Registered Scientist
Application Guidelines

RSci
Registered Scientist
Brought to you by Science Council

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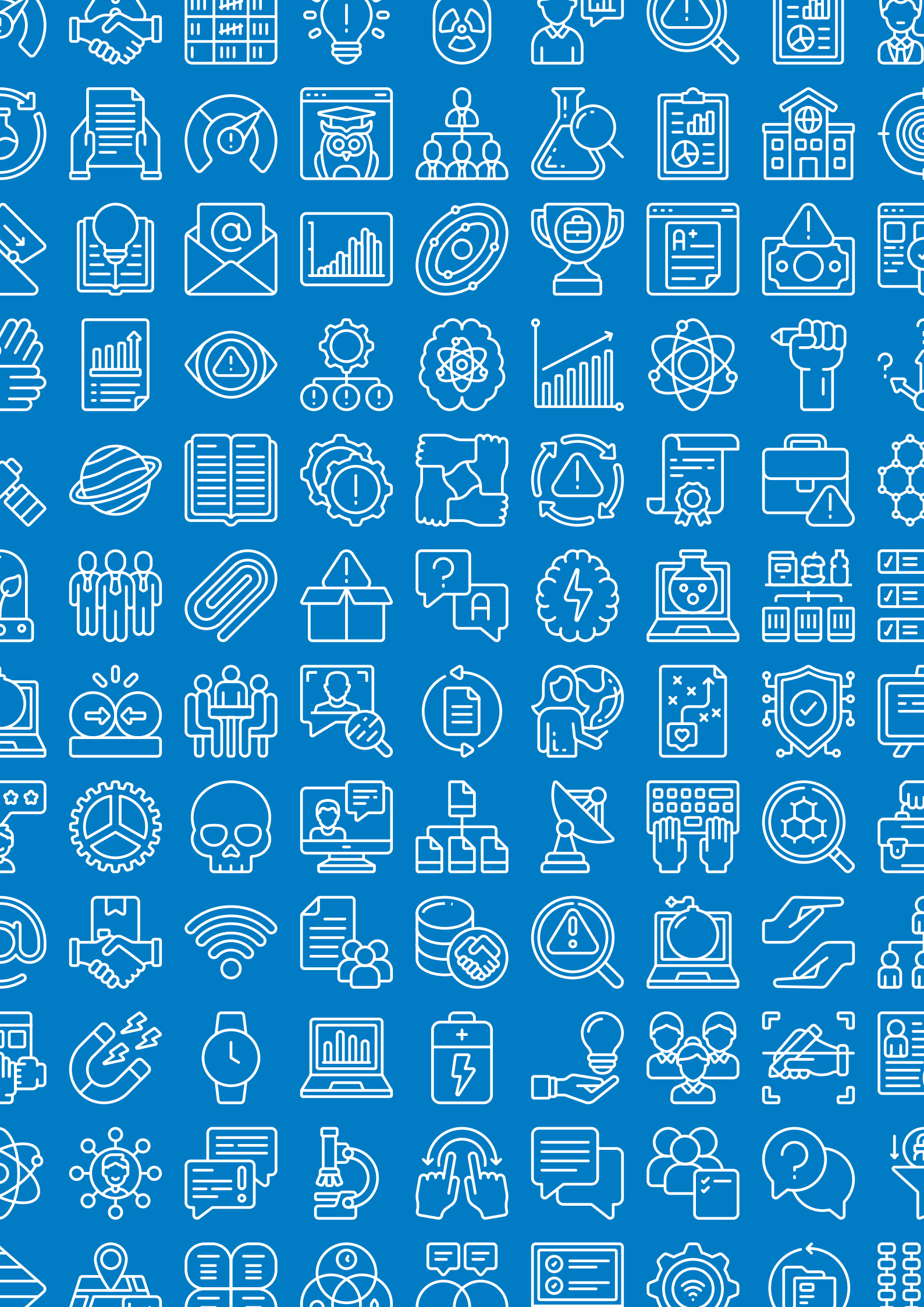
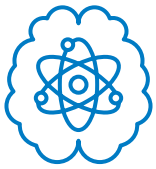
IOP Institute of Physics





Application of knowledge and understanding

Personal Responsibility

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About professional registration

Professional registration is a peer-reviewed and internationally recognised confirmation of your achievements. Professional registration demonstrates a level of knowledge and experience that can be relied upon by employers and the wider community. It is recognition of your achievements and enhances your status.

