



ACADEMIA ROMÂNĂ
INSTITUTUL DE CHIMIE MACROMOLECULARĂ "PETRU PONI"
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COMPETITION ANNOUNCEMENT

"Petru Poni" Institute of Macromolecular Chemistry (Institutul de Chimie Macromoleculară „Petru Poni”, ICMPP), Iași, Aleea Gr. Ghica Vodă 41A, 700487, as Beneficiary, organizes the competition in order to hire within the funding contract no. 760284/27.03.2024, "Metal complexes for the treatment of cancer targeting microtubules or microtubules and R2 RNR (Metubin)", CF 99/31.07.2023, run through National Recovery and Resilience Plan, Component 9 "Support for the private sector, research, development and innovation", Investment 8. "Development of a program to attract highly specialized human resources from abroad in research, development and innovation activities", call PNRR/2023/C9/MCID/I8, financed by the Recovery and Resilience Mechanism, several open positions, as follows:

I. Position of scientific researcher, CS (postdoctoral member in the project)

Number of positions for competition: 2

Type of employment contract: individual part-time employment contract

Estimated contract start date: 10.03.2025

Period of employment: determined, until 30.06.2025, with the possibility of extension, financed by the project: Metal complexes as microtubule- and dual microtubule – R2 RNR-targeting drugs for cancer treatment (Acronym: Metubin) (ID 99/31.07.2023), Financing contract no. 760284/27.03.2024

The place of the research activity: the Laboratory of Inorganic Polymers within ICMPP

The venue of the competition: ICMPP, Aleea Gr. Ghica Voda 41A, 700487-Iasi, Romania.

Position description: *synthesis, chemical modification, purification, and structural characterization of intermediates and final products in the preparation of organic ligands with indolobenzazocine structure.*

Specific conditions for the positions of scientific researcher, CS (postdoctoral member in the project):

- The candidate must be a graduate of higher education with a bachelor's and master's degree in the fields of chemistry/chemical engineering/pharmacy/bioengineering and seniority Law no. 183/2024 on the status of research, development and innovation staff.
- The candidate holds a doctor's degree in chemistry field and falls within the definition of "post-doctoral researcher" according to Instruction no. 2260/15.11.2023 regarding the clarification of the notion of "post-doctorate" within the projects related to the investments of Component 9 "Support for the Private Sector, Research, Development and Innovation" of the National Recovery and Resilience Plan issued by the Ministry of Research, Innovation and Digitization: "*the person who holds a doctor's degree and has experience in research of no more than 8 years full-time equivalent, from the date of the first doctoral degree, but not exceeding 10 years full-time equivalent under the conditions provided by the Executive Agency European for Research (REA)*". *The call date means 15.09.2022, the launch date of the call PNRR-III-C9-2022-I8. **If the doctorate was awarded by ministerial order, the date of the ministerial order is taken into account, and otherwise, the date indicated on the diploma is taken into account. The date of the first doctoral degree is taken into account.
- Theoretical and practical knowledge in the field of organic synthesis and pharmaceutical chemistry. The candidate must have an advanced knowledge of research methods – experimental synthesis techniques in organic and/or macromolecular chemistry, compounds characterization by physico-chemical methods (FTIR and UV-Vis spectroscopy, NMR, etc.).
- The candidate must have experience in writing scientific articles, at least in draft. The candidate must have at least 5 papers published in journals with impact factor (WOS).
- Intermediate foreign language skills, English being mandatory; knowledge of other international languages is an advantage.
- The candidate must be available to travel within the country and abroad, if necessary.

- To be motivated and creative, with advanced communication and teamwork skills.
- Possess practical knowledge of computer operation (Word, Excel, Power Point). Knowledge of TopSpin, ChemDraw, MestReNova programs is an advantage.

Competition procedure:

• *Analysis of the candidate's file* (eliminary). The absence of a requested document or failure to meet a mandatory requirement will take to elimination from the competition. The results of the selection of the competition files are displayed on the ICMPP website with the mention "admitted" or "rejected".

• *Written test* (eliminary): it will be held at the ICMPP headquarters, for two hours, from the announced topic. The results of the written test will be displayed on the ICMPP website with the mention "admitted" or "rejected". Candidates who obtain a minimum core of 8 (eight) in the written test are admitted to the oral test.

• The *oral test* will be held at the ICMPP headquarters and will consist of the presentation of the scientific activity for which the candidates must obtain a minimum score of 8 (eight). The results of the oral test are displayed on the ICMPP website with the mention "admitted" or "rejected".

