EuChemS
European Chemical Society

Guidance Notes for the Award of the European Chemist Designation

EurChem

Please read carefully the notes before filling in the application/reapplication.

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1.0 INTRODUCTION

The European Association for Chemical and Molecular Sciences (EuCheMS) has taken over the role and responsibilities of the former Federation of European Chemical Societies (FECS) that was founded in 1970. The object of EuCheMS is to provide cooperation in Europe between those non-profit-making scientific and technical societies and professional institutions in the field of chemistry whose membership consists largely of individual qualified chemists/ chemical scientists and whose interests include the science and/or practise of chemistry/ chemical sciences. At present EuCheMS has over 50 member societies in 36 countries. Under its new constitution, EuCheMS is more ready to enter into partnership with other science groups.

The chemical and molecular sciences community needs to make some significant advances in order to be operating on equal terms with other sciences groupings and to be welcomed as a partner in joint initiatives; EuCheMS is ready to take the lead. EuCheMS aims also to provide added value to the member societies in order to ensure their involvement in developing the new strategy.

As chemical sciences can contribute to the future quality of life and to Europe's strategic goal of improved sustainable development, a globally competitive chemical industry is vital for Europe's future prosperity. In this respect mobility of researchers within Europe encourages successful multi-disciplinary collaborations and strengthens the cohesion of Europe. Thereof EuCheMS intends to help the chemists of Europe, through its EuCheMS Member societies, by giving them the opportunity to improve their career development. In particular the EuCheMS's purpose is to facilitate the exchange of information, to promote the professional interests of the chemists by facilitating their free movement within Europe, to support multilateral collaboration between EuCheMS Member societies. The European Chemist Registration Board (ECRB) is established by EuCheMS for the purpose of awarding the designation of European Chemist (EurChem) to appropriately qualified chemists and it works continuously since 1992.

EurChem is a professional qualification. The aim of the European Chemist designation is to promote the mobility of chemical scientists throughout Europe based on an agreed set of skills, competencies and training, and building upon Bologna qualifications; to provide a uniform system to facilitate the employment of chemical scientists from across Europe.

Achieving European Chemist status denotes to the wider community a high level of specialised subject knowledge and professional competence. The award of EurChem delivered by EuCheMS recognises the experienced chemist who has demonstrated an in-depth knowledge of chemistry, significant personal achievements based upon chemistry, professionalism in the workplace and a commitment to maintaining technical expertise through continuing professional development (CPD).

The EurChem designation ensures high and improving standards across all chemical disciplines and reflects best practice in sciences. Therefore, EurChem becomes a mark of scientific excellence and competence. European Chemists are listed in a Register, a database maintained by the ECRB Secretariat which is currently based in Prague, CZ. The main purpose of the Register is to provide sufficient data about the qualification of the individual chemist in order to facilitate the movement of chemists who wish to practice outside their country.

Suitably qualified members of the Participating EuCheMS Member societies (appendix 1) can seek the award of EurChem. In doing so they need to demonstrate appropriate learning and professional competence in chemistry, i.e. satisfy both the academic and professional requirements for the designation. Full details of the "Regulations for the Award of the European Chemist Designation" can be found in appendix 2. Having Europe more internationalised than in the past, suitably qualified members can apply for the award either *via* any of the participating EuCheMS Member societies of which they are members or directly *via* ECRB if in the respective country the EuCheMS Member societies does not participate to EurChem scheme.

1.2 1.1 Academic Requirements for European Chemist

EuCheMS recognises normally a Bologna 2nd cycle university qualification (or historical equivalent) in chemistry, or in a chemistry specialism, as the minimum academic prerequisite for professional practice.

Members of EuCheMS Member societies who do not possess a EuCheMS recognised 2nd cycle qualification are able to apply for the award of EurChem so long as they can demonstrate that they have developed an in-depth knowledge and critical awareness of a substantial area of chemistry. Such development can be via a course of university level study beyond a first cycle qualification, vocational training and/or experiential learning. The 2nd cycle qualification is not further examined when the applicant has a Chemistry EuroMaster labelled degree. Every applicant with Chemistry EuroBachelor labelled degree can apply, a longer working experience period shall be required in this case.

