

## **2018 ICIQ PhD FELLOWSHIP PROGRAMME**

The Institute of Chemical Research of Catalonia (ICIQ) establishes the PhD Fellowship Programme with the aim to support excellent students from all over the world to enrol in a training and research programme in the area of chemistry ultimately leading to the completion of a Doctoral Thesis in partnership with the Universitat Rovira i Virgili (URV). The programme will also contribute to their professional development and next career steps, both in academia and industry.

- This objective is achieved by:
  - The performance of an individual research project under the direction of an internationally renowned group leader in a creative and stimulating scientific environment.
  - Opportunities for short stays in renowned international research institutions.
  - Opportunities for complementary training in technical and soft skills designed to ensure a successful career: weekly scientific seminars, hands-on training in the use of state-of-the-art scientific instrumentation, IP management, entrepreneurship, knowledge and technology transfer, grant's applications, project management, communication skills and career development.

The program is addressed to highly qualified and talented graduate students with a keen interest in chemical research. Candidates should have an excellent academic record, strong commitment to scientific research and solid working knowledge of English.

Admission to the programme is on a competitive basis.

### **I. Available positions: See Annex 1**

### **II. Eligibility criteria**

The programme is open to graduate students, from any nationality that fulfil the following eligibility criteria:

- a. Candidates must have a Master or an equivalent degree in the areas of Chemistry, Pharmacy, Physics, Physical Chemistry, Material Science or Chemical Engineering, which must be completed by the time of enrolment in the PhD programme.

In case of doubts about the eligibility criteria, applicants should contact the ICIQ Human Resources Team at [positions@iciq.es](mailto:positions@iciq.es) prior to submission of the application.

### III. Application process

All the application procedure will be made online. Other means of application will not be considered. Applicants must fill out and submit the online application form available at the Jobs & Grants section on ICIQ's website (<http://www.iciq.org/jobs-grants/>).

After completing online the personal data fields, applicants must attach the following documents:

#### 1) Required documentation

- a. A full **Curriculum Vitae** (in PDF format).
- b. A **Personal Statement** that describes the applicant's academic background, research experience and career goals (maximum two DIN A4 pages, in PDF format). This is a very important part. Please take the time to communicate what your interests are and how they would fit into carrying out your PhD at ICIQ. You should also mention the group that you would like to join to carry out your PhD and the reasons you are interested in the group leader and the research project.
- c. **Official transcripts** of your BSc and MSc studies in PDF format. A scanned copy of the certified academic record of the studies granting access to the PhD programme (BSc and MSc if available). In case that the MSc studies have not yet been completed at the time of the application, include details on the subjects in which you are currently enrolled (subject name and number of credits). For academic records not issued in Catalan, Spanish or English, a certified translation in English should be provided. For degrees obtained in foreign institutions, the academic record must include the range of marks used in the corresponding countries and the minimum mark to pass, as well as the hours or ECTS and marks for each subject.
- d. **Contact details for letters of recommendation** of two University professors or other relevant individuals who can assess your potential for research. We will directly contact the persons you list for letters of recommendation. We suggest informing them.

#### 2) Desirable documentation

- a. **Chemistry level:** The score of your Graduate Record Examination (GRE) – Chemistry Test is an added advantage for evaluation.
- b. **English proficiency level:** Applicants from non-English speaking countries are strongly encourage to supply evidence of their proficiency in written and oral communication in the English language i.e. TOEFL or IELTS scores.

Please note that documents sent in hard copy cannot be processed.

Applicants should select one PhD supervisor.

Once the application has been successfully completed, an acknowledgement e-mail will be automatically sent. Candidates must ensure that all information is included before the deadline. Incomplete proposals will not be considered.

Pursuant to Personal Data Protection Organic Law 15/1999, 13 December, We inform you that we will proceed to include your data in the Curriculum Vitae file duly registered in the General Register of the Data Protection in the Spanish Data Protection Agency. The data provided will be used only for recruitment processes made by the ICIQ.

You can exercise your rights to access, cancel, rectify and oppose this information by writing to AV PAISOS CATALANS 16 TARRAGONA 43007-TARRAGONA or through this mail address: [LOPD@iciq.es](mailto:LOPD@iciq.es)

### III. Evaluation and Selection Process

The evaluation and selection of the candidates will be performed by the Human Resources Team, and the project supervisor following this procedure:

1. Submitted proposals will be checked for eligibility and those not fulfilling all the criteria will be rejected. There will not be the possibility to modify the application or to add missing documentation after the call deadline.
2. The selection will be based on academic marks, scientific merits, academic and professional references, working knowledge of English and the personal interview.
3. At the late stages of the selection process, candidates will be contacted for a personal interview.
4. All applicants will be notified of the final selection decision by middle of May. The name of the awardees will be published on the ICIQ's website.

