



ROMANIAN ACADEMY
“PETRU PONI” INSTITUTE OF MACROMOLECULAR CHEMISTRY
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COMPETITION ANNOUNCEMENT

The “Petru Poni” Institute of Macromolecular Chemistry (ICMPP), as Beneficiary of the financing contract for Project 43PCBROMD/01.09.2025, concluded with the Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI), announces the organization of a competition for the employment of a temporarily vacant position of Scientific Researcher – SR (postdoctoral member) within the Experimental Demonstrative (PED) project of the PN-IV-PCB-RO-MD-2024-0018 Programme, entitled: “Heterocyclic hybrids based on natural compounds as new antimicrobial agents: modern solutions to long-standing problems”, acronym: NATPHERA, project code: 43PCBROMD/01.09.2025, which is part of the National Research, Development and Innovation Plan 2022–2027 (PNCDI IV).

Position: Scientific Researcher – SR (postdoctoral member)

Number of positions open to competition: 1

Type of employment contract: Individual part-time employment contract

Estimated contract start date: 01.03.2026

Employment period: temporary, until 31.12.2026 with the possibility of extension

The place of the research activity: Center of Advanced Research in Bionanoconjugates and Biopolymers within the “Petru Poni” Institute of Macromolecular Chemistry

Place of the competition: “Petru Poni” Institute of Macromolecular Chemistry (ICMPP), 41A Grigore Ghica Voda Alley, 700487 Iași

Job description: *Biological testing of pyrrol-sulfonamide terpenic compounds obtained via Doebner reactions.*

General requirements for candidates:

- have Romanian citizenship, citizenship of other European Union member states or states belonging to the European Economic Area and domiciled in Romania;
- know Romanian/English, written and spoken;
- have full capacity to work;
- have a state of health appropriate to the position for which he/she is applying;
- have not been definitively convicted of committing a crime against humanity, against the state or against authority, of duty or in connection with duty, which impedes the course of justice, of forgery or of acts of corruption or of a crime committed intentionally, which makes him/her incompatible with the duties of the position, except in the case where rehabilitation has occurred.

Specific requirements for the Early-stage researcher (R1) - Scientific Researcher (Member – Postdoctoral Researcher):

- The candidate must hold a university degree, master’s, and PhD in Chemistry, Biochemistry, or Medical Bioengineering with competencies in biological testing.
- The candidate should have **theoretical and practical knowledge in biotechnology**.
- Proficiency in **English**, both written and spoken.
- The candidate must be **willing to travel nationally and internationally**, if required.

- Must be **motivated and creative**, with **advanced communication skills** and the ability to **work effectively in a team**.
- Must possess **practical computer skills** (Word, Excel, PowerPoint, OriginLab).

Selection procedure:

- **Analysis of the candidate's file** (eliminary step) - Lack of a requested document or failure to fulfill a mandatory requirement entails elimination from the competition. The results of the selection of competition files are displayed on the ICMPP website with the mention „admitted” or „rejected”;

- **Written test** (eliminary) – The written test will take place at the ICMPP headquarters and will consist of a written exam with subjects according to the examination topics displayed on the website. Only candidates who have submitted all the necessary documents to register for the competition and meet the conditions for participation are accepted to participate in the written test. To be declared admitted, candidates must obtain a minimum grade of 8 (eight) in the written test. The results of the written test are displayed on the ICMPP website with the mention „admitted” or „rejected”;

- **Oral examination** - The oral examination will take place at the ICMPP headquarters and will consist of the presentation of the scientific activity of the candidates. To be declared admitted, candidates must obtain a minimum grade of 8 (eight) in the oral test. The results of the oral examination are displayed on the ICMPP website with the mention „admitted” or „rejected”.

The result of the competition tests is appreciated by each member of the commission with grades from 1 to 10; the grade of the test represents the arithmetic average of the grades given by the committee members.

The final mark of the candidates is calculated as follows:

$$\text{final grade} = \text{written exam grade} \times 0.7 + \text{oral exam grade} \times 0.3$$

The ranking of candidates will be done according to the final average.

