



ADAM MICKIEWICZ UNIVERSITY, POZNAN

ANNOUNCES

A COMPETITION

for the position of post-doc

at the at the Faculty of Chemistry

in the project: "Molecular geometry – pre- and post-synthetically modified shape-persistent macrocycles of a great chiroptical response, for molecular tectonics and chirality sensing"

contract number: UMO-2023/49/B/ST5/00574

Basic information

1. Research discipline:

Chemical sciences

2. Number of work hours per week including a task-based work schedule:

Full-time/40 hours per week in a task-based work time system

3. Type of an employment contract and expected duration of employment:

Fixed-term employment contract from 01.02.2025 - 31.01.2026

4. Anticipated job starting date:

February 1st 2025 or later if justified

5. Workplace location:

Faculty of Chemistry, Uniwersytetu Poznańskiego 8, 61-614 Poznan, Poland

6. Monthly salary:

salary about 8980 PLN gross

7. Application deadline and process:

14 of December 2024, sent directly to the PI of the project: Professor Marcin Kwit – marcin.kwit@amu.edu.pl

8. Required documents:

- Application form/letter of the candidate.
- *Curriculum Vitae*.
- Diplomas or certificates issued by colleges and universities attesting to education and degrees or titles held (in case of academic degrees obtained abroad - the documents must meet the equivalence criteria set out in Article 328 of the Act of 20 July 2018 Law on Higher Education and Science.
- Information on the Applicant's research, teaching, and organizational achievements.
- Short description of one, the most important scientific achievement (max. 2 A4 format pages, font: Calibri 11, single interline).
- Consent to the processing of personal data as follows : *In accordance with Article 6 (1) (a) of the General Data Protection Regulation of 27 April 2016. (OJ EU L 119/1 of 4 May 2016) I consent to the processing of personal data other than: first name, (first names) and surname; parents' first names; date of birth; place of residence (mailing address); education; previous employment history, included in my job offer for the purpose of the current recruitment."*

Conditions of the competition determined by the competition committee

I) Determination of qualifications: (researcher profile) according to the Euraxess guidelines

- (R1) First Stage Researcher (up to the point of PhD)
- (R2) Recognised Researcher (PhD holders or equivalent who are not yet fully independent)
- (R3) Established Researcher (researchers who have developed a level of independence)
- (R4) Leading Researcher (researchers leading their research area or field)

II) Job Offer description

In this project, we intend to prove that intentionally designed selected groups of chiral polyaza macro- and gigantocyclic compounds of periodical and symmetrical structure may act as tunable and highly responsible sensors and tectons. The molecular and supramolecular systems designed and studied within this proposal will resemble macroscopic geometric objects such as figures, solids, and helixes of natural origin. The mechanism of action of these compounds will be based on some fundamental processes, namely, molecular recognition, enantiodiscrimination, aggregation, and assembly. We intend to demonstrate the versatility of macro- and gigantocyclic (over 50-membered) derivatives as molecular receptors and chirality sensors. The change of the size of the

internal cavity and/or the possibility of formation of the receptor pocket allows for selective encapsulations of guests. Using chiral but conjugated macrocycles of planar or tubular structure for recognition and in tectonics will be an important novelty.

The candidate will be involved in:

- Synthesizing conjugated macrocycles containing additional chirality elements on the periphery of the ring, mainly derivatives of terephthalaldehyde or diaminobenzene.
- The development of catalytic and convenient methods of post-synthetic modifications of polyamines or polyamines, with special emphasis on synthesizing polyamide derivatives of macrocyclic polyamines.
- Conducting independent searches of scientific literature.
- Active participation in carrying advanced syntheses and experiments, discussing results, and preparing manuscripts.
- Designing new chiral materials with predefined properties.

III) Requirments and qualifications

The competition is open to individuals who meet the requirements.