The results of the competition tests are assessed by each member of the commission with marks from 1 to 10. The test score represents the average of the scores given by the committee members.

The final mark of the candidates is calculated with the following relation: $Final\ grade = written\ exam\ grade \times 0.7 + oral\ exam\ grade \times 0.3$.

To be declared admitted, the candidate must obtain a minimum overall average of 8 (eight) and no average (from the oral test or the written test) below 8 (eight). The ranking of candidates will be made according to the final average.

Topics:

1. Reaction types in organic chemistry (electrophilic and nucleophilic substitution reactions, double bond addition reactions);
2. Synthesis and characterization methods of azomethine and heterocyclic compounds.
3. Spectral techniques for compounds characterization: FTIR, UV-Vis, $^1\text{H-NMR}$, and $^{13}\text{C-NMR}$.

References:

1. C.D Nenițescu, *Chimie organică*, Ediția a VIII-a, Editura Didactică și Pedagogică, București, 1980, vol. 1.
2. M. Avram, *Chimie organică*, Editura Academiei Române, București, 1983, vol. 1,2.
3. F. Badea, *Mecanisme de reacție în chimia organică*, Editura Științifică, București, 1973.
4. R.M. Silverstein, F.X. Webster, D.J. Kiemle, *Spectrometric Identification of Organic Compounds*, 7th edition, John Wiley&Sons, Inc., 2005.
5. I. Pogany, M. Banciu, *Metode fizice în chimia organică*, Editura Științifică, București, 1972.
6. I. Baciuc, C. Dobrotă, I. Dumitru, M. Matache, C.C. Paraschivescu, L.L. Ruță, *Separarea și purificarea compușilor organici, Lucrări practice pentru anul I*, București, Editura Universității din București, 2009.
7. H. Becker, *Organicums, Chimie organică practică*. 2nd ed. București: Editura Științifică și Enciclopedică, 1982.

II. Position of Research Assistant, AC (PhD student member in the project)

Number of positions for competition: 1

Type of employment contract: individual part-time employment contract

Estimated contract start date: 10.03.2025

Period of employment: determined, until 30.06.2025, with the possibility of extension, financed by the project: *Metal complexes as microtubule- and dual microtubule – R2 RNR-targeting drugs for cancer treatment (Acronym: Metubin) (ID 99/31.07.2023)*, Financing contract no. 760284/27.03.2024

The place of the research activity: the Laboratory of Inorganic Polymers within ICMPP

The venue of the competition: ICMPP, Aleea Gr. Ghica Voda 41A, 700487-Iasi, Romania

Position description: synthesis, purification, and structural characterization of indolobenzazocine organic intermediates and ligands;

Specific conditions for the position of research assistant (PhD student member in the project):

- The candidate must be a graduate of higher education with a bachelor's and master's degree in the field of chemistry and be enrolled in a doctorate program at an institution organizing doctoral studies in Romania, in the field of chemistry.
- Theoretical and practical knowledge in the fields of fine organic chemistry and structural analysis.
- Theoretical and practical knowledge in the field of heterocycle chemistry;
- Intermediate foreign language skills, English being mandatory. Knowledge of other international languages is an advantage.
- The candidate must be available to travel within the country and abroad, if necessary.
- To be motivated and creative, with advanced communication and teamwork skills.
- Possess practical knowledge of computer operation (Word, Excel, Power Point). Knowledge of ChemDraw, Origin, MestReNova, ChemSketch, and ImageJ is a plus.

Competition procedure:

• *Analysis of the candidate's file* (eliminary). The absence of a requested document or failure to meet a mandatory requirement will take to elimination from the competition. The results of the selection of the competition files are displayed on the ICMPP website with the mention "admitted" or "rejected".

• *Written test* (eliminary): it will be held at the ICMPP headquarters, for two hours, from the announced topic. The results of the written test will be displayed on the ICMPP website with the mention "admitted" or "rejected". Candidates who obtain a minimum core of 8 (eight) in the written test are admitted to the oral test.

• The *oral test* will be held at the ICMPP headquarters and will consist of the presentation of the scientific activity for which the candidates must obtain a minimum score of 8 (eight). The results of the oral test are displayed on the ICMPP website with the mention "admitted" or "rejected".

The results of the competition tests are assessed by each member of the commission with marks from 1 to 10. The test score represents the average of the scores given by the committee members.

The *final mark* of the candidates is calculated with the following relation: $Final\ grade = written\ exam\ grade \times 0.7 + oral\ exam\ grade \times 0.3$.

To be declared admitted, the candidate must obtain a minimum overall average of 8 (eight) and no average (from the oral test or the written test) below 8 (eight). The ranking of candidates will be made according to the final average.

