Call for Applicants

Enabling Sustainable combustion technologies using hybrid physics-based, data-driven modeling ▬ ENCODING

CNR, Istituto di Scienze e Tecnologie per l'Energia e la Mobilità Sostenibili offers **2 PhD positions** (Early Stage Researcher) within the ***ENCODING*** project (Grant Agreement n. 101072779) co-funded by Horizon Europe Framework Programme /Marie Sklodowska Curie Action Doctoral Network, as reported on EURAXESS at the following link https://euraxess.ec.europa.eu/jobs/62327

The main scientific goal of ENCODING is to develop a data-intensive framework to enable sustainable combustion technologies and RSFs in energy-intensive applications. The topics of the research work will be:

PhD position 1

Combustion of RSF in laboratory scale cyclonic reactors.

PhD position 2

Low-cost sensors for monitoring and soft-sensing strategies for control of RSF combustion.

1. **Eligibility criteria**

Applicants need to fully comply with the following eligibility criteria:

- **REQUIREMENTS:**
- Hold or graduate this year of an MSc or equivalent in chemistry, mathematics, engineering, physics, computer science, or any related fields.
- Not be in possession of a doctoral degree.
- Not having resided or exercised your main activity (work, studies, etc.) in the country for which you are applying for the position for more than 12 months in the last 36 months.
- Fluent in English. Any other language, especially the language of the country in which the application is submitted, would be a plus.
- *Research experience is not required, but it would be a plus.*

ENCODING recruits and trains regardless of race, religion, gender identity, sexual orientation, disability, or national origin. All employment is decided based on qualifications and competence. ENCODING is committed to creating a diverse and inclusive environment of mutual respect.

The applications has to be sent by email to encoding.recruitment@gmail.com with:

- your CV,
- a small presentation/purpose letter,
- 2 recommendation letters,
- academic records

The selection is made in a collective, open, transparent, and merit-based process, led by the Recruitment and Skill Progress Committee of ENCODING, whose members are representatives of beneficiaries (Universite Libre de Bruxelles, Rheinisch-Westfalische Technische Hochschule Aachen, Universidad Politecnica de Madrid, Centre National de la Recherche Scientifique CNRS, Consiglio Nazionale delle Ricerche – STEMS) that will supervise the PhDs

2. Information related to the supervision and the contract

The successful applicants will

- o develop the project under the supervision of Mara de Joannon and tutors Pino Sabia and Giancarlo Sorrentino at the Istituto di Scienze e Tecnologie per l'Energia e la Mobilità Sostenibili (STEMS) of the CNR based in Naples, Italy;

- o be enrolled in the PhD Programme in "Industrial Product and Process Engineering" of the Dipartimento di Ingegneria Chimica, dei Materiali e della Produzione (DICMaPI) at Università di Napoli Federico II

- o The employment contract offered is a full time, temporary contract with full social security coverage;

The duration of the contract is 36 months or renewable every 12 months up to 36 months;

The Marie Skłodowska-Curie programme offers highly competitive and attractive salary and working conditions. Exact salary will be confirmed upon appointment. In particular it consists of:

- Allowances (**Gross amounts**): a monthly allowance: 3.911,60 € / month or 4571,6 € / month with family

- It must be noted that the living allowance is a gross EU contribution to the salary costs of the researcher. Consequently, the net salary results from deducting all compulsory (employer/employee) social security contributions as well as direct taxes (e.g. income tax) from the gross amounts.

For more details please see the Horizon Europe Framework Programme /Marie Sklodowska Curie Action
3. Deadline and procedure for the submission of the application

Deadline for application is 15 April 2023.

The applications has to be sent by email to encoding.recruitment@gmail.com

1. **For any further information please visit** https://euraxess.ec.europa.eu/jobs/62327

Contact:

Mara de Joannon mara.dejoannon@stems.cnr.it
Pino Sabia pino.sabia@stems.cnr.it
Giancarlo Sorrentino giancarlo.sorrentino@stems.cnr.it

The Director Ing.

Riccardo Chirone