

INSTITUTION: Institute of Plant Genetics, Polish Academy of Sciences

CITY: Poznań

POSITION: Postdoctoral

DISCIPLINE: Chemistry/Biochemistry/Biotechnology/Chemical Biology

POSTED: 04.09.2026

EXPIRES: 04.10.2026

WEBSITE: <https://www.igr.poznan.pl/>

KEY WORDS: Biological fluids; multi-molecular crowding; Ionic liquids; Deep eutectic solvents; Enzymatic cascade reactions; Artificial CO₂ fixation

DESCRIPTION (field, expectations, comments):

The competition is open to persons who meet the conditions set out in the Act of 30 April 2010 on the Polish Academy of Sciences (Journal of Laws No. 96, item 619, as amended) and the Regulations for conducting competitions for scientific positions at the Institute of Plant Genetics, Polish Academy of Sciences in Poznan and the NCN Regulations "**Doctoral degree obtained not earlier than 7 years before the year of employment in the project (not including maternal leaves)**"

Number of positions: 01

Place of employment: Institute of Plant Genetics Polish Academy of Sciences, Poland

Contract type: Full-time employment, fixed term for 2-3 years

Salary/Fellowship range: 11666.67 PLN per month

Department: Plant Nanotechnology

Goal of employment: Postdoctoral position in the SONATA BIS 14 (2024/54/E/ST4/00113) financed by National Science Centre, Poland.

Scope of research: The successful candidate will actively participate in the following tasks connected to the project:

Task-1: Develop and characterize biomimetic multi-molecularly crowded fluids using ILs and DESs.

Task-2: Investigate the stability and kinetics of enzymes (HRP, GOx, CA, and Rubisco) in presence of MCBNFs.

Task-3: Investigate how MCBNFs affect substrate channeling, kinetic efficiency, and stability under harsh conditions in the GOx-HRP cascade reaction.

Task-4: Study protein-protein interactions and enzyme stability in MCBNF using molecular dynamics simulations.

Required Qualifications

1. PhD in the area of Chemistry/Biochemistry/Biotechnology/Chemical Biology and who has developed a level of independence.
2. Excellent verbal and writing skills in English is required.
3. Knowledge of basic biophysical techniques, biocatalysis, and enzyme kinetics
4. Knowledge of computational methods and techniques in protein-protein interaction study in complex system will be a plus.
5. Good organizational skills and experience in work in a team.
6. Ability to communicate with other scientists at the interface of academy and industry.

Main duties

Include but not limited to conduct high quality scientific research, train students and visitors, prepare high impact scientific articles for publication and drafting of progress reports.

The application must contain the following statement:

"I, the undersigned, give my consent to the processing by the Institute of Plant Genetics, Polish Academy of Sciences (hereinafter referred to as IPG PAS) with headquarters at Strzeszyńska 34, 60-479 Poznań, my personal data contained in the submitted competition documentation for the needs necessary in the recruitment process, including to put my name and surname in the information on the results of the recruitment carried out on the Institute's website. I have been informed that consent is voluntary and that I have the right to withdraw my consent at any time, and withdrawal of consent does not affect the lawfulness of the processing that was carried out on its basis before its withdrawal. I have also read the IPG PAS information clause."

Criteria for the assessment of candidates to be employed at the IPG PAS in postdoc positions:

1. Matching the candidate's experience and skills to the planned field of study
2. Creativity measured:
 - a) the quality and number of publications in which the candidate is the first author or corresponding author, as well as the number of citations of the candidate's papers (Web of Science Core Collection) and the Hirsch index;
 - b) number of patents/patent applications and/or implementations (if applicable);
 - c) the quality and number of managed research projects and development works (if applicable).
3. Mobility in their scientific career, including completed scientific internships, change of scientific profile, internships and work in industry.

Documents required

1. Application for employment addressed to the Director of the Institute.
2. Curriculum vitae in English.
3. Cover letter (1 A4 page) containing concise information about scientific interests, previous achievements and own research intentions.
4. A scan or a photocopy of the university graduation diploma.
5. A scan or a photocopy of the diploma of the doctoral degree obtained
6. List of publications with indication of the five most important works carried out in the last 5 years of the candidate's research work (after deduction of breaks in research work), patent applications, patents, implementations, research projects,
7. Information on the number of citations (total and without self-citations, according to the Web of Science Core Collection) and the Hirsch index.
8. List of research projects that the candidate has managed or has been a contractor.

