



Mineralogical Society of Great Britain and Ireland Chartered Scientist Guidelines for Applicants

The Mineralogical Society of Great Britain and Ireland is licensed by the Science Council to award the qualification of Chartered Scientist. The Science Council was incorporated by Royal Charter on 14 October 2003. The Charter empowers the Science Council to award the designation 'Chartered Scientist' through Licensed Member Bodies.

An aim of introducing the title Chartered Scientist (CSci) is to ensure high and improving standards across all scientific disciplines. The designation reflects best practice in science and is set at a benchmark level throughout the profession.

Chartered Scientist is appropriate for those practising science professionally and for those for whom scientific knowledge or practice at a professional level forms an essential element for the fulfilment of their role.

Qualifications and experience required to be a Chartered Scientist with the Mineralogical Society

Applicants must be Fellows of the Mineralogical Society. Members and Student Members are not eligible at present.

Applicants should be qualified to at least 'M' level in a subject relevant to the science of the Mineralogical Society and should have at least four years appropriate level post graduate experience in the practice, application or teaching of the science, with a minimum of two years immediately prior to the application at an appropriate level of responsibility and with appropriate professional development.

Typical routes to CSci are given in the table below. The majority of Society members are engaged in academic research and a PhD or Masters is an appropriate qualification.

Table 1 Typical routes to CSci

First degree	Higher degree	Additional length of appropriate experience required
	Integrated Masters degree e.g. MSci	4 years
BSc	Postgraduate Masters degree e.g. MSc, MPhil or MRes	4 years
BSc	Doctorate such as PhD or EngD (two years of which can count towards the 4 years total post graduate experience required)	2 years
BSc		Appropriate professional development to attain a depth of understanding and knowledge equivalent to the 'M' level*. This is expected to take at least 5 years

The lengths of experience given in the table more or less equalise the *minimum* time from starting a 3-year BSc to gaining CSci of 8 years.

*M-level equivalence is described in our 'M'-level equivalence document (see the 'Forms and Links' menu option)

Fast track procedure for Mature Entry

A 'Mature Entry' procedure is important to the Mineralogical Society because few members are of Chartered or equivalent status but many are senior researchers and practitioners and 'overqualified' compared with the minimum standard required for CSci. The Society is keen to encourage this body of membership to become Chartered Scientists and therefore has sought to devise a rigorous but not too arduous fast track process for Fellows who meet the qualification standard of M level or PhD *and* have more than 10 years post graduate experience.

This procedure will require certificates of qualifications, a completed application form with career details in extended CV format to show scrutineers the nature of work, with at least the last two years given in more detail and signed off by a senior manager. Supporting information, such as recent publications and a publications list should also be provided.

In this case, the Society will appoint one scrutineer, who may pass to a second if required to cover the subject area. Applicants will not be interviewed unless the application is considered borderline or other clarification is required, as recommended by the scrutineers. The scrutineers will make a recommendation to the Validation Committee who will make the decision on the award of CSci.

Exceptional cases

Exceptionally, applications may be accepted from applicants who are not graduates. A minimum of 15 years appropriate experience is required in this case, and applicants

should make informal contact with the Executive Director of the Society in the first instance to discuss suitability.

Career breaks such as maternity, paternity or family leave and flexible working arrangements will not detract from suitability for CSci and should be clearly indicated on the application form.

Suitability of academic qualifications

There are two aspects to the consideration of degree courses, (1) whether they are of appropriate academic standing and (2) whether the subject is suitable.

(1) Recent taught degrees in the UK should have Quality Assurance Agency for Higher Education (QAA) listing. If degree courses predate QAA assurance, the highest taught degree will be considered further. Degrees from UK universities will normally be accepted. For degrees obtained overseas, reference will be made to the NARIC National Academic Recognition Information Centre for the United Kingdom (UK NARIC) (<http://www.naric.org.uk/>) to demonstrate equivalence. The Mineralogical Society does not currently subscribe to this service and so applicants should apply to NARIC for a written individual assessment of academic qualifications, which results in a letter of comparability that must be included with the application form.

The Mineralogical Society does not formally accredit degree courses itself but accepts accreditation by other Science Council Licensed Bodies (e.g. Geological Society, IoM³, Royal Society of Chemistry and the Institute of Physics and Institute of Engineers).

Quality assurance for PhD degrees is by

<http://www.qaa.ac.uk/academicinfrastructure/codeofpractice/>

(2) Degrees in geology, mineralogy, geochemistry, Earth science and planetary science subjects are suitable. As a general rule, undergraduate degree courses should have contained at least three hundred learning hours of mineralogical or geochemical science. A list of UK and Irish degrees that fulfil this requirement is being compiled. Degrees in complimentary subjects such as chemistry, physics, materials science or environmental science are also acceptable when combined with appropriate postgraduate training and experience in mineralogical and/or geochemical sciences relevant to the Mineralogical Society. Advice about subject suitability for taught degrees, and especially for research degrees, will be sought from the scrutineers. You may attach supporting information to your application to show that your degrees are suitable.