Topics:

1. Reaction types in organic chemistry (electrophilic and nucleophilic substitution reactions, double bond addition reactions).
2. Synthesis and characterization methods of azomethine compounds.
3. Common techniques for the purification of organic and coordination compounds.

References:

1. C.D Nenitescu, *Chimie organica*, Editia a VIII-a, Editura Didactica si Pedagogica, Bucuresti, 1980, vol. 1, cap. III.
2. M. Avram, *Chimie organica*, Editura Academiei Romane, Bucuresti, 1983, vol. 1,2.
3. F. Badea, *Mecanisme de reactie in chimia organica*, Editura Stiintifica, Bucuresti, 1973.
4. H. Becker, *Organicums, Chimie organica practica*. 2nd ed. Bucuresti: Editura Stiintifica și Enciclopedică, 1982.

Note: *These positions are open to all applicants, regardless of race, religion, gender or sexual orientation, and the project team rejects any type of discrimination.*

Competition timetable:

For the positions of scientific researchers, CS (postdocs) and Research Assistant, AC (PhD student member in the project):

Competition publication date: 30.01.2025

Deadline for file registration: 28.02.2025, 12.00 HR Office, first floor, ICMPP;
email: pricob.narcis@icmpp.ro

Publication on the institute website of the results of the file analysis: 28.02.2025, 16.00

Deadline for appeals on the results of the file analysis: 03.03.2025, 14.00

Publication on the institute website of the final results of the file analysis: 03.03.2025, 16.00

Written test: 04.03.2025, 09:00 at the Institute headquarters

Date of publication on the institute website of the results of the written test: 04.03.2025, 16:00

Deadline for appeals on the results of the written test: 05.03.2025, 14:00

Publication on the institute website of the final results on the written test: 05.03.2025, 16:00

Oral examination (interview): 06.03.2025, 10.00

Publication on the institute website of the results of the oral examination: 06.03.2025, 16.00

Deadline for appeals on the results of the oral examination: 07.03.2025, 12.00

Publication on the institute website of the final results: 07.03.2025, 16.00.

General requirements for candidates:

- The candidate has Romanian citizenship, citizenship of other member states of the European Union, or citizenship of states belonging to the European Economic Area;
- The candidate knows written and spoken Romanian and/or English;
- The candidate has full exercise capacity;
- The candidate has a state of health corresponding to the position for which he/she is applying;
- The candidate is medically fit;
- The candidate is available for part-time employment for a fixed period.

The registration file must contain the documents provided by art. 21 and 23 of Law no. 183/2024 on the status of research, development and innovation staff, art. 10 of Government Decision no. 1568/2024 for the approval of the Methodological Norms on the organization of competitions for filling vacant positions of research, development and innovation staff in research organizations, and the ICMPP Internal Regulations and the legislation in force, namely:

- The candidate's application should be addressed to the ICMPP legal representative, requesting registration for the competition for filling the vacant position. The request should be dated and signed by the candidate, approved by the legal representative of the institute, and registered within the legal deadline for registration;
- Copy of the 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(s);
- Diplomas obtained in other countries must be recognized by The National Center for the Recognition and Equivalence of Diplomas (CNRED), and implicitly by the National Council for Attestation of University Titles, Diplomas, and Certificates in Romania (CNATDCU) or initiate the steps for them;
- Certificate attesting to the quality of a doctoral student enrolled in an institution organizing doctoral studies in Romania for the positions of *research assistant - doctoral student*;
- Appendix 9 – PhD supervisor's agreement (*model displayed on the website*) completed and signed for the position of *research assistant - PhD student*;
- Doctor's diploma, for the positions of *scientific researcher - post-doctoral student*;
- Curriculum vitae adapted to employment requirements;
- List of scientific contributions accompanied by copies of the papers (if appropriate);
- Cover letter (free format), indicating the research areas of interest and the motivation for applying to this vacant position;

- Original medical certificate attesting clearly to the state of health, containing the number, date, name, of the issuer, in the standard format established by the Ministry of Health;
- Criminal record or declaration on own responsibility that has no criminal convictions that would make it incompatible with the position for which the candidate is applying, with the completion of the competition file (up to the date of the first competition test) and the original criminal record.

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

Details regarding the specific conditions can be read on the website <https://icmpp.ro>, the 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 Iași**, telephone 0332 880 220, as well as at e-mail: metubin.pnrr@icmpp.ro.

This announcement was published on the website of the Institute - Section "Vacancies", by the Secretary of the Competition Commission on 30.01.2025