

## Expression of Interest for hosting Marie Skłodowska – Curie Postdoctoral Fellow at the University of Lodz

### 1. DEPARTMENT INTERESTED IN HOSTING POSTDOCTORAL FELLOWS

Faculty: **Faculty of Mathematics and Computer Science**  
Department: **Department of Nonlinear Analysis**  
Contact person – potential Supervisor (name, e-mail address, position in organization, phone number): **Dariusz Wardowski, [dariusz.wardowski@wmii.uni.lodz.pl](mailto:dariusz.wardowski@wmii.uni.lodz.pl), associate professor, 42 6355914**  
Website: **<https://www.uni.lodz.pl/pracownicy/dariusz-wardowski>**

### 2. SCIENTIFIC AREA:

- Chemistry
- Economic Sciences
- Information Science and Engineering
- Environmental and Geosciences
- Life Sciences
- Mathematics
- Physics
- Social Sciences and Humanities

### 3. SHORT SUMMARY OF THE HOSTING DEPARTMENT:

#### Activities and expertise

*Faculty of Mathematics and Computer Science is one of the main scientific centers in Lodz employing recognized specialists in various branches. The Department of Nonlinear Analysis conducts research in the field of nonlinear functional analysis, topological methods, fractal geometry and various applications.*

**Involvement in EU-funded research and training programmes/actions/projects** n/a

**Key research facilities** *The main research facility is the building of Faculty of Mathematics and Computer Science*

**Intersectoral secondments options<sup>i</sup>**

YES       NO

#### 4. PROPOSED PROJECT TOPIC

*Rough outline of project idea or key words – max. 10 phrases (optional)*

*A possible project could concern nonlinear functional analysis, in particular analysis on fractal sets and applications in differential equations on this type of sets. Also, nonlinear and topological methods related to fixed point theory can be the field of interest.*

*Key words: fractal analysis, geometry of fractals, differential equations, fixed point theory*

#### 5. VALID FOR THE FOLLOWING HORIZON-MSCA--PF CALL:

2023       2024       2025       2026       2027

MSCA Postdoctoral Fellowships are selected by EC on the basis of annual calls for proposals. Forthcoming and open calls for proposals can be found on the Funding & tender opportunities Portal of the European Commission

#### 6. DO YOU CONSIDER THE NEED OF ON-SITE MEETING DURING THE APPLICATION PROCESS?

YES    NO

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<sup>i</sup> Within non-academic organizations (enterprises, hospitals, government institutions, cultural institutions, non-governmental organisations such as foundations, associations or other legal entities) – may be planned during the project provided they are in line with the Guide for applicants regulations of the corresponding call.