



HIRES-MULTIDYN

DEAN OF THE FACULTY OF FOOD SCIENCE

UNIVERSITY OF WARMIA AND MAZURY IN OLSZTYN

opens a call

for adjunct- POSTDOC position in a group of researchers

in the Department of Physics and Biophysics

within the project

**H2020-FETOPEN-2018-2020 / H2020-FETOPEN-2018-2019-2020-01
EXCELLENT SCIENCE - Future and Emerging Technologies (FET)
<https://cordis.europa.eu/project/id/899683>**

**Multiscale Dynamics with Ultrafast High-Resolution Relaxometry
HIRES-MULTIDYN**

PERIOD: 24 months (not longer than until 30.09.2024)

AMOUNT: 10000.00 PLN/month (gross/gross)

APPLICATION DEADLINE: 26.08.2022 (23.59)

ANTICIPATED DATE OF ANNOUNCING THE OUTCOME: 08.09.2022

PLANNED STARTING DATE: 01.10.2022

KEYWORDS: Nuclear Magnetic Resonance, spin relaxation, dynamics, condensed matter

PROJECT DESCRIPTION:

The project is devoted to a ground-breaking technology, called ultrafast high-resolution (UHRR) Nuclear Magnetic Resonance (NMR) relaxometry, providing deep insight into dynamical processes of complex, condensed matter systems. The technology enables probing dynamical processes on timescales ranging from picoseconds up to microseconds with atomic resolution. To fully profit from this concept, development of a theoretical framework including relaxation scenarios for composed systems is needed. The theoretical framework includes different relaxation pathways combined with models describing molecular motion. UHRR prototypes are meant to be exploited in a series of proof-of-concept applications covering a broad range of fields (drug design, food and health sciences, energy).

<https://cordis.europa.eu/project/id/899683>

TASKS:

- Participation in developing models of spin relaxation (Nuclear Magnetic Resonance – NMR) in molecular and ionic condensed matter systems

- Participation in numerical implementation of the relaxation models and their testing against experimental NMR relaxation data
- Participation in the preparation of research papers
- Presentation of scientific results at conferences

REQUIREMENTS:

- Doctoral degree in physics, chemistry, materials science, nanotechnology, biotechnology or related sciences or the expected date of obtaining the doctoral degree before starting the employment
- Knowledge of English at a level that allows active participation in the research
- Knowledge of the principles of Nuclear Magnetic Resonance or other spectroscopic methods highly preferred
- Programming expertise preferred
- Experience in investigating structural and dynamical properties of condensed matter systems preferred

DOCUMENTS:

1. Application addressed to the Rector of UWM in Olsztyn
2. Motivation letter
3. Curriculum vitae including a description of the Candidate's competences in relation to the requirements
4. List of publications and other scientific achievements (such as: leading research projects, participation in research projects, conference presentations, other achievements)
5. Copy of the doctoral diploma or a confirmed statement regarding the expected date of obtaining doctoral degree
6. Personal questionnaire form
[<http://bip.bios.uwm.edu.pl/files/KwestionariuszosobowyUWM.pdf>]
7. Statement that the University of Warmia and Mazury in Olsztyn will be the primary place of work
[http://wh.uwm.edu.pl/sites/default/files/download/202205/osw._ze_uwm_bedzie_podstawowym_miejscem_pracy.docx]
8. Statement on the health condition enabling to perform the work specified in the position announcement
[<https://bip.uwm.edu.pl/uczelnia/baza-dokumentow-sprawy-kadrowe#123>]
9. Consent to processing of personal data
[<https://bip.uwm.edu.pl/uczelnia/baza-dokumentow-sprawy-kadrowe>]

ADDITIONAL INFORMATION:

- The University of Warmia and Mazury in Olsztyn will be the primary place of work within the meaning of Art. 120 of the Act of July 20, 2018 Law on Higher Education and Science (Journal of Laws of 2022, item 574, as amended)
- The Rector of the University of Warmia and Mazury in Olsztyn reserves the right to cancel the competition without giving reasons

- Lack of information about the results of the call means rejection of the Candidate application
- Documents should be submitted in electronic form to the following address:
wnz-dziekanat@uwm.edu.pl
The email title: HIRES(1)

The Evaluation Committee reserves the right to interview selected candidates (the candidates will be informed about the place and time of the interview by e-mail). The interview will be conducted on-line.

In the event of the resignation of a selected candidate, the Commission reserves the right to select the next person from the ranking list. Other candidates will be informed about the reasons for not accepting their application upon request.

Applicants can receive timely communication from the recruitment office to inform them on their status in the recruitment process upon request.

WE OFFER:

- work in an interdisciplinary research team
- opportunity to participate in international scientific conferences

For more information, please contact: danuta.kruk@uwm.edu.pl
Phone number: +48516849233

Dean of the Faculty of Food Science
prof. Dr. hab. Eng. Małgorzata Darewicz