- Specified in Article 113 of the Law on Higher Education and Science of 20 July 2018.
- Appendix No. 2 to the Regulations on the allocation of funds for the implementation of tasks financed by the National Science Center in the field of research projects, as defined by Resolution of the NCN Council No. 23/2023 of February 16, 2023.

and who meet the following requirements:

- PhD degree in chemistry or a related field, obtained not later than 7 years before submitting the application.
- Knowledge and skills in catalysis and synthesis.
- Authorship or co-authorship of scientific publications in chemistry and catalysis.
- Knowledge of analytical methods typical of organic chemistry and catalysis (NMR, FT IR, MS).
- Presentations at national and foreign scientific conferences.
- At least one year of scientific internship in another scientific unit, outside the country of residence of the applicant.

Additional advantages will be:

- Experience in material engineering.
- Ability to work in a group, independence, creativity, motivation.
- Experience as the role of manager or contractor in research projects.

IV) Required languages

English fluent

Polish – good in speaking and writing is welcome but not necessary

V) Required research, teaching or mixed experience

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VI) Benefits

- ✓ an atmosphere of respect and cooperation
- ✓ supporting employees with disabilities
- ✓ flexible working hours
- ✓ funding for language learning
- ✓ co-financing of training and courses
- ✓ additional days off for education
- ✓ life insurance
- ✓ pension plan
- ✓ savings and investment fund
- ✓ preferential loans
- ✓ additional social benefits
- ✓ leisure-time funding
- ✓ subsidizing children's vacations
- ✓ "13th" salary

VII) Eligibility criteria

1. Scientific achievements documented by publications in the field of research topics specified in the competition requirements (0-20 points).
2. Completed scientific internships, participation in conferences, scientific seminars, workshops, trainings (0-20 points).
3. Participation in research projects (0-10 points).

VIII) The selection process

1. Competition committee begins working no later than 7 days after the deadline for submission of documents.
2. Formal evaluation of submitted proposals.
3. Call to provide additional or missing documents if necessary (within 2 working days).
4. Selection of candidates for the interview stage.
5. Interview with candidates who meet the formal requirements and have earned at least 50% of the points.
6. The committee has the right to request external reviews of candidates' work or to ask candidates to conduct teaching assignments with an opportunity for student evaluation.
7. The chair of the competition committee announces the results and informs the candidates by January 10th 2025. This information will include justification with a reference to candidates' strengths and weaknesses. Submitted documents will be sent back to candidates.

IX) Prospects for professional development

- Work in young and developing research team.
- Opportunity to develop and refine the experience in catalytic organic synthesis, material engineering and molecular tectonics.

Pursuant to Article 13 of the General Data Protection Regulation of 27 April 2016. (Official Journal of the EU L 119 of 04.05.2016) we inform that:

1. The controller of your personal data is Adam Mickiewicz University, Poznań with the official seat: ul. Henryka Wieniawskiego 1, 61 - 712 Poznań.
2. The personal data controller has appointed a Data Protection Officer overseeing the correctness of the processing of personal data, who can be contacted via e-mail: iod@amu.edu.pl.
3. The purpose of processing your personal data is to carry out the recruitment process for the indicated job position.
4. The legal basis for the processing of your personal data is Article 6(1)(a) of the General Data Protection Regulation of 27 April 2016 and the Labour Code of 26 June 1974. (Journal of Laws of 1998 N21, item 94 as amended).
5. Your personal data will be stored for a period of 6 months from the end of the recruitment process.
6. Your personal data will not be made available to other entities, with the exception of entities authorized by law. Access to your data will be given to persons authorized by the Controller to process them in the performance of their duties.
7. You have the right to access your data and, subject to the law, the right to rectification, erasure, restriction of processing, the right to data portability, the right to object to processing, the right to withdraw consent at any time.
8. You have the right to lodge a complaint to the supervisory authority - the Chairman of the Office for Personal Data Protection, ul.Stawki 2, 00 - 193 Warsaw.
9. Providing personal data is mandatory under the law, otherwise it is voluntary.
10. Your personal data will not be processed by automated means and will not be subject to profiling.