9. Names of two people who can issue references. Please provide their positions, specialization, business address and e-mail address.

10. Statement of the Candidate on getting acquainted with the Regulations for conducting competitions for scientific positions at IGR PAN.

How to apply: The application should contain the full set of documents (1 pdf or doc file), which should be sent by email entitled SONATA BIS14 Postdoc to the HR Department: work@igr.poznan.pl

For additional information contact the principal investigator **dr. Dibyendu Mondal**, dmon@igr.poznan.pl

Pursuant to article 13 Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (hereinafter General Data Protection Regulation - GDPR), the Employer informs that:

a) the administrator of personal data obtained, collected and processed as a part of the implementation of this agreement is the Institute of Plant Genetics, Polish Academy of Sciences, 34 Strzeszyńska str., 60-479 Poznań Regon: 000326204, NIP 7811621455,

b) contact with the inspector of personal data protection of the Institute of Plant Genetics, Polish Academy of Sciences in Poznań, is possible at the following e-mail address: iodo@igr.poznan.pl,

c) personal data is processed in order to implement the administrator's tasks related to recruitment for a vacancy,

d) Legal basis for data processing: consent of the data subject.

e) Your data collected in the current recruitment process will be deleted, but not later than within 4 months of the recruitment being resolved. After this period, personal data will be effectively destroyed, which means that there will be no access to them or the ability to restore them.

f) If a given candidate is chosen - the candidate's personal data will be forwarded to the Institute's administration in order to establish an employment relationship. Personal data of the candidate who won the recruitment will be processed for the purpose of: implementing the contract to which the selected candidate is a party, as well as taking action for the benefit of the selected candidate before concluding the contract (in accordance with Article 6 para. 1 lit.(B) of the GDPR)

g) with respect to personal data obtained, the Institute will not make decisions in an automated manner,

h) Your personal data will not be transferred to a third country.

i) The candidate whose data is processed has the right to:

- access to the content of his/her personal data, request its rectification or deletion on the terms set out in Articles 15-17 of the GDPR

- restrict data processing, in cases specified in Article 18 of the GDPR,

- data transfer on the principles set out in Article 20, GDPR,

- withdraw the consent at any time without affecting the lawfulness of the processing that was carried out on the basis of consent before its withdrawal '

- lodge a complaint to the President of the Office for Personal Data Protection.

Announcement of the results: As soon as the positions are filled.

Stages of the recruitment procedure:

- selection of the best candidates by the competition commission appointed by the Director
- interview and assessment of the selected candidates by the competition commission
- decision of the Director

Candidates with negative opinions from the Commission have the right to appeal against the results of the assessment. This appeal submitted to the Director of the Institute within 7 days from the date of receipt of the information. The decision of the Director of the Institute on this appeal is final.

Note: each of the submitted candidates will receive individual information about the results of the competition in relation to their candidature. Information about the successful candidates will be available on the Institute's website.

Apostille clause and nostrification of diplomas

We would like to inform that foreign diplomas entitle to continue education in Poland on the principles set out in international agreements, and in the absence of such agreements - on the basis of relevant national provisions, by way of nostrification. Therefore, applicants who have obtained their professional title or degree from countries other than Poland should check whether their diploma confirms having higher education at a doctoral level in Poland. Information in writing about the diploma obtained abroad, in particular about the level of education and the status of the university, at the request of the person concerned, is provided by the Director of the National Academic Exchange Agency. Information is provided on the basis of documents submitted by the applicant. Detailed information can be found at:

<https://nawa.gov.pl/uznawalnosc/informacje-dla-uczelni/nostryfikacja-dyplomow>

ATTENTION: at the stage of the recruitment process, there is no requirement to present documents certified by the apostille clause nor the requirement of nostrification of diplomas. These requirements must be met if the candidate is accepted.

Task-5: Explore in vitro CO₂ fixation in the presence of MCBNFs by modulating CA-Rubisco cascade efficiency.