

## ABSTRACT OF VACANCY CALL IOM AR 021/2022 TS

### DESCRIPTION OF PROGRAM/PROJECT:

The successful candidate will be included in a personal and collaborative program of experimental activity focused on characterization by scanning and transmission electron microscopy focused on materials relevant to the circular economy (e.g. recyclable textiles, biodegradable food packaging or materials for storage or energy production). The program will be carried out in strong synergy with the CNR-IOM groups involved in materials growth by PLD and in electronic characterization by techniques based on the use of synchrotron light as well as with the partners of the ReMade project's consortium. The winning candidate will have to support experiments of academic and industrial groups within the project. This will include collaborating with external users to develop proposals, provide advice on the appropriateness of using electron microscopy in the scientific proposals, assist in experiments and support data analysis up to final publication

**RESEARCH AREA:** Physics - Condensed Matter Physics

**RESEARCH THEME:** Nanostructural characterization by transmission electron microscopy of materials relevant to the circular economy; The activity falls within the framework of the development of innovative research infrastructures open to the international user community at EU level and is part of a 4-year project, ReMade@ARI, funded by the European Commission within Horizon Europe, which also involves synchrotron x-ray, laser, electron microscope and ion beam facilities as well as neutrons and muons. (Project UE ReMade@ARI)

**Contract of one year renewable (subject to satisfactory progress).**

**Yearly gross remuneration: 26.000,00 €.**

### QUALIFICATIONS AND EXPERIENCE:

- Degree in Physics, Chemistry or similar; PhD in Physics, Chemistry or similar; at least 2 years of Postdoctoral activity; professional CV fitting the required skills
- proven experience in the field of transmission electron microscopy and in the characterization of the chemical-physical properties of materials, as well as good knowledge of the research topics typical of materials science generally addressed with electron microscopy and of the complementarity of the latter with other experimental techniques. Previous experience in data analysis and simulation of TEM/STEM images, in analysis of electronic properties by EELS spectroscopy, synchrotron light spectroscopy and in situ TEM/STEM experiments will be well considered;
- good level of English and some knowledge of Italian.

**DEADLINE FOR APPLICATIONS: February 24, 2023**

**Candidates residing outside of Italy must send the application and all the documents listed in Annex A to the following e-mail address: [iom.recruitment@iom.cnr.it](mailto:iom.recruitment@iom.cnr.it)**

**The application form must be filled in using the attachments A-B-C- of this call (send only signed PDF files).**

**Candidates will receive an e-mail confirming receipt of the application.**

**TYPE OF SELECTION:** the submitted applications will be evaluated by CNR. A reserve list of accepted applications will be set up. These candidates will be invited for an interview that it will held on **the March 14, 2023 at 11:00 A.M (local time) c/o by videoconference.**

**It is possible to do the interview by videoconference, upon candidate request in written form sent with the application form. By request the candidate must declare all the information to make the connection. During the connection the candidate has to show a valid identity document.**

*For any information please contact:*

*[iom.recruitment@iom.cnr.it](mailto:iom.recruitment@iom.cnr.it) or [supporto.reclutamento@spin.cnr.it](mailto:supporto.reclutamento@spin.cnr.it)*