By becoming professionally registered with the Institute of Physics (IOP), you agree to our Code of Conduct that reflects best practice. The code requires that our members not only show a high level of professionalism, but also advance their competence through continuing professional development (CPD).

The IOP awards its own professional registration of Chartered Physicist (CPhys). The IOP is also licensed by the Engineering Council to award Engineering Technician (EngTech), Incorporated Engineer (IEng) and Chartered Engineer (CEng), and by the Science Council to award Registered Science Technician (RSciTech), Registered Scientist (RSci) and Chartered Scientist (CSci).

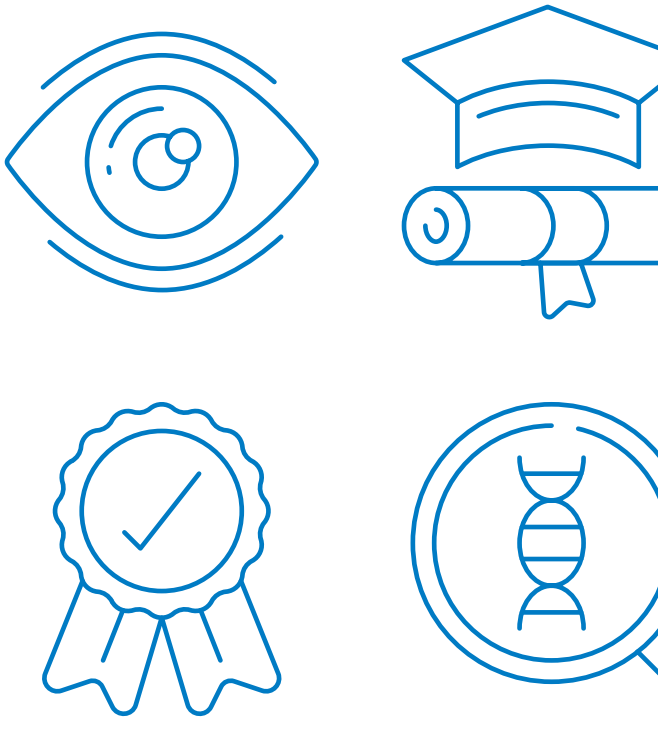
To be eligible to apply for Registered Scientist through us you will need to be a member of the IOP and have a science-based qualification or equivalent knowledge and experience. If you are uncertain about your eligibility to apply for Registered Scientist please contact us on **registration@iop.org**.

If you are not a member, you will need to be elected to an appropriate grade of membership before your application for professional registration will be considered. For more information and to apply for membership please visit **membership.iop.org**.

This guidance document has been designed to guide you through the requirements and application processes for Registered Scientist.

The application process is anonymous as such we request that when documents are uploaded personal identifiable information is not included. Supporting documents such as a CV, organisational chart, the equivalence report or supporting statements or letters should not include the following information: name, contact details, address, date of birth age, marital status, social media links etc. Degree certificates should not be anonymised as these are verified by IOP staff.

Additionally, when completing your application, please avoid using your name or gender pronouns. References to publications, where relevant, should have all names removed but your level of involvement should be described.



Eligibility Requirements

Registered Scientists can be found in a huge variety of scientific and higher technical roles. They apply their skills and knowledge whilst working autonomously and have the ability to resolve problems and identify, review and select appropriate techniques, procedures and methods.

