



Expression of Interest – Marie Skłodowska-Curie Individual Fellowships

Poznan University of Technology is searching for researchers interested in submitting a joint application for the **Marie Skłodowska-Curie Individual Fellowships**.

Are you an Experienced Researcher with a doctoral degree or do you have at least four years' full-time research experience? The MSCA Individual Fellowship funding scheme might be suitable for you.

The goal of the Individual Fellowships is to enhance the creative and innovative potential of experienced researchers, wishing to diversify their individual competence through advanced training, international and intersectoral mobility.

Individual Fellowships provide opportunities to researchers of any nationality to acquire and transfer new knowledge and to work on research and innovation in Europe and beyond.

You can complete the MSCA Individual Fellowship at Poznan University of Technology under one of two options:

- European Fellowship: research stay at Poznan University of Technology which lasts from 12 to 24 months,
- Global Fellowship: 12 months stay at Poznan University of Technology (mandatory return period) after a research stay outside Europe, which lasts from 12 to 24 months.

Poznan University of Technology is one of the leading technical universities in Poland. Situated in Greater Poland region, it currently offers education at 9 faculties, running a total of 31 fields of study. With about 13,000 students and over 1,300 academic staff it provides studies at a high, European level and high-quality scientific research. Students and staff have an access to new, well-equipped research laboratories.

Poznan University of Technology is **willing to host Marie Skłodowska-Curie fellows** carrying out their **research in the fields of:**

1. Computing science:
 - Distributed computing,
 - Data warehouse architectures,
 - Data integration,
 - ETL design and optimization,
 - Time series analytics in databases,

- Software engineering (Empirical Software Engineering, Software Measurement, Requirements Eng., Software Maintenance, End-User Programming, Software Project Management).
- 2. Communication technology:
 - Next-generation methods in video processing and coding - Next-generation video coding (beyond VVC, using AI methods); Immersive video processing and coding; Video coding for machines; 3D video processing and coding; Video processing for advanced surveillance; Programmed hardware implementations of video processing and coding techniques.
- 3. Mechanical engineering.
- 4. Management and quality studies:
 - Human factor in lean management,
 - Human factor in Industry 4.0.
- 5. Automation, electronic and electrical engineering:
 - Applications of differential geometry in control of mechanical Systems (in particular in robotics),
 - Optimization of line-start synchronous reluctance motor,
 - Machine learning in diagnostics of electrical machines,
 - Analysis and design of shape memory actuators,
 - Reinforcement learning for precision electrical drive control design,
 - Energy-saving control of a synchronous reluctance motor in energy vehicle,
 - Intelligent optimization system for energy management in urban transport vehicles with the use of machine learning methods,
 - Machine learning in machine perception: new perception and state estimation methods in robotics,
 - AI for spatial reasoning with modern LiDAR sensors: advancing localization mapping with data-driven methods.
- 6. Mathematics:
 - Functional analysis.

The financial support covers:

- Living, mobility and family allowances for the researcher,
- Research, training and networking costs,
- Management and indirect costs.

Researcher unit cost person/month			Institutional unit cost person/month	
Living Allowance	Mobility Allowance	Family Allowance	Research, training and networking costs	Management and indirect costs
4,880€	600€	500€	800€	650€

The living allowance is the EU contribution to the gross salary costs of the researcher and is adjusted through the application of the country correction coefficient.

The host institution is obliged to recruit the researcher under an employment contract.

Researchers interested in applying with Poznan University of Technology as host institution are kindly asked to send **CV and summary of the proposed project** to Research and Development Office at dzial.badan@put.poznan.pl by **07/08/2020**.