EuCheMS recognises that technological developments have resulted in a wide range of chemistry specialisms. The traditional range of theoretical, organic, inorganic, physico-chemical, analytical and process chemists has extended to include other specialisms such as computational chemistry, biotechnology, chiral-synthesis, catalysis, structural and functional materials, organometallic compounds, micro-systems, safe food, agricultural and environmental chemistry, radiochemistry, conservation of cultural heritage and many more.

1.3 Professional Requirements for European Chemist

Candidates for EurChem must be practising as a professional chemist. That is, they must be able to demonstrate that the chemical knowledge and skills, derived from their education and training, are critical to fulfilling the duties and responsibilities of their current role.

Furthermore candidates need to reflect on their development as a professional chemist and construct a competency review in relation to prescribed professional attributes. This review requires consideration by a reviewer, who is normally a peer or other professional colleague, before formal submission for assessment to the European Chemist Registration Board (ECRB).

The competency review should relate to recent professional development, i.e. within the last two years. In presenting the review to the ECRB, candidates must demonstrate that they satisfy the professional requirements for the award of EurChem.

Appropriate professional experience for assessment is that which has been undertaken in the practise, application or teaching of chemistry since achieving a EuCheMS recognised 2nd cycle qualification (or equivalent level of attainment). A candidate for EurChem would normally be expected to have at least 5 years of appropriate professional experience. In the case of Chemistry EuroBachelor application, 8 years are normally required.

1.4. WHAT DOES EurChem SIGNIFY?

A European Chemist is:

> **someone who is making a significant impact in their professional role drawing upon highly developed chemical skills with the necessary competence and has the ability to do a particular activity to a prescribed standard in time** .

The award of EurChem is not recognition of "long service". It is not granted in cases where an individual's involvement or academic achievement is not at an appropriate level or is not in chemistry.

To be awarded the European Chemist designation, the candidate is expected to show that he/she:

- *has developed professional competence involving the application of chemistry across a variety of contexts, the outcomes of which may be unpredictable;*
- *exercises substantial personal autonomy and is accountable for critical analysis and diagnosis, design, planning, execution and evaluation through existing and emerging methodologies relevant to his/her field of specialization;*
- *has significant influence on the work of others and ability to work on multidisciplinary projects;*
- *observes health and safety requirements relevant to the job and pays due regarding to national and international standards and regulations;*
- *is capable to serve society and the profession through commitment to apply the appropriate code of professional conduct ;*
- *has the willingness to maintain competence by continuous professional development (CPD).*

For the award of EurChem the candidates must:

- **be a member of a EuCheMS Member society;**
- **have a EuCheMS recognised 2nd cycle qualification (or equivalent) or EuroBachelor labelled 1st cycle qualification;**
- **demonstrate that the chemical knowledge and skills derived from their education and training are critical to fulfilling the duties and responsibilities of their current role;**
- **demonstrate development of twelve professional attributes for EurChem.**

Among the benefits of being registered as European Chemist are: professionalism, possibility to use EurChem logo on business cards, discounts on fees at selected scientific meetings (already carried out by some Societies),

obtaining directly EuCheMS news, enhanced mobility. It is entire aim of ECRB to reach a status when EurChems shall be considered in front of European laws as registered professionals.

2.0 Professional attributes for a European Chemist

The twelve professional attributes against which a candidate's performance is judged are:

1 **Make significant personal contributions to key tasks in the employment area and understand fully the chemistry objectives of the work done.**

2 **Demonstrate a high level of appropriate professional skills in the practise of chemistry.**

3 **Develop chemistry and other professional skills as required for the career development.**

4 **Demonstrate an understanding and appreciation of Health, Safety and Environmental issues including international standards and adhere to the relevant requirements relating to the role.**

5 **Evaluate critically and draw conclusions from scientific and other data.**

6 **Demonstrate an interest in broader developments in chemical science.**

7 **Demonstrate integrity and respect for confidentiality on work and personal issues. Demonstrate other professional attributes such as reliability.**

8 **Plan and organise time systematically, demonstrate foresight in carrying out tasks.**

9 **Write clear, concise and orderly documents and give clear oral presentations.**

10 **Discuss work convincingly and objectively with colleagues, customers and others. Respond constructively to and acknowledge the value of alternative views and hypothesis.**

11 **Demonstrate the ability to work as part of a team also on multi-disciplinary projects.**

12 **Exert effective influence on the work of others.**

3.0 HOW TO BECOME A EUROPEAN CHEMIST

3.1 Completing an Application

The "**Application Form for the Award of the European Chemist designation**" is available from the participating EuCheMS Member societies or from ECRB. The candidate must complete all sections of the Form.