Appropriate experience

You should have been working at a professional, post-graduate level in the practice, application, management, administration or teaching of mineralogical science (including mineralogy, mineral physics, clay minerals and fine particle science, industrial mineralogy, mineral processing, crystallography, mineral chemistry and environmental mineralogy), geochemistry (pure or applied, organic or inorganic) or petrology (including experimental petrology, mineral deposits, volcanology and planetary sciences) for at least the minimum length of time specified in the table above. For two years immediately prior to the application the guidelines specify 'an

appropriate level of responsibility', which will vary according to the job but, as a guide, you should be required to use the competencies listed below. For example, an experienced post-doctoral research assistant who plans and carries out work within the project remit, making collaborations with internal and external colleagues as required, writes up papers and reports, attends conferences and presents results, has carried out some training in complimentary skills and carries out all correct health and safety procedures would be likely to fulfil the requirements.

Competencies required to become a Chartered Scientist through the Mineralogical Society

In addition to the appropriate qualifications and experience, chartered scientists must have the following six competencies. These are key scientific and professional skills that are kept deliberately broad in order to allow scientists working in interdisciplinary areas of the mineralogical and geochemical sciences to apply for CSci.

Applicants must be able to:

A. Deal with complex scientific issues, both systematically and creatively, make sound judgements in the absence of complete data and communicate conclusions clearly to specialist and non-specialist audiences

A1. Use a combination of general and experiential knowledge, understanding and skills to be able to optimize and engage in the application of existing and emerging science and technology. Be confident and flexible in dealing with new and changing situations. Carry out experimental work and/or advise on and manage the work of others;

A2. Use theoretical and practical methods in the analysis and solution of problems Collect, analyse and evaluate relevant data and offer possible solutions; Present solutions to technical and non scientific audiences; Communicate with colleagues at all levels; Exchange information and give advice to scientific and non-scientific audiences; Prepare and deliver appropriate presentations.

A3. Communicate effectively.

B. Exercise self-direction and originality in solving problems, and exercise substantial personal autonomy in planning and implementing tasks at a professional level

B1. Plan and organize projects effectively

B2. Work effectively in a team

B3. Use effective influencing and negotiating skills

C. Continue to advance knowledge, understanding and competence to a high level and demonstrate a commitment to CPD

D. Demonstrate an understanding and commitment to Health and Safety and environmental issues related to employment. (Candidates must provide evidence of H&S criteria that cover their areas of work; this may include relevant legislation and appropriate application (i.e. COSHH, Ionizing Radiation Regulations, etc.) It may also include risk assessments or systems of schemes of work to comply with H&S.)

E. Comply with the relevant Codes of Conduct

The scrutineers will need to tick these off on their report and so the applicant should ensure that their application form demonstrates that he/she fulfils all of the competencies.

A set of generic competencies for chartered scientist is also given by the Science Council (see Science Council Chartered Scientist booklet, pages 2 and 3).

Application procedure

Application form

Please read the guidelines for applicants carefully before completing the application form. The information provided should be as concise as possible whilst giving enough detail to demonstrate that the qualifications, experience and competencies required for chartered scientist are met. Remember, to demonstrate the competencies, you will need to do more than simply list scientific output.

Supporting information

Degree certificates

Please enclose the original certificate or an official certified copy (i.e. signed on the back by a senior colleague at your current place of employment) for each degree qualification plus a set of photocopies of certificates. Photocopies alone are not acceptable.

Other supporting information such as published papers and professional reports may be attached. Please remember 'quality rather than quantity'.

If you are not allowed to submit a significant report because of confidentiality restrictions, please indicate this on the application form.

Sponsors

Two sponsors are required to support your application. They should have known you personally for at least three years and must not be related to you. Ideally sponsors should be Chartered Scientists but those with relevant qualifications and at least eight years professional experience in the mineral or related sciences are acceptable. At least one must be a Fellow of the Mineralogical Society. For example, you may choose to ask a senior manager, such as a current or past Head of Department, in your current employment to act as sponsor and sign off the career details and professional report on the application form, and choose a scientific colleague from another organisation to act as second sponsor. You should ask both to provide confidential reports on the sponsor's forms to the Mineralogical Society. Alternatively, if the senior manager is from a different subject area, you may ask them to sign off career details, and ask two other scientific colleagues to act as your sponsors. If self-employed, you may ask sponsors to sign the sections on your application form that they can validate.

Scrutineers

Two scrutineers will be appointed by the Mineralogical Society to assess the application and recommend to the Validation Committee whether CSci should be

awarded. Their reports are confidential but feedback will be provided to unsuccessful applicants. The scrutineers may invite you for interview. The scrutineers or the Executive Director may ask you to provide further information or clarification at any time during the assessment process.

