

Marie Skłodowska-Curie Post-doc Positions in Germany

“Expression of Interest” for hosting Fellows

This template should be used by institutions interested in hosting post-doctoral fellows within the Marie Skłodowska-Curie Individual Fellowship programme. Host institutions should be located in Germany.

1. Valid for the following MSCA-IF Calls¹:

<input checked="" type="checkbox"/> 2017	<input checked="" type="checkbox"/> 2019
<input checked="" type="checkbox"/> 2018	<input checked="" type="checkbox"/> 2020

2. Interested host institution:

Federal Institute for Materials Research and Testing (BAM), Berlin, Germany

Name of EU liaison officer (EU-Referent/in), if applicable:

Dr. Claudia Eggert (claudia.eggert@bam.de)

3. Institute/Department:

Department 8: Non-destructive Testing

Division 8.4: Acoustical and Electromagnetic Methods

Website (Hyperlink): <https://www.bam.de/Navigation/EN