To be eligible to apply for Registered Scientist you will:

1. Have a good breadth and depth of scientific knowledge. You will demonstrate this by either:

- Possessing an exemplifying qualification; or
- Showing knowledge and understanding of equivalence to this

2. Have sufficient work experience to enable you to demonstrate the Registered Scientist competences and provide examples of sustained experience at a responsible level. You will demonstrate this by completing the Professional Review Report

3. Nominate supporters who can vouch for you. For all grades of professional registration, the IOP requires a minimum of two supporters. These supporters verify the content of your application and should be someone who knows your work.

How do I apply?

To apply for Registered Scientist, you will need to complete the online application form, which can be found at **applications.iop.org**.

Meeting the standard

Scientific knowledge

All applicants are required to demonstrate that they have the breadth and depth of scientific knowledge and understanding that is required for Registered Scientist. Applicants need to demonstrate their competence across five areas by providing examples from their working life, usually within the last three to five years, that illustrates how they have met each standard. This is then assessed either online or in a face to face interview.

Applicants need to hold a Level 5 qualification in a relevant scientific discipline (level 7 in Scotland) or equivalent. For example, a foundation degree, HND, NVQ Level 5.

Non-UK qualifications

If you have a non-UK qualification, please contact us at **registration@iop.org** prior to applying and we will help you identify the right route.

The IOP will compare your qualification to a UK qualification using an international database, found at enic.org.uk. The IOP uses this to verify the level of your qualification. Depending on how your qualification compares to the requirements for Registered Scientist we will advise on the appropriate route of application which may include completing additional paperwork. If you have a qualification from an EU/EEA state or Switzerland, you may be eligible to apply through the Recognition of Professional Qualifications route.

If you have any questions, please contact us on **+44 (0)20 7470 4800** or email **registration@iop.org**.

Demonstrating Competence

Professional Review Report

All applicants are required to demonstrate that they have sufficient professional experience in a science-based role.

To enable a sufficient assessment of your professional experience, all applicants are required to submit a Professional Review Report. This report summarises and links your experiences to the competences for Registered Scientist which are set by the **Science Council**.

Career length: There is no specific time-served requirement, but you will need to have been working for long enough to allow you to demonstrate all of the Registered Scientist competences, and provide evidence of sustained work at the required level.

A template for the report is provided within the application form. It includes the following sections:

Introduction – A brief outline of your current role and its scientific content, around 200-500 words in length.

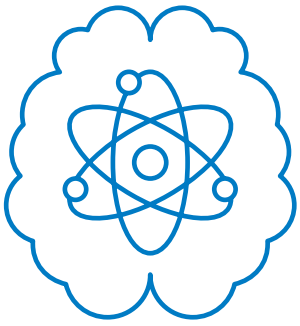
Organisational chart – An organisational chart or statement of accountability must be attached to your report. The chart or statement should detail your position within your organisation and display or describe any hierarchy, or matrix system, linking you to those you are responsible to and for. It should indicate your level of seniority within the organisation. If you work by yourself, for instance as a consultant, you must provide a supporting statement.

Competence and Commitment – You will need to supply evidence against each competency requirement, where you demonstrate how your experience meets each competency or commitment standard.

Each answer should be approximately 200-500 words. Within your answers, please provide several different examples of how you are using and applying your knowledge at a professional level.

You should choose examples where you played a role that allows you to demonstrate how you have learned to apply your knowledge, your level of responsibility and how you have applied your professional judgment. We

A



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recommend that you provide at least two examples for each standard, one describing how you developed the competence or commitment and one describing your current level of experience and responsibility.

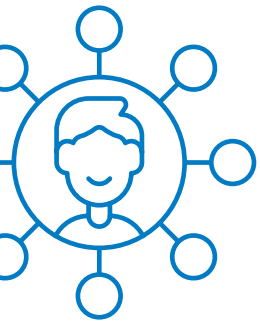
Continuing professional development (CPD) – Outline your training and development plans for the next five years. This section should explain how you intend to maintain your competence once you are registered as a Registered Scientist and, if appropriate, how you intend to progress to Chartered Scientist or Chartered Physicist. This should be around 200 to 500 words.

