

**NATIONAL RESEARCH AND DEVELOPMENT INSTITUTE  
FOR CRYOGENIC AND ISOTOPIC TECHNOLOGIES - ICSI RM.VÂLCEA**



Annex 5



## ANNOUNCEMENT

On October 30, 2025, at 10:00 AM, ICSI Rm. Vâlcea will organize a competition/examination for 1 (one) positions of Researcher in Chemistry, COR Code: 211306, consisting of:

- Application file review and interview

### Eligibility Requirements:

- Must be a graduate with a bachelor's or diploma degree from long-term university education, or hold a master's degree in the specialty or related fields;
- Holds a PhD in Chemistry;
- Meet the minimum and mandatory score corresponding to the CS position, in accordance with Annexes 5a and 5b; obviously
- Foreign language: English;
- Experience in electrochemical processes and/or development of nanomaterials for electrochemical devices;
- Communication skills, analytical and synthesis abilities;
- Full legal capacity;
- Age limit regulated by legal provisions;
- Health condition appropriate 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 8500 RON net/month (approximately 1,700 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 works must be referenced with a functional web link;
  15. Works 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. Electrodeposition methods for catalyst production
2. Methods for preparing catalytic materials for electrolysis processes
3. Electrochemical methods for evaluating catalysts (cyclic voltammetry, linear voltammetry, chronoamperometry).

#### **Bibliography**

1. B. Mekuye, B. Abera (2023) "Nanomaterials: An overview of synthesis, classification, characterization, and applications", Nano Select, 4, 486, DOI: 10.1002/nano.202300038 – disponibil online
2. N. Baig, I. Kammakakam, W. Falath (2021) "Nanomaterials: a review of synthesis methods, properties, recent progress, and challenges", Materials advances, 2, 1821, DOI: 10.1039/d0ma00807a
3. D. Brynn Hibbert (1993) Introduction to electrochemistry, Macmillan physical science, Ed. MacMillan, ISBN: 978-0333563038
4. S. S. Kumar, H. Lim. (2022). An overview of water electrolysis technologies for green hydrogen production, Energy Reports, 8, 13793-13813. <https://doi.org/10.1016/j.egy.2022.10.127>

*Application deadline: October 27, 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**

