

Job Offer: Postdoctoral Fellow

JOB Information

Organization/Company

Innovative Catalysis for Carbon Recycling-IC2R Ltd

Department

CHEMISTRY

Research Field

Photochemistry, Photo-electrochemistry

Researcher Profile

Recognized Researcher (R2)

Country, City

Italy, Valenzano (BA), TecnoPolis

Application Deadline

28/02/2023 – 23:00 h (CET-Bruxelles)

Type of Contract

Temporary

Job Status

Full-time

Hours per week

40

Is the Job funded through the EU Research Framework Programme?

Yes, it is funded through the EU Horizon 2020 Project "DESIRED" #101083355

Is the Job related to staff position within a Research Infrastructure?

No

OFFER DESCRIPTION

Postdoctoral Fellow position at Innovative Catalysis for Carbon Recycling is for working on the EU Funded Project "DESIRED" for a one-year period until February 28, 2024. The contract could be annually renewed for a maximum of two years until February 28, 2025 and until February 28, 2026. One position available. Salary: 35 000 Euro/year (brutto) in 12 monthly payments. The employment includes a six-months trial period.

REQUIREMENTS

Research Field

Chemistry

Topic of application

Photochemistry and photo-electrochemistry of the system H₂O-CO₂. Conversion of CO₂ and water under solar irradiation into C₂₊ energy rich species or methanol.

Skill qualifications (documented through publications in International Journals reputed within the Scientific community, IF>3.5)

- Multi-annual experience (>5 years after PhD) in research and organization of work, with tutoring attitude/capability.
- Experience of synthesis, characterization and application of photocatalysts and photo-electrocatalysts made of binary or ternary(+) oxides or other semiconductors/compounds.

- Experience of photo-electrochemistry and building/use of photoelectrochemical electrodes/cells.
- Direct use of techniques such as: Gas-chromatography, Mass spectrometry, UV-Visible spectroscopy, Infrared spectroscopy, SEM, TEM.
- Experience of determination of quantum yield in photochemical processes.
- Experience of Band-Gap and Urbach-energy evaluation using UV-Visible techniques
- Experience of Band structure evaluation

Languages

Knowledge of English spoken and written at a Level of B2 minimum.

Additional Information

Eligibility criteria

In addition to the general conditions for employment from Article 39, Paragraph 4 and 6, of the Act on Higher Education and Scientific Activity, candidates must meet **all** the following criteria.

- PhD in the Area of Natural Sciences, field of Chemistry or Industrial Chemistry.
- Documented experience in Inorganic Chemistry, knowledge of Synthetic Methodologies, Materials at nano-scale, Crystal growing, Facets growing, Nano-Sheet production, Supported photocatalysts production-characterization-application
- Documented experience of working with photochemical devices and production of photoelectrodes.
- Documented experience of tutoring.
- Ability in writing reports and scientific publications in English.
- **First author or Corresponding author of at least 15 publications** in the specific field of this call.
- **Number of relevant to the call publications in International Journals:** Minimum 25 in the last ten years.
- **Hi>15 (minimum 10 in the last five years); Citations >700.**

The Candidate must attach to the application a recommendation letter in English written by a reputed scientist expert in the field of photo-electro-chemistry.

Applications should be **written in English** (only) and should contain:

- Evidence of the PhD title and short summary of the work done during the PhD Thesis.
- Summary of work done after PhD and where with reference to the publications of the applicant.
- Motivation for this application.
- Declaration of continuous stay in Bari-IT for the entire duration of the contract.
- Availability to the renovation of the contract for at least one more year, if not two.
- Recommendation letter.
- Documented Citizenship (copy of the ID)
- Declaration that the candidate enjoys the full civil- and political-rights in the Country of residence and in the entire EU and has no trials ongoing in the EU or outside.

- In case of **non-EU citizenship**, the candidate must declare that has verified to be in possession of the requisites to get the permission to work in Italy in due time and can sustain herself/himself until the permission is released.

Information for submitting the application: **by pec-mail only** to: soccircsrl@pec.it

Applications must be submitted as a single file (max 30 MB)

Deadline: 28/02/2023, 23:00 h (CET, Bruxelles time). Late applications will not be considered.

In the **subject** of the electronic message, the **candidate must write** the following sentence:
“Application for the R2 Job Vacancy DESIRED Project.”