The Registered Scientist Standard

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

The competences will largely be met during employment. For some applicants, professional development will be through participation in an IOP Accredited Company Training Scheme (ACTS) which will be structured in order to provide relevant experience and include the recording of evidence towards registration. However, it is recognised that experience can be gained gradually over several years without undertaking formal training or participating in a professional development scheme and this is no barrier to attaining professional registration.

Competence is developed by a combination of formal and informal learning, and training and experience. However, these elements are not necessarily separate or sequential and they may not always be formally structured.



D

Professional Practice

E

Professional Standards

A

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 extended knowledge of underlying concepts and principles associated with area of work

We are looking for an example of how you have used your extended knowledge within the area in which you work. This will include developments within your field and the ability 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: Review, evaluate and apply underlying scientific concepts, principles and techniques in the context of new and different areas of work

What we are looking for here is how you have taken techniques/principles and reviewed, evaluated and applied them in a new area of work. For example:

- 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 undertaking 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

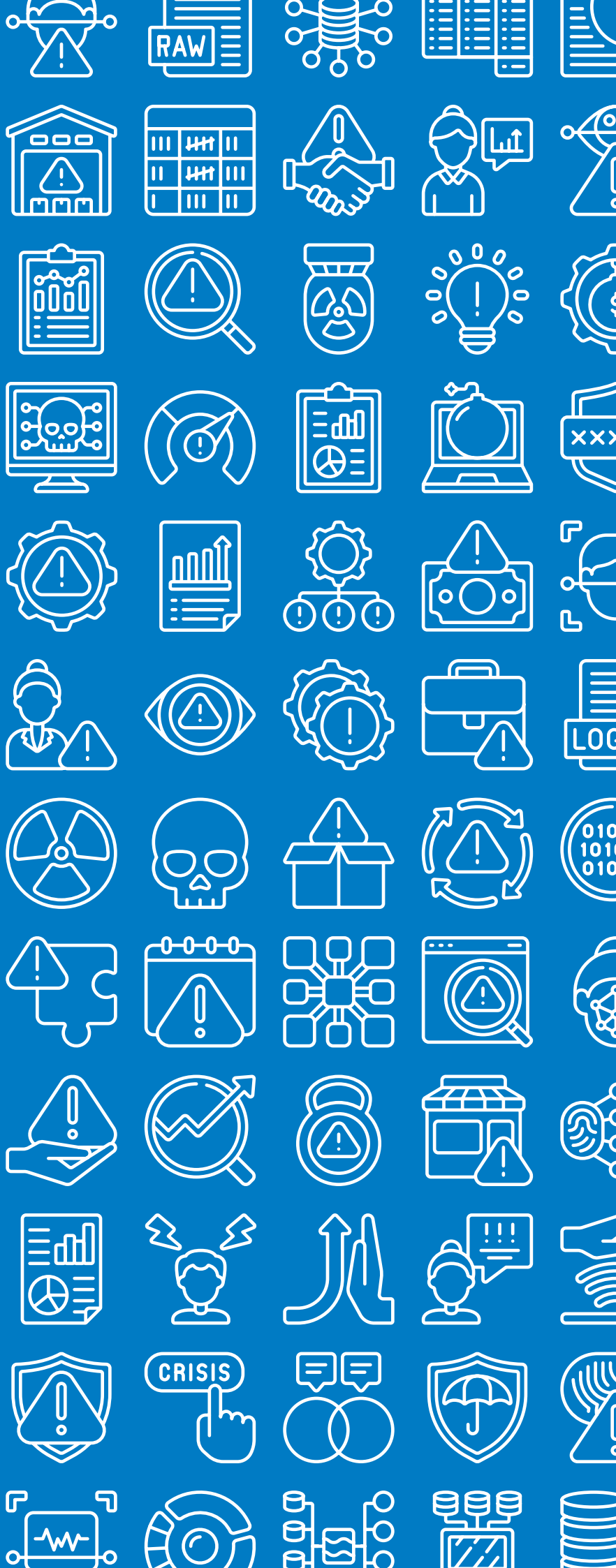
A3: Analyse, interpret and evaluate data, concepts and ideas to propose solutions to problems

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.