Examination topics:

1. Biological activity of classes of compounds of interest
 - 1.1. Nitrogen heterocycles: properties and biological applications
 - 1.2. Pyrrole and its derivatives: biological applications
 - 1.3. Antibacterial sulfonamides: general structures and biological properties
2. Microbiology
 - 2.1. Gram-positive and Gram-negative bacteria: general aspects
 - 2.2. Fungal infections: general concepts
 - 2.3. Methods for evaluating antimicrobial activity

Bibliography:

1. Joule, J. A., & Mills, K. (2010). *Heterocyclic Chemistry* (5th ed.). Wiley.
2. Katritzky, A. R., & Rees, C. W. (1996). *Comprehensive Heterocyclic Chemistry II*. Elsevier.
3. Khan, A., et al. (2016). Biological activities of nitrogen-containing heterocycles: A review. *European Journal of Medicinal Chemistry*, 117, 1–36.
4. Rabindran, S. (2019). Pyrrole-based compounds as potential therapeutic agents. *Bioorganic & Medicinal Chemistry Letters*, 29, 1456–1465.
5. Chopra, I., & Roberts, M. (1998). Sulfonamide and trimethoprim resistance. *Microbiology and Molecular Biology Reviews*, 62(2), 430–449.
6. Madigan, M. T., Martinko, J. M., Bender, K., Buckley, D., & Stahl, D. (2017). *Brock Biology of Microorganisms* (15th ed.). Pearson.

7. Tortora, G. J., Funke, B. R., & Case, C. L. (2019). *Microbiology: An Introduction* (12th ed.). Pearson.
8. Calderone, R. A., & Clancy, C. J. (2012). *Candida and Candidiasis* (2nd ed.). ASM Press.

Competition timetable:

Competition publication date: 13.01.2026.

Deadline for file submission: 13.02.2026, at 10.00 at the ICMPP headquarters or online at: **pponi@icmpp.ro**

Publication of the results of the files analysis: 16.02.2026, at 16.00

Deadline for appeals of the results of the files analysis: 17.02.2026, at 14.00

Publication of the final results of the file analysis: 17.02.2026, at 16.00

Written test date: 18.02.2026, at 10.00

Date of publication of the results of the written test: 18.02.2026, at 16.00

Deadline for appeals of the results of the written test: 19.02.2026, at 14.00

Date of publication of the results of the written test: 19.02.2026, at 16.00

Oral examination: 20.02.2026, at 11.00

Date of publication of the results of the oral examination: 20.02.2026, at 16.00

Deadline for appeals of the results of the oral examination: 23.02.2026, at 14.00

Publication of the final results of the oral examination: 23.02.2026, at 16.00

Publication of the final results of the competition on the institute website: 24.02.2026, at 15.00

The enrolment file must contain:

- The candidate must submit a formal request addressed to the ICMPP management by which he requests the registration in the competition for filling the vacant position, dated and signed by the candidate, approved by the director of the institute and registered within the legal registration deadline
- Copy of identity document and copies of documents certifying the change of name, if applicable;
- Copies of the documents certifying the candidate's studies: bachelor's and/or master's degree accompanied by the transcript (academic reports or diploma supplement);
- Diplomas obtained in other states must be recognized by the National Council for Attestation of University Titles, Diplomas and Certificates (CNATDCU);
- Certificate attesting the status of doctoral/master student enrolled in Chemistry field
- Curriculum vitae adapted to employment requirements;
- Cover letter (free format) in which to indicate the research areas of interest and the motivation for applying for the position;
- Medical certificate in original, attesting clearly the state of health, the number, date, name of the issuer and its quality, in the standard format established by the Ministry of Health;
- Criminal record or declaration on his own responsibility that he/she has no criminal convictions that would make him/her incompatible with the position for which he/she is applying, with the completion of the competition file (up to the date of the first competition test) with the original criminal record.

The candidate undertakes to maintain the confidentiality of the research topics in which he/she participates.

Details regarding the specific conditions can be read on the website <https://icmpp.ro>, <<Vacancies>> Section, <https://www.euraxess.gov.ro/ro>, <https://jobs.research.gov.ro/>, or additional information can be obtained at the Human Resources Office at the headquarters of the “Petru Poni” Institute of Macromolecular Chemistry from Iasi, telephone 0332 880 220.

This announcement was published on the Institute’s website - <<Vacancies>> Section, by the Secretary of the competition commission on 13.01.2026