Successful candidates will be requested to inform ICIQ whether they accept or decline the offer within one week after being notified. The offer will be considered declined if the applicant does not respond during this time.

The ICIQ follows in its selection process a gender equally opportunity policy and a non-discrimination policy on the basis of age, ethnic or social origin, religion or belief, sexual orientation, language and disability.

#### **IV. Fellowships' conditions**

1. The awardees of an ICIQ PhD fellowship will be considered research personnel in training and they will have an employment contract (a pre-doctoral contract) which is regulated in the Spanish Law 14/2011, of June 1<sup>st</sup>, of Science, Technology and Education.
2. Pre-doctoral contracts are renewed annually for up to 4 years. Renewal is subject to satisfactory performance in the PhD studies and related research activities.
3. The gross yearly salary of the contract shall be €16.200, split into 12 monthly payments.
4. The fellowship includes full social security coverage through the Spanish Social Security system, providing access to the Spanish public health care system and pension and unemployment benefits.
5. The fellowship holder is entitled to temporary interrupt the fellowship in the following situations: temporary disability, risk during pregnancy, maternity, paternity and adoption or foster care. The time elapsed during this interruption will not be accounted for against the total time.
6. The contract will take effect on the date when the awarded student joins the centre.
7. The PhD fellowship includes the costs of enrolment in the PhD programme. These costs will be paid by each beneficiary to the university, and later they will be refunded by the ICIQ. The PhD thesis has to be completed within 4 years.
8. The PhD fellowship awardees will work full-time at ICIQ and may not receive any other fellowship or regular income.
9. The PhD fellowship is incompatible with any other fellowship with the same purpose.

### Indicative Calendar

Call opening	February 7 <sup>th</sup> , 2018
Call deadline	13 March 2018
Notification to candidates	From 23 April to 15 May 2018
Start of fellowships	September-October 2018

Tarragona, 5 February 2018

Prof. Miquel A. Pericàs

ICIQ Director

Dr. Lluís Solà

ICIQ Administrative Director

## Annex 1: Available Projects

Ref. PhD 2018/01: Perovskite based electronic devices

Supervisor: **Prof Emilio Palomares**

Ref. PhD 2018/02: Discovery of enantioselective halogen-bonded catalysts for C-C and C-X bond forming reactions

Supervisor: **Prof Anton Vidal**

Ref. PhD 2018/03: Photochemical enantioselective organic catalysis: making biologically relevant chiral molecules with light

Supervisor: **Prof Paolo Melchiorre**

Ref. PhD 2018/04: Mechanistic studies of enantioselective photo-organocatalytic processes

Supervisor: **Prof Paolo Melchiorre**

Ref. PhD 2018/05: Light-driven enantioselective organic catalysis

Supervisor: **Prof Paolo Melchiorre**

Ref. PhD 2018/06: Kinetic Monte Carlo for heterogeneous catalysis

Supervisor: **Prof Núria López**

Ref. PhD 2018/07: Catalytic remote functionalization of hydrocarbons

Supervisor: **Prof Ruben Martin**

Ref. PhD 2018/08: Visible light photochemical functionalization of unactivated sp<sup>3</sup> C-H bonds

Supervisor: **Prof Ruben Martin**

Ref. PhD 2018/09: Unravelling the mechanistic intricacies of catalytic reductive carboxylation reactions

Supervisor: **Prof Ruben Martin**

Ref. PhD 2018/10: Development of C-H-amination reactions for alkaloid total synthesis

Supervisor: **Prof Kilian Muñoz**

Ref. PhD 2018/11: Catalysis with redox-active halide reagents

Supervisor: **Prof Kilian Muñoz**

Ref. PhD 2018/12: Gold-catalysed reactions for the synthesis of biologically active molecules.

Supervisor: **Prof Antonio Echavarren**

Ref. PhD 2018/13: Chiral metal catalysts based on new designs

Supervisor: **Prof Antonio Echavarren**

Ref. PhD 2018/14: Computational treatment of mechanochemistry

Supervisor: **Prof Feliu Maseras**

Ref. PhD 2018/15: Design, construction, and investigation of chromophore-protein systems to achieve the efficient conversion of solar energy to fuel

Supervisor: **Dr Elisabet Romero**

Ref. PhD 2018/16: Computational chemistry to tackle complex reactivity

Supervisor: **Prof Carles Bo**

Ref. PhD 2018/17: Separation of stereoisomers employing highly advanced functional materials

Supervisor: **Prof Anton Vidal and Prof José Ramón Galán-Mascarós**

Ref. PhD 2018/18: Electrocatalytic organic transformations

Supervisor: **Prof Julio Lloret-Fillol**

Ref. PhD 2018/19: Catalysts for artificial photosynthesis

Supervisor: **Prof Antoni Llobet**