Section 1 asks for personal details.

In Section 2, candidates present information on their studies in chemistry at university level.

Section 3 requires candidates to provide full details of all post-graduate employment. Particular emphasis should be given to the personal practice, application or teaching of chemistry within each position held. For the current post, a note of personal achievements and a brief outline of the employer's business should be provided. An organisation chart can often assist.

The main body of the application is the competency review (Section 3). The 12 professional attributes for a European Chemist are listed. For each, the candidate is required to provide a short development statement in the box provided (Section 3A). The statements should address how the candidates have developed and maintained their competence in the relevant attribute area. The candidates can add any final comments to support their statements in the box provided (Section 3B).

Appendix 3 of the Guidance Note illustrates the type of development activity that candidates may want to reflect upon when completing their competency review.

Candidates need to identify a reviewer who is willing to substantiate the development statements, to add any relevant comments and to make a final recommendation (Section 3C). The reviewer should be a member of the same EuCheMS Member society as the candidate and be normally a European Chemist.

Candidates are required to provide the name of a referee who is a member of a EuCheMS Member societies (Section 4). The referee is expected to have had responsibility for or have sufficient knowledge of the recent work of the candidate and ideally be awarded by the European Chemist Title. The referee will be asked, in his/her opinion, whether the candidate meets the competency standards for a professional chemist and conducts himself/herself honourably in terms of professional and ethical practice.

The candidate submits the completed form to his/her participating EuCheMS Member society or directly to ECRB in the case the EuCheMS Member society does not participate with the scheme, together with a registration fee of €100. The fee covers registration for a period of five years and is refundable only if registration is declined. EuCheMS Member societies also set an application fee which is non-refundable. Providing the application is submitted directly to ECRB, there is non refundable fee of €50.

3.2 Scrutiny of Applications

Once the Report Form is received by the EuCheMS Member society the application is reviewed by an Assessment Panel, or directly by ECRB, if the EuCheMS member society does not have an Assessment Panel, which determines whether or not from its perspective the EurChem academic and professional requirements are fulfilled. If the Panel is content with the application, it is submitted to the European Chemist Registration Board (ECRB) for its final consideration.

The ECRB consists of appointed representatives from participating EuCheMS Member societies, normally a European Chemist, and generally meets at least twice per year. Decisions of ECRB could be made, if necessary, on circulation/electronic basis. If the ECRB agrees with the recommendation of the Assessment Panel, registration as a European Chemist is confirmed. The decision of the ECRB is final.

3.0

4.0 THE REGISTER OF EUROPEAN CHEMIST

All successful candidates are added to the Register and entitled to use the designation EurChem. After five years European Chemists are invited by their EuCheMS Member society, or ECRB to renew their registration for a further period of five years and in doing so are required to remit a €50 retention fee to the ECRB.

4.1 Certification

Certificates are issued in English to each individual upon registration. The Participating EuCheMS Member society is responsible for sending the certificate to the candidate and capable of official translation of the certificate into the national language, if necessary.

The ECRB Secretariat maintains a record of all certificates issued and each certificate has a unique registration number.

If certificate holders do not remain on the Register, they are asked to return their certificate.

4.2 Removal from the Register

The ECRB Secretariat will automatically remove from the Register the name of any individual:

- who has ceased to be member of a EuCheMS Member society; the Participating Society is required to notify the ECRB Secretariat of any European Chemist in this position;
- who has not renewed his/her registration after five years.

The ECRB will take action to remove from the Register the name of any individual:

- who has been adjudged by the participating EuCheMS Member society to be guilty of professional misconduct; any EuCheMS body shall inform the EuCheMS Member society or ECRB of any misconduct, if found or reported.

