

Postdoctoral researcher (Ref: Postdoc 2021-03)

The Institute of Chemical Research of Catalonia (ICIQ) is seeking a Postdoctoral Researcher to join the Suero research group. This position will be funded by the European Research Council – ERC project CARBYNE (865554).

ICIQ is committed to performing excellent research at the frontier of knowledge in the broad area of chemistry (Catalysis, Artificial Photosynthesis, Activation of Small Molecules, Photovoltaics, Functional Molecular Assemblies and Chemical Biology, from either theoretical or experimental perspectives). The institute also aims at training the future generation of scientists by offering high-quality educational programmes to master, PhD students and postdoctoral researchers (Full details on <http://www.iciq.org/>).

Our mission is to lead, from the vantage point of molecular science, cross-strategies for solving major social and economic challenges, such as climate change and sustainable supply of energetic and raw materials, thereby contributing to the establishment of a knowledge-based economy and improving citizens' quality of life in our influence area.

Description of the project: The art of organic synthesis and reaction discovery relies on logic-guided thought processes that often involve hypovalent carbon reactive species and their corresponding stabilized equivalent forms. However, not all of the possible carbon reactive intermediates and their reactivity rules have attracted the same attention by the synthetic community. This is mainly because of the perception of the lack of synthetic utility and importantly, because of the challenges associated with controlling its extreme reactivity and lack of efficient sources. The main goal of this project is to invent and develop new chemical reactions based on equivalents of carbyne species –the monovalent carbon species–, able to transform feedstock & fine chemicals into complex organic matter. Our initial works on carbyne equivalent generation and metal-carbynoids were recently published (Nature 2018, 554, 86; JACS, 2019, 141, 15509)

We are looking for a self-motivated, creative and independent individual that fulfill the following requirements:

- PhD in Organic chemistry or related field.
- Proven track record in discovery and development of novel catalytic concepts.

- Experiences in photochemistry, photocatalysis, metal-catalyzed C–H bond functionalization, radical chemistry or asymmetric catalysis.
- Proven good level of written and spoken English.
- Strong commitment for scientific excellence.

Responsibilities

- Discovery and development of new chemical reactions based on equivalents of carbyne species.
- Writing reports, preparation of scientific articles, and presentation of results in group meetings and conferences.
- Maintenance of laboratory equipment.
- Complete documentation of research results.

We offer:

- A full-time 1-year contract with possibility of extension.
- Remuneration according to individual's qualification/experience
- Incorporation: as soon as possible
- Application deadline: 11 February 2021

The candidate must submit (a) a cover letter highlighting the interest in the position in the Suero research group, (b) a full CV including a research summary highlighting the most significant results, and (c) the names and emails of at least two referees that might be willing to write down a recommendation letter.

YOU CAN APPLY @

<http://www.iciq.org/jobs-grants/position/postdoctoral-researcher-ref-2021-03-mg/>