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 several relevant manuals/designs/literature and present your findings to others
- Develop new methods/approach based on information or outcomes from previous work by others or yourself.

B



B: Personal Responsibility

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

B1: Work autonomously while knowing when to escalate appropriately and recognising limits of scope of practice

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.

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

We are looking for an example of how you have taken responsibility for working safely and sustainably. For example:

- 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 3
- 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
- Undertaking 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: Take responsibility for the quality of your work and also enable others to work to high 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 an example of how you enable 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.

C

C: Interpersonal Skills

Demonstrate effective communication and interpersonal skills

C1: Demonstrate effective and appropriate communication skills

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. 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 effective interpersonal and behavioural skills

This means that you can give an example that demonstrates the skills that you use to interact with colleagues in a constructive way within 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.

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 the problem. 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

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 or other types of working environment. 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 process improvement

This means that you can give an example that 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 and promote relevant codes of conduct and practice

This means that you can give examples of how you comply with a code of conduct (e.g. the IOP Code of Conduct) or how you work within all relevant legislative, regulatory and local requirements.

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) and reflect on its impact on you and others. We are not looking for a list of courses but evidence of how your CPD benefits your practice and benefits others. Your CPD may include work-based learning, professional activity, formal/ educational, self-directed learning. All registrants will need to comply with the Science Council CPD Standards, and you should familiarise yourself with them and ensure your plan for CPD in the future will meet these.

The Registered Scientist Standard Report: Five most common mistakes

1

We, not I

Now's your time to shine! We are awarding registration to you, not your team, so in all your explanations, you need to be clear on what your individual role was. If your entire answer references "us" and "we" with no "I" or "me," then you will need to reformulate what you've written.

2

Being too brief

After you've written your response, read it back and think about whether an assessor would be able to visualise what your role was. If they can't, you have not provided enough detail.

3

Lacking depth

It isn't just about what you did; it's about how and why you did it. You can only be awarded registration when our assessors are sure you know the impetus behind, and results from your work.

4

No outcomes

You need to demonstrate that you understand the difference that your work makes long-term. If you have improved a procedure, what does that mean in real terms? How do your colleagues benefit? What happens to the standard of your results?

5

Not referencing the heading

The competence report is broken into five sections with several sub sections. Read the section heading thoroughly before you write your response. You need to make sure you have fully absorbed what the standard is asking.

!

Personal details included

As the application process is anonymous, make sure all personal details are removed from your supporting documents and your application.

Refer to **our website** for further advice on completing your application.

Choosing your supporters

Along with your written application, you are required to supply details of two supporters who can verify the information in your application and comment on your suitability for Registered Scientist. Sometimes you may find it necessary to provide the details of a third supporter in order to adequately cover the content of your application. Please note your supporters do not need to be professionally registered.

Please consider the following when choosing your supporters:

First supporter – This must be someone who knows, or has known you professionally, working at a senior level to you and with direct knowledge of your role and responsibilities. This could be fulfilled by your current line manager, employer, head of department or faculty, head teacher or training scheme mentor.