Standard national procedures will be operated in order to investigate allegations of professional misconduct.

In the event of removal from the Register for whatever reason there will be no refund of fees. The EuCheMS Member societies and the individual shall be informed by the Chairman of the ECRB in case of removal.

Appendix 1

Regulations for the Award of European Chemist Designation.

1. The candidate for European Chemist must be a member of one of the EuCheMS Member societies. Candidates are required to produce evidence of membership if they apply directly to ECRB.

2. Candidates are required to produce evidence of being awarded by EuCheMS recognised university qualification (or historical equivalent) and be engaged in the practice, application and/or teaching of chemistry.

3. Candidates who cannot fulfil the academic requirements in 2 above must demonstrate that they have an in-depth knowledge and critical awareness of a specialised area of chemistry. This is usually demonstrated by a course of university level study beyond a first cycle qualification, vocational training and/or experiential learning.

4. All candidates must submit a competency review in relation to prescribed professional attributes to a level set by ECRB. The candidate must identify a reviewer who is willing to support statements made in the competency review. The reviewer should be a member of the same participating EuCheMS Member society as the candidate and normally a European Chemist.

5. For the final assessment, all candidates are required to provide the name of a referee who is a member of the same participating EuCheMS Member society as the candidate.

6. Registered European Chemists are entitled to use the abbreviation “EurChem” after their names.

APPENDIX 2

Further guidance on evidence for the twelve Professional Attributes

The twelve professional attributes previously listed in Section 2.1 are presented below with examples of the type of information that can be used in the competency review .The examples are presented for illustrative purposes and do not represent an exhaustive list.

1. Make significant personal contributions to key tasks in your employment area and understand fully the chemistry objectives of the work done.
   Subject matter: relevant section from current job description and examples of contribution to key tasks.

2. Demonstrate a high level of appropriate professional skills in the practice of chemistry.
   Subject matter: type of work undertaken in the workplace, which highlights the skills.

3. Develop your chemistry and other professional skills as required for the career development.
   Subject matter: analysis of needs and evidence of fulfilment such as training courses, attendance at professional meetings, conferences and published work.

4. Demonstrate an understanding and appreciation of Health, Safety and Environmental issues including international Standards and adhere to the relevant requirements relating to your role.
   Subject matter: records of training, achievement and a summary of Health, Safety and Environmental responsibilities. Examples of how implementation of HSE policies has been achieved should be provided by testimonial.
   Other examples could include:
   - Contributing to Safety Inspection Team, signing permits of work.
   - Reviewing Hazardous Area Classifications.
   - Writing emergency procedures for shutdown, evacuation, and recovery of a safe situation.
   - Specifying dust and fume control equipment and choice of emergency personal protective equipment.

5. Evaluate critically and draw conclusions from scientific and other data.
   Subject matter: decisions undertaken in the workplace, data handling.

6. Demonstrate an interest in broader developments in chemical sciences.
   Subject matter: activity external or internal to the organisation in which candidates work, e.g. internal briefing sessions , involvement in Local activity or school / college / university involvement such as presentations to external groups e.g. Annual Conferences – Speak Out programme, Chemistry Week and Science Week activities, Summer schools, participation on committees of sciences and related bodies.

7. Demonstrate integrity and respect for confidentiality on work and personal issues. Demostrate other professional attributes such as reliability.
   Subject matter: annual appraisal, professional review by line manager.

8. Plan and organise systematically, demonstrate foresight in carrying out tasks.
   Subject matter: this may be from the workplace in the form of project planning or design or completion of tasks / projects.

9. Write clear , concise and orderly documents and give clear oral presentations .
   Subject matter: copies of documents prepared by the Candidate , examples of presentations and any feedback from audiences .

10. Discuss work convincingly and objectively with colleagues , customers and others . Respond constructively to, and acknowledge the value of, alternative views and hypotheses
    Subject matter: relevant reports / correspondence.

11. Demonstrate the ability to work as a part of a team also on multidisciplinary projects.
    Subject matter : team meeting, opinions of colleagues.

12. Exert effective influence on the work of others.
    Subject matter : professional review by line manager, discussion with peers.

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