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— Mission of AMU —

We create a working environment supporting both male and female scientists

— HR Excellence in Research —

Adam Mickiewicz University, Poznań

announces a competition for the position of:

Postdoctoral Researcher in the project **Opus 28 LAP number : 2024/55/I/ST5/02185**

“*“Engineering Biocompatible and Bioactive Stents for Improved Endothelial Integration in Cardiovascular Applications”*

at the **Center for Advanced Technologies**

Basic information

1. Competition reference number	
2. Research discipline *(research field)*	Chemical Sciences, Material Science and Engineering
3. Number of work hours per week including a task-based work schedule *(if applicable)*	Full-time, 40 hours per week in a task-based work time system
4. Monthly salary	
a. Basic salary	**~ 8.987,00 PLN gross**
b. Other remuneration components	AMU Remuneration Regulations
5. Type of an employment contract and expected duration of employment	Temporary contract for one year with the possibility of extension
6. Anticipated job starting date	May 2026
7. Workplace location	Center for Advanced Technologies Uniwersytetu Poznańskiego 10, 61-614 Poznań, Poland
8. Work rules	AMU Work Regulations

9. Application deadline and process	Electronic submission to jagoda.litowczenko@amu.edu.pl Application deadline: 26.04.2026r.
10. Required documents	■ Application form/letter of the candidate (email) ■ 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 (Journal of Laws of 2023, item 742 Polish: Dziennik Ustaw 2024 poz. 1571 t.j.); ■ Information on the Applicant's research, teaching and organizational achievements, ■ Other documents as determined by the competition committee. ■ 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	The job offer refers to the position in the Opus LAP project (National Science Center) titled "Engineering Biocompatible and Bioactive Stents for Improved Endothelial Integration in Cardiovascular Applications" (Contract number: 2024/55/I/ST5/02185) under the supervision of principal of the project - dr Jagoda Litowczenko-Cybulska. This project aims to develop next-generation bioactive, slowly degradable stents for applications in cardiovascular disease. By combining naturally derived and synthetic polymers, the stents will feature improved

mechanical stability, biocompatibility, and the ability to support the growth of a functional endothelial cell layer. A bioactive surface will be incorporated to enhance the interaction between the stent and surrounding tissue, improving long-term performance.

The work will involve advanced material synthesis, characterization, drug release studies, antibacterial assays, and biological evaluation under in vitro, ex vivo, and in vivo conditions using a porcine model. The project will also utilize volumetric bioprinting to deposit functional layers inside the stent lumen, as well as computational simulations and perfusion bioreactor systems to optimize design and performance. The final goal is to deliver a prototype of a 3D-printed or casted bioactive stent with proven tissue compatibility and mechanical stability, paving the way for improved cardiovascular implants.

The Opus LAP project includes international collaboration with the Institute of the Czech Academy of Sciences, providing access to complementary expertise and facilities.

The postdoctoral scientist will mainly be responsible for managing experiments in design and synthesis of biomaterials, 3D printing and characterization, drug releasing studies, microfluidics as well as cell biology tests.

This project will be carried out at the Center for Advanced Technologies (CAT), Adam Mickiewicz University in Poznań. AMU is one of the leading scientific institutions in Poland, consistently ranked among the top four research universities in the country, and is equipped with state-of-the-art infrastructure. The university achieved the highest ranking—1st place in Poland—in the category of building international research networks. This metric evaluates the durability and diversity of international scientific partnerships resulting in joint publications.

The Center for Advanced Technologies (CAT) brings together experts in chemistry, engineering, and biology to work on innovative projects in the fields of biomaterials, and medical, environmental, and industrial biotechnology. JagodaLab's research focuses on the development of novel biomaterials for 3D bioprinting, stem cell research, and cell differentiation.

JagodaLab is equipped with multiple 3D printers, including Poland’s first volumetric bioprinter, an extrusion-based bioprinter, SLA printers. CAT also houses fully equipped chemical and biological laboratories. The group has strong expertise in the field of biofabrication, including the development of printable materials and their characterization (e.g., rheology, FTIR, UV-Vis, SEM, mechanical testing, NMR), as well as cell culture and biological analysis.

