacopoeia method involved some cross referencing between two different methods.</li> <li>• Instigating a method guidance note which contains advice and recommendations on how to approach a particular test and documents acceptable deviations that the analyst can carry out.</li> </ul>	<ul style="list-style-type: none"> <li>• Investigating in-range, but low test results by looking through old reports and adjusting the procedure according to a change in calculation.</li> <li>• Investigating the cause of low resolution in results, after confirming the instrument was performing correctly and sh tw tassis</li> </ul>

		<p><i>This includes examples from teaching, research and industry technicians</i></p>		
<p>Comply with and promote relevant codes of conduct and practice.</p> <p><i>This means that you can give an example of how you comply with a code of conduct (eg. of your professional body) or how you work within and promote all relevant legislative, regulatory and local requirements.</i></p>	<ul style="list-style-type: none"> <li>• Due to working in a UKAS accredited lab, carrying out a health and safety observation regarding bottle disposal to ensure health and safety guidelines are adhered to.</li> <li>• Attending a course on COSHH and creating safety documents as and when necessary.</li> <li>• Adhering to ISO17025 according to UKAS accreditation, including calibrations, maintaining staff competence, circulating any method changes, and preparing for annual audits.</li> <li>• Complying with the company code of conduct and reporting any health, safety or wellbeing flags on a monthly basis.</li> </ul>	<ul style="list-style-type: none"> <li>• Completing a COSHH form for an environmentally toxic chemical so ensuring waste disposal streams were availableal saste disp( )TjEMC 0.778 TPO iEf1.4E1.429Td62 company jE2saomnfdelntiliby gage22 (edments(as)10 (t)15 (e disp( )TjEMC 0.778 TPO iEf1.4E1.429Td62 ))T0 -1-1.7suude.)10 O -s gage22 (edments(as)10 (t)15 (e disp( )TjEMC 0.778 TPO iEf1.4E1.429Td62 ))T0 -1-1.7suude.)10 O -s cedspet ao lquliby gondtoml(as)104.108976 Td(• )Tj/SpnzActualTextFEFF0007BDC ( )TjEMC 0.778 Td[(CAbiing t aj-6(t)15 (e disp( )TjEMC 0.778 TPO iEf1.4E1.429Td62 ))T0 -1-1.7suude.dhering to lny c</li> </ul>		