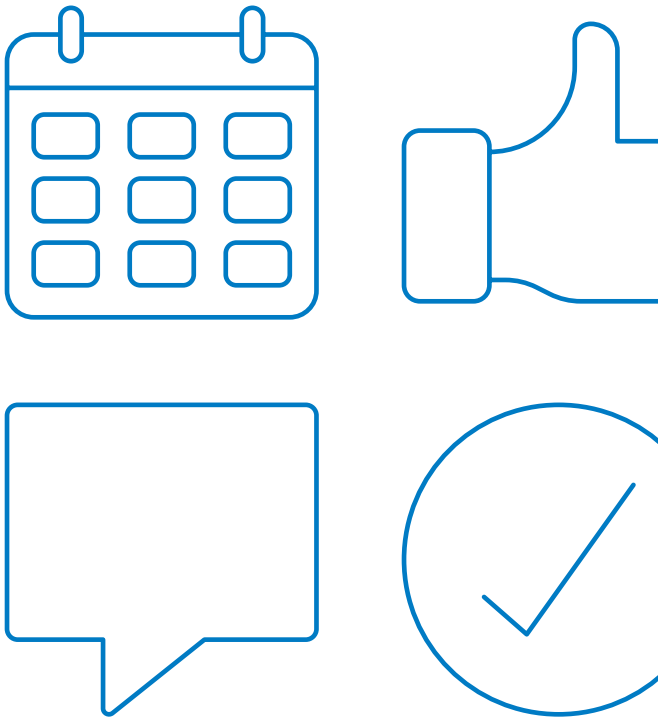
Second supporter – This must be someone who knows or has known you professionally at a relevant point in your career and will usually have been senior to you at the time.

Optional third supporter – A third supporter may be necessary if your application covers periods spent at several different organisations or if you undertake consultancy work.

Supporters should be familiar with your work, but not be a close friend or relative.

Please ensure that between them, your supporters are willing and able to verify your experience. They should be contactable by email for several months after you submit your application. Supporters will be sent links to the form they need to complete online via a generic IOP email address. Please ask your supporters to provide an email address that does not have a high firewall as this can cause delays in your application.

In the event of inconclusive comments from your supporters, we may contact them for further information or ask you to nominate an additional supporter. The assessment process places great value on the supporters comments so it is important that you select supporters that are willing to provide a full and detailed response.



How is my application assessed?

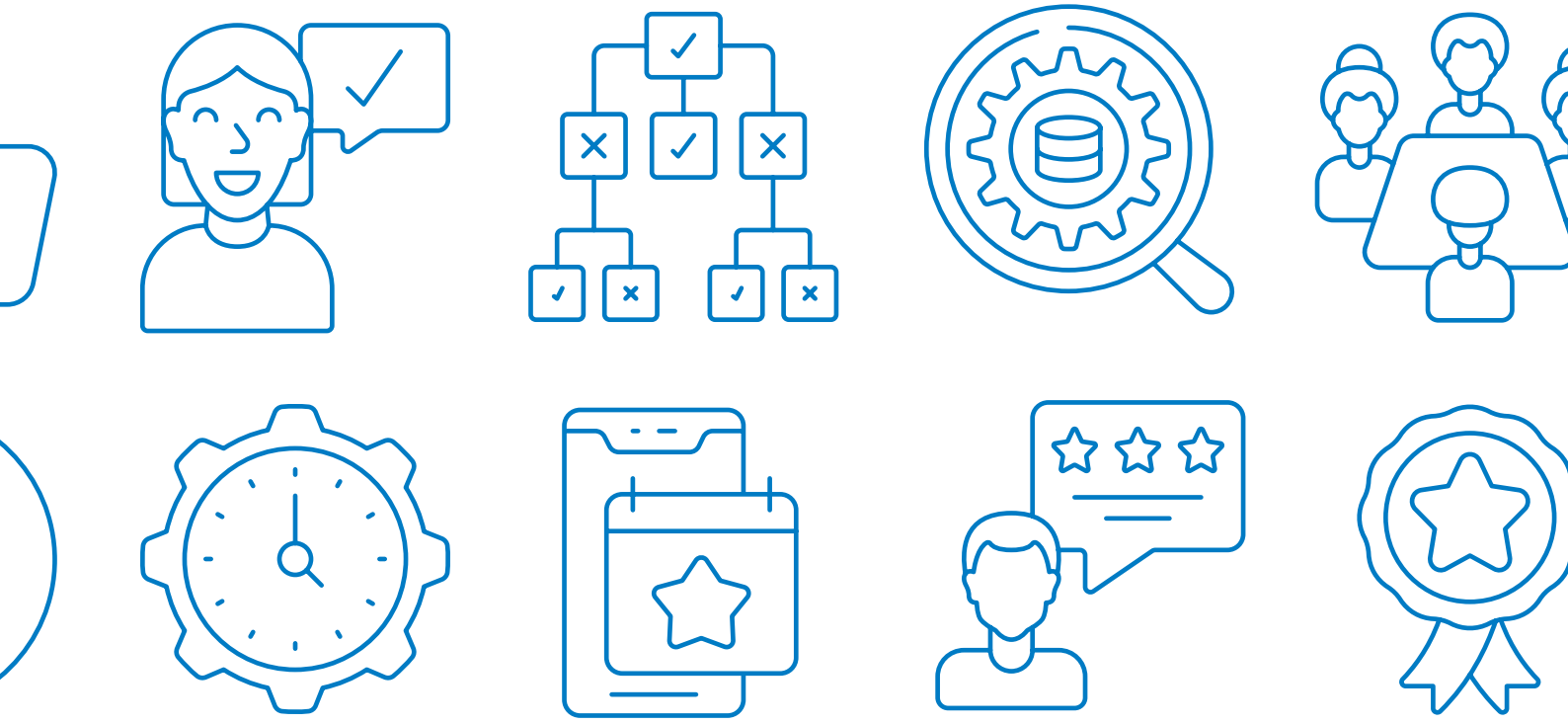
Each application undergoes an independent assessment by a panel of Science Council registered members of the IOP. The panel assesses the information in your application, and the comments of your supporters, in order to decide if you have met the standard for Registered Scientist. If the panel feel you would benefit from attending an interview they will recommend so at this point. The panel may also advise at this point that you need to demonstrate further learning, training or additional experience. Once assessed, you will be notified of the decision.