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 (Journal of Laws of 2024, item 1571, Article 113 as amended) and who meet the following requirements: Appendix No. 2 to the Regulations for the Award of Funds for the Implementation of Tasks Financed by the National Science Centre in the Area of Research Projects, as specified in Resolution No. 84/2024 of the NCN Council of 5 September 2024 1. PhD in chemical sciences or materials engineering or biological sciences obtained in the year of employment under the project, or within 12 years prior to 1 January of the year of employment under the project. The degree must have been awarded by an institution other than the institution in which employment in this position is planned, or the candidate must have completed a continuous and documented postdoctoral fellowship of at least 10 months at an institution other than the one implementing the project and in a country different from the country in which the doctoral degree was obtained. They fulfilled formal requirements regarding the date of obtaining the doctoral degree in accordance with the regulations of the National Science Center https://www.ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2024/uchwala84_2024-zal1.pdf 2. Applicants without a doctoral degree may apply, provided they submit their doctoral diploma no later than at the time of signing the employment contract. 3. Proven record of productivity and publications in indexed journals. 4. Experience in volumetric, light based or extrusion based 3D bioprinting and material characterisation. 5. Experience the techniques: Fourier Transform Infrared Spectroscopy (FTIR), UV-visible spectroscopy, NMR, drug releasing studies, HPLC and mechanical testing. 6. Experience in microfluidics. 7. Experience in in research work in the field of cell culture, molecular biology (real time PCR or Western Blot) will be advantage. 8. Experience in the implementation of research grants. 9. Postdoc will be responsible for managing experiments in design and synthesis of biomaterials, 3D printing and characterization, drug releasing studies, microfluidics as well as cell biology tests.
IV. Required languages	Language: English Level: Excellent

V. Required research, teaching or mixed experience	- Expirience in volumetric or extrusion or light based printing and chemical characterisation of hydrogels (e.g FTIR, UV/VIS spectrophotometer, NMR). - Experience in drug releasing studies and mechanical testing. - Experience in microfluidics. - Experience in cell culture and characterisation (PCR, Western Blot) will be an advantage. - Knowledge of microfluidics, stem cell biology, molecular biology. - Independence, good organization of work, ability to work in a team. - Experience in writing scientific publications and conference presentations. - Excellent knowledge of relevant software such as: OriginLab, Fiji. - Experience with working in an international environment will be highly appreciated
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 ■ healthcare package
VII. Eligibility criteria	1. Matching the candidate's scientific profile with the advertisement. 2. Number, scientific level of the candidate's scientific publications. 3. Number, scientific level and of the candidate's scientific conference presentations. 4. Grade on the diploma. 5. Internships and participation in research projects.
VIII. The selection process	1. Competition committee begins working no later than 14 days after the deadline for submission of documents. 2. Formal evaluation of submitted proposals. 3. Call to provide additional or missing documents if necessary. 4. Selection of candidates for the interview stage. 5. Interviews for candidates who meet the formal requirements. 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. 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	• supervision in building a scientific profile through the publication in high-impact scientific journals, • assistance in writing grant applications in domestic (FNP, NCN) and foreign (Horizon) research projects, • establishing cooperation with renowned research centres in the world.

RODO Information Clause

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.

Procedure for reporting violations of the law

Recruitment: Positions and Competitions for Academic Teachers: Information on the internal reporting procedure referred to in the Act of 14 June 2024 on the Protection of Whistleblowers (Journal of Laws, item 928), announced by Regulation No. 5/2023/2024 of the Rector of Adam Mickiewicz University, Poznań of 17 September 2024 concerning the introduction of the Internal Reporting Regulations regarding the breach of law and follow-up actions at Adam Mickiewicz University, Poznań. Below are links to the regulation together with its annexes:

Ordinance No. 5/2023/2024
Rules for submissions
Information clause