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

Annex 5

ANNOUNCEMENT

On May 23, 2025, at 10:00 AM, ICSI Rm. Vâlcea will organize a competition/examination for 2 (two) positions of Researcher in Physics, COR Code: 211102, consisting of:

- Application file review, written exam, and interview

Eligibility Requirements:

- Graduate of higher education in the field of science (in physics);
- Holds a PhD in Physics;
- Foreign language: English;
- 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 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. Electrochemical methods for catalyst evaluation
2. Characterization methods for nanostructured catalytic materials
3. Preparation methods for nanostructured catalytic materials

Bibliography

1. Introduction to electrochemistry, D. Brynn Hibbert, University of New South Wales, Australia, ISBN 978-0-333-56303-8 - availabe online.
2. Physical Chemistry, Atkins, published by Freeman/Oxford Press 2006 - availabe online.
3. 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 - availabe online.
4. B. Mekuye, B. Abera (2023) "Nanomaterials: An overview of synthesis, classification, characterization, and applications", Nano Select, 4, 486, DOI: 10.1002/nano.202300038 – availabe online.
5. Fuel Cell Handbook (Seventh Edition), 2004, By EG&G Technical Services, Inc., U.S. Department of Energy Office of Fossil Energy National Energy Technology Laboratory https://www.netl.doe.gov/sites/default/files/netl-file/FCHandbook7.pdf.
6. V. S. Bagotsky. Fundamentals of Electrochemistry Second Edition, ISBN-13 978-0-471-70058, https://www.thevespiary.org/library/Files_Uploaded_by_Users/Enkidu/Chemistry/Fundamentals_of_Electrochemistry_BAGOTSKY.pdf.
7. Joseph Wang, Analytical Electrochemistry, Second Edition, https://www.smbstcollege.com/uploads/department/Analytical_electrochemistry_2ed_-_Wang.pdf.

Application deadline: May 21, 2025, at 3:00 PM
Files must be submitted to the Secretariat Office or via email to office@icsi.ro
For more information, contact the Human Resources Department

PRESIDENT OF THE EMPLOYMENT AND PROMOTION COMMITTEE
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