Applications may be deferred, and this is generally due to insufficient responsible experience. Occasionally, applications are deferred to allow the applicant an opportunity to supply additional information. A deferral can be granted for up to a maximum of 12 months. Where an application is deferred or rejected the applicant will always receive a letter explaining the reason for this and suggesting a future course of action as put forward by the assessment panel.

Optional Interview

All applicants for Registered Scientist who have selected to have an interview will be asked to attend a Professional Review interview to discuss their application in greater depth. The aim of the interview will be to confirm information supplied within your application and to verify that you meet the required standards.

Interviews are usually held virtually although in-person interviews can be made available if required and would normally be held in London. Interviews are conducted by two members of the IOP who are professionally registered with the Science Council. On occasion there may be an observer present.



How long will my application take to process?

You will normally receive the outcome of your application within 12-16 weeks of from when your supporters' responses were received. The outcome of your application will be communicated to you by the IOP following assessment by the panel. You can log back onto the online application form to check the progress of your application.

Poorly prepared applications will be sent back to you review. This will mean your application will take longer to process. It is in your best interest to ensure that the information supplied is as accurate, clear and as complete as possible.

If your application is successful, you will be invoiced for your professional registration fees before your details are registered with the Science Council. Current fees can be found on our **website**.

Document Checklist

To help you prepare your application please find listed below the documents that you will need to upload:

