



## **ANNOUNCEMENT**

On May 22, 2025, at 11:00 AM, ICSI Rm. Vâlcea will organize a competition/examination for the position of Researcher in Materials Science, Code 214650, consisting of:

- Application file review and interview

### **Eligibility Requirements:**

- Graduate of higher education in the field of engineering, related to the specialization "Materials Science";
- Holds a PhD in the relevant field;
- Foreign language: English;
- Experience in electrochemical processes and/or development of nanomaterials for electrochemical devices: minimum 2 years;
- Communication skills, analytical and synthesis abilities;
- Full legal capacity;
- Age limit regulated by legal provisions;
- Health condition suitable for the position applied for, certified by a medical certificate issued by the family doctor or authorized medical institutions;
- Employment of persons under judicial interdiction is prohibited.

### **Type of Contract:**

Fixed-term individual employment contract – 6 months, with the possibility of extension for the duration of the project Romanian Hydrogen and New Energy Technologies Hub – Ro-HydroHub, negotiable salary, as per applicable collective agreement, minimum 6,000 RON net/month (approximately 1,200 EUR).

### **The competition/exam application file must include:**

1. Standard application form (Annex 1), accompanied by a declaration of responsibility attesting to the accuracy of the information provided (Annex 2);
2. Copies of the bachelor's degree or equivalent (with transcript), and the master's degree in the relevant field or related domains (if applicable). If the selected candidate does not have a degree issued by a Romanian university, a recognition or equivalency certificate must be submitted before appointment and signing the contract;
3. Copy of the PhD diploma in the scientific field corresponding to the position, as well as any other diplomas or scientific or academic titles; if the diploma was not issued by a higher education institution in Romania, a copy of the recognition or equivalency certificate must be submitted;
4. Checklist verifying the fulfillment of minimum and, if applicable, additional standards, completed and signed by the candidate (Annex 5);
5. Proposal for scientific career development related to research activities (max. 5 pages);
6. Signed CV including:
  - Education and obtained diplomas;
  - Professional experience and previous relevant jobs;

- RDI projects led as project director and obtained grants (mentioning source of funding, budget, and main resulting publications);
  - Awards or other recognitions of scientific contribution;
  - Narrative description of the top 3 relevant achievements related to the competition/exam field – max. 3 pages.
7. List of selected publications, works, articles/studies, patents, as applicable, based on relevance to the candidate's scientific activity;
  8. Copy of ID card or other identification document, and copy of marriage certificate (if applicable) or name change proof;
  9. Medical certificate attesting the candidate's fitness for the job, issued by their family doctor or an authorized medical facility, dated no more than 3 months prior to the competition;
  10. Signed GDPR consent declaration (Annex 3);
  11. Criminal record certificate (issued no more than 6 months before the hiring date);
  12. Other documents required by current legislation or regulations;
  13. The competition file must include the list of scientific publications, works, articles/studies considered relevant for the field of the position. The list must be structured as follows:
    - Top 10 most relevant scientific publications (authored books, articles/studies/chapters, edited volumes);
    - List of authored books and edited/published volumes;
    - List of full-length articles/studies published in leading international journals;
    - List of other works and scientific contributions.
  14. Online-available publications must be referenced with a functional web link;
  15. Publications not available online must be submitted as scanned copies and/or in PDF format;
  16. References from previous employers (upon ICSI request).

#### **Competition Topics:**

1. Nanomaterial characterization methods
2. Structure and properties of porous materials
3. Fuel cells – basic concepts, operation, and applications

#### **Bibliography**

1. The structure and properties of porous materials, Edited by D.H. Everett, F.S. Stone, London Butterworths Scientific Publications 1958
2. Physical Chemistry, Atkins, published by Freeman/Oxford Press 2006 - available online
3. Handbook of Microscopy: Applications in Materials Science, Solid-State Physics, and Chemistry, Methods II, Gustaaf van Tendeloo (Editor), J. van Landuyt (Editor), Dirk van Dyck (Editor), S. Amelinckx (Editor), ISBN: 978-3-527-62053-1, 2008, available online on [www.wiley.com](http://www.wiley.com)
4. PEM Fuel Cells: Theory and Practice, F. Barbir Elsevier/Academic, Burlington, 2005 – available at ICSI library
5. Fuel Cells: Modeling, Control and Applications, De Bei Gou, Woonki Na, Bill Diong, CRC Press, 2017; <https://www.taylorfrancis.com/books/mono/10.1201/9781420071627/fuel-cells-woonki-na-bill-diong-bei-gou>
6. PEM Fuel Cells Theory and Practice, Frano Barbir, ISBN:9780123983725, Elsevier Science, available at ICSI library.

*Application deadline: May 20, 2025; at 3:00 PM*

*Files must be submitted to the Secretariat Office or via email to [office@icsi.ro](mailto:office@icsi.ro)*

*For more information, contact the Human Resources Department*

**PRESIDENT OF THE EMPLOYMENT AND PROMOTION COMMITTEE**  
**dr. eng. Roxana Elena Ionete**