Interviews

You may well be invited to an interview as part of the assessment process, although not all applicants will be interviewed. There will be two interviewers, either the scrutineers or a scrutineer and a member of the Validation Committee. You may bring additional supporting information to the interview.

Validation Committee

The scrutineers will send their recommendation to the Validation Committee, which meets three times a year, usually on the same dates as Council, to consider applications for CSci. It is this committee that decides if your application is approved for the award of CSci. Their decisions are ratified by Council.

Application fee and Annual Registration fee

There is a one-off (non-refundable) application fee and an annual registration fee for Chartered Scientist. Current rates may be found on the Society web site.

Sending the application

Two copies of the application should be made (one set of supporting reports is sufficient) and sent *in hard copy only* by post to the Mineralogical Society, 12 Baylis Mews, Amyand Park Road, Twickenham TW1 3HQ. It is your responsibility to send by recorded delivery if required. The original certificates will be returned as soon as possible by recorded delivery. Other supporting information will be returned at the end of the application procedure. Please indicate if you do not need it returned.

Notification of result

The Executive Director will notify the applicant of the result. If successful, a numbered certificate, guidelines for continuing professional development and CPD monitoring will be sent. If unsuccessful, feedback will be given on the additional qualifications, experience and competencies required for the applicant to fulfil the criteria for CSci.

Appeals procedure

An unsuccessful applicant may appeal in writing to the General Secretary of the Society. The appeal will be considered by the next scheduled meeting of Council. The decision of Council is final.

Candidates from abroad

Applicants from outside the UK are welcome. You may need to provide additional evidence of the status of your degrees (see above). Attendance at interview is at your own expense.

Fast track procedure for Mature Entry

The Society is keen to encourage senior members to become Chartered Scientists and therefore has sought to devise a rigorous but not too arduous fast track process for

Fellows who meet the qualification standard of M level or PhD *and* have more than 10 years post graduate experience. Go to the 'Fast-track' application option on the website menu relating to Chartered Status.

This procedure will require certificates of qualifications, a completed application form with career details in extended CV format to show scrutineers the nature of work, with at least the last two years in more detail and signed off by a senior manager. If self-employed you may ask an external sponsor, who fills the requirements of sponsor's above, to do this for you. Supporting information, such as recent publications and a publications list should also be provided. Sponsors statements are not required.

The Society will appoint one scrutineer, who will pass to a second if required to cover the subject area. Candidates will not be interviewed unless the application is considered borderline or other clarification is required, as recommended by the scrutineers. The scrutineer's recommendation will be sent to the Validation Committee for a decision on the award of CSci.

Continuing Professional Development

Chartered scientists must undertake appropriate continuing professional development activities such as attendance at courses, self-directed learning such as reading up on an area of science, technology or legislation, on-the-job learning of new skills and procedures, reflective practice, attendance at conferences and workshops, and service to learned societies. Details of these activities must be supplied by the Chartered Scientist, as part of an online Annual Monitoring process, to the Society. See the sample CPD report below.



Chartered Scientist CPD Recording Template

Name:

Mineralogical Society Membership No:

Email address:

This template has been provided to help you detail your CPD history and demonstrate that you meet the CSci CPD standards. In addition to this please provide a current CV or role profile documenting any CPD activities you have undertaken i.e. training courses, qualifications. *Evidence of activity (as listed in section 4) may be requested during our annual audit. If you would prefer to submit such evidence at the time of submitting CPD, we would be grateful.*

SECTION 1: Please demonstrate how your CPD activities are a mixture of learning activities relevant to current or future practice. *This should include activities in at least three (exceptionally two) of the following categories:*

a) Work based learning (e.g. supervising staff / students, reflective practice)

b) Professional activity (e.g. involvement in a professional body, mentoring)

c) Formal / Educational (e.g. writing articles / papers, further education)

d) Self-directed learning (e.g. reading journals, reviewing books / articles)

e) Other (e.g. voluntary work, public service)

SECTION 2: Please provide examples of how your CPD activity has contributed to the quality of your professional practice and service delivery.

SECTION 3: Please provide examples of how your CPD activity has benefitted the users of your work.

SECTION 4: Summary of supporting evidence available

Evidence of activity i.e. certificates, course material, reports, research papers	Date of activity	CPD section above activity relates to

Guidance on career breaks, retired members and confidentiality

Additional guidance can be found on the CSci website at:
www.charteredscientist.org/about/cpd_and_revalidation.html

Declaration

I hereby agree that the information given is correct and supports my wish to revalidate as a Chartered Scientist (CSci).

Please tick the box below to indicate your agreement to the declaration.

I agree to the declaration

Print name:

Date: