

RECRUITMENT PROCEDURE NO. **18/2019**
FOR THE POSITION OF A **HEAD OF IBCH PAS SPECIALIZED LABORATORY**
IN THE FIELD OF BIOINFORMATICS/COMPUTATIONAL CHEMISTRY

INSTITUTION: **Institute of Bioorganic Chemistry, PAS**
CITY: **Poznan**
TYPE OF POSITION: **Head of Laboratory**
SCIENTIFIC DISCIPLINE: **biology – chemistry – informatics**
POSITIONS AVAILABLE: **1 or 2**
PUBLICATION DATE: **July 22nd, 2019**
SUBMISSION DEADLINE: **August 31st, 2019**
IBCH PAS WEBSITE: <http://www.ibch.poznan.pl>

KEY WORDS: bioinformatics, NGS data analysis, sequencing data analysis, structural modelling, databases, multi-omics analysis, computational chemistry, molecule dynamics, ab initio modelling, transition states, quantum-mechanical calculations

The Institute of Bioorganic Chemistry, PAS, is an interdisciplinary science center, unique both in Poland and in the world, hosting research that binds together the areas of chemistry, biology and informatics. It encompasses modern laboratory space with very well equipped supporting laboratories. The Institute also features Poznan Supercomputing and Networking Center, which is its affiliated institution. Research at IBCH PAS is focused primarily on synthesis and studies of the structure and function of nucleic acids and proteins, as well as their components. The Institute also opens itself to other interdisciplinary fields of study, combining chemistry, biology and informatics in various configurations.

IBCH PAS is currently planning to establish a new supporting laboratory in the field of
bioinformatics and computational chemistry.

The main role of the specialized laboratories functioning at IBCH PAS is to support the activities of the Institute's research departments. In addition, the laboratories may provide services to external centers, and conduct their own scientific research.

In view of a wide range of scientific research conducted at IBCH PAS and its interdisciplinary character, it is essential to support them with adequate computational facility. Therefore, it is possible to establish one or two laboratories – to be determined on the basis of the submitted applications. It is expected that the Head will organize and supervise the laboratory, and participate in its activities, having the knowledge and experience in at least one of the following fields: bioinformatics or informatics analysis of the data typical of structural or functional genomics, or problems concerning computational chemistry. The topics to be dealt with by the future laboratory can be for example:

- analysis of the NGS (*Next-Generation Sequencing*) data:
 - associated with the methods for RNA structural genomics (i.a., DMS-seq, Structure-seq, SHAPE-MaP);
 - associated with the methods for identifying the RNA-biomolecules interactions;
 - associated with genome analysis;
 - data/result visualization
- analysis of RNA-seq expression (e.g., transcripts of protein-coding genes, long- and short non-coding RNAs, including miRNA);
- identification of sequence variants (e.g., substitutions, SNP, insertions/deletions, copy number variations – CNV);
- application of statistical tools (e.g., R package), visualization and statistical interpretation of the obtained results;
- structural modelling of RNA, DNA and their complexes with other biomolecules;
- analysis of other sequential and structural data;
- multi-omics analysis (genomics, proteomics, transcriptomics, epigenomics, microbiomics, etc.)
- molecular modeling for exploring the structure, dynamics and thermodynamics of small-molecules and biomolecules, as well as their complexes;
- modeling of chemical reactions, optimization of the transition state geometry and orbital geometry;
- quantum-mechanical calculations concerning, i.a., prediction of spectral properties of compounds;
- image analysis (e.g., from systems of microscope imaging);
- creation, management and search of large-sized research databases (European Bioinformatics Institute, EMBL database);

Taking into account significant diversity of the subject matter, we assume that these topics will be implemented gradually, in line with the increase in the number of laboratory members and extension of their competence.

I. Requirements for the candidates:

1. At least a PhD degree in IT, biology, chemistry or related sciences.
2. Documented track record in at least one of the aforementioned fields.
3. Good command of spoken and written English.
4. Experience in managing research groups, accomplished long-term research internships, as well as the ability to cooperate with other groups shall be considered as additional assets.

II Required documents:

1. Letter of application, addressed to the Director of IBCH PAS.
2. Brief description of the vision of the new laboratory.
3. Scientific CV featuring, in particular, the course of research and professional career, as well as information on the scientific, educational and organizational achievements, including:
 - information on the range of expertise in the aforementioned topics/computational tools in which the candidate has experience;
 - description of most significant scientific achievements;
 - the list of research papers with a relevant number of citations (excluding self-citations) and the h-index (according to the *Web of Science Core Collection*), along with other publications;
 - the list of inventions, patents, implementations;
 - information on managing or participating in research projects;
 - information on previously held management positions;
 - information on accomplished research internships;
 - information on awards and distinctions.
4. Photocopy/scanned copy of the PhD diploma.
5. Documents confirming the duration of interruptions in research career (optional).

6. Contact details of two independent researchers or other persons entitled to provide letters of recommendation (optional).
7. Statement of consent to personal data processing:
I hereby give consent to process my personal data included in my offer, for the purposes and in the scope required for the recruitment procedure, and – in the case of employing me– to disclose my name and surname in the recruitment section of the IBCH PAS website. I have been informed that the declaration herein constitutes a voluntary consent, and that I have the right to withdraw my consent at any moment, and withdrawal of my consent shall not influence the compliance with the law of the processing that has been executed prior to such withdrawal. I have also acquainted myself with information concerning data protection (information clause)*.
Attention: applications lacking the aforementioned consent shall not be considered in the recruitment procedure.
- III.** The applications shall be sent via electronic mail, to the following address: applications@ibch.poznan.pl, subject line: **Recruitment procedure No. 18/2019**, in a single **PDF** file.
 Should there be no possibility of submitting the documents via e-mail, the applications can also be sent via traditional mail to the address of the secretariat of the Institute of Bioorganic Chemistry PAS, Noskowskiego 12-14, 61-704 Poznan, POLAND, with the following notice on the envelope: "**Recruitment procedure for the position of a Head of Laboratory – 18/2019**". Please do not send original documents.
- IV.** The submission deadline is **August 31st, 2019**. The date of receipt of the applications shall be decisive.
- V.** In the course of the recruitment procedure, the candidates may be asked to deliver a public or non-public presentation of their achievements and a general outline of the principles of operation for the newly established laboratory at IBCH PAS.
- VI.** The recruitment procedure shall be concluded until **September 30th, 2019**.
- VII.** The successful candidate shall be employed in the position of a research technician. Detailed conditions shall be settled through negotiations with the successful candidates.
- VIII.** In the case of a successful candidate, the Institute of Bioorganic Chemistry PAS shall be her/his basic, full-time place of employment.

For further details, please contact the Deputy Director for Scientific Affairs
 Michal Sobkowski, PhD, DSc (phone: (+48) 618 52 85 03, ext. 182); e-mail: msob@ibch.poznan.pl).

Information clause:

Pursuant to the stipulations of the 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 (General Data Protection Regulation), further referred to as GDPR, we hereby inform that:

- *The Institute of Bioorganic Chemistry, Polish Academy of Sciences, seated in Noskowskiego 12/14, 61-704 Poznan; REGON 000849327, VAT No. 777-00-02-062 is the administrator of the collected personal data (further referred to as the Institute).*
- *The Administrator appointed a Data Protection Officer, who can be contacted in writing, via traditional mail, by sending a letter to the following address: Noskowskiego 12/14, 61-704 Poznan, or by sending an e-mail to: dpo@ibch.poznan.pl.*
- *The personal data of the candidates is processed for the purposes of fulfilling the tasks of the administrator, associated with conducting the recruitment procedure for a vacant position.*
- *The legal basis for processing personal data is the Act of 26 June 1974 – The Labor Code, Act of 30 April 2010 on the Polish Academy of Sciences or the consent of the person whose data shall be subjected to processing.*
- *Your personal data shall be subjected to processing for period of 3 months upon the date of decision of the recruitment committee. Following this period, the data will be irretrievably and effectively destroyed.*
- *The personal data of the candidates shall not be transferred to any third country.*
- *The person whose data shall be subjected to processing has the right to:*
 - *request access to his/her personal data, and to amend it or delete it, pursuant to articles 15-17 of GDPR;*
 - *limit data processing, in the events stipulated in article 18 of GDPR;*
 - *data transferring, pursuant to article 20 of GDPR;*
 - *withdraw consent at any moment, without influencing compliance with the law of the processing that was executed prior to consent withdrawal;*
 - *file a complaint to the Inspector General for Personal Data Protection.*

Providing personal data in the scope stipulated in article 22 (1) of the Act of 26 June 1974 – The Labor Code is mandatory, whereas providing data in a broader scope is voluntary and requires consent for its processing.