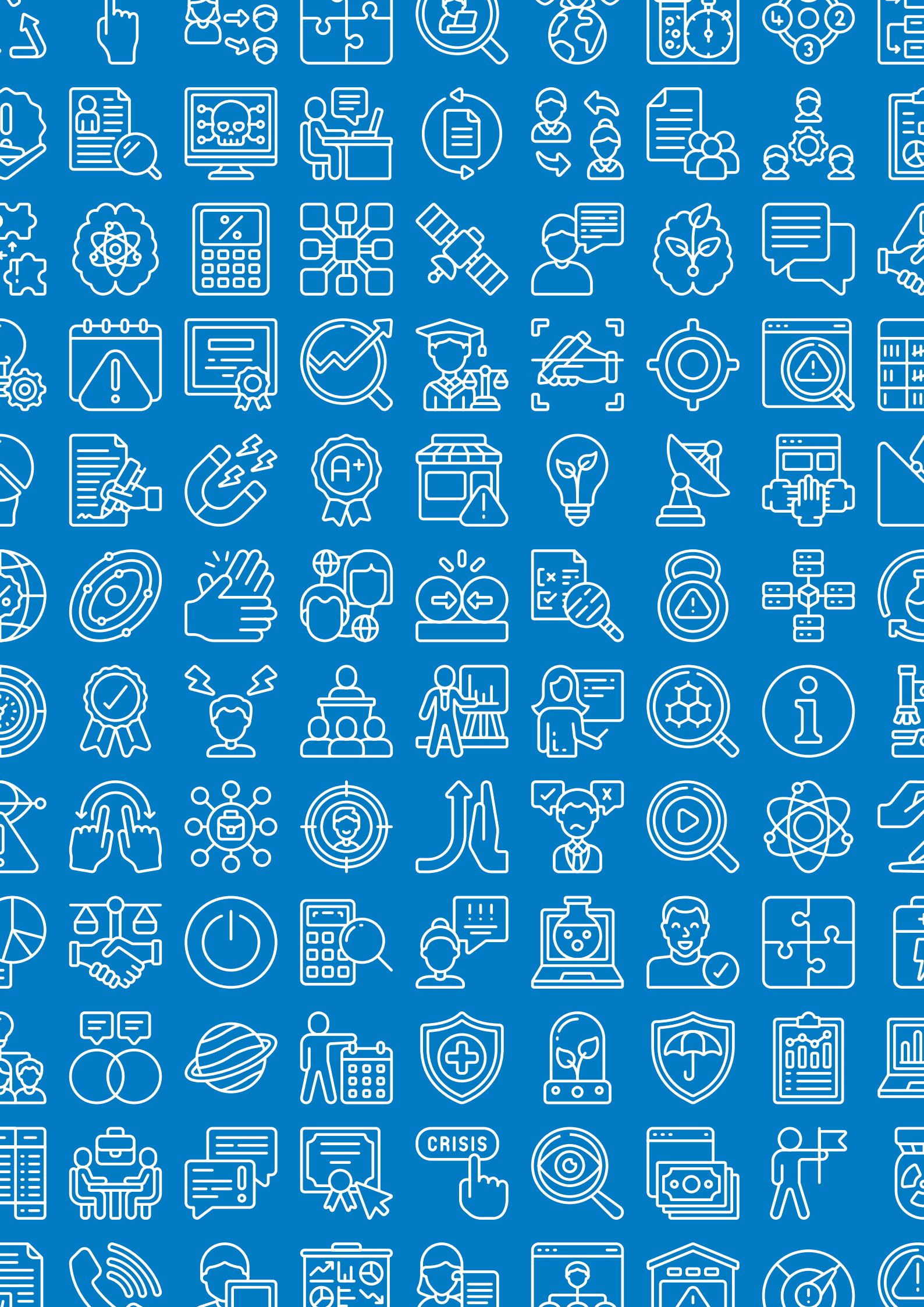
- CV
- Organisational Chart/Statement of seniority
- Qualification Certificates/Transcripts

Please remember that the following information should not be included in the supporting documents:

- Name
- Contact details
- Address
- Date of birth
- Age
- Marital status
- Social media links, etc.

Degree certificates should not be anonymised as these are verified by IOP staff.

The file name should not include your name.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Visit our **website** or contact us to discuss your application on +44 (0)20 7470 4800 or **registration@iop.org**. Apply online: **applications.iop.org**

iop.org

The IOP is the professional body and learned society for physics in the UK and Ireland, with an active role in promoting cooperation in physics around the world. We strive to make physics accessible to people from all backgrounds. Our 22,000 members demonstrate their professional expertise in physics in settings ranging from schools, universities and national research facilities, to businesses of all sizes, and in roles as varied as teacher, researcher, apprentice, technician, engineer and product developer.

Date created: June 2020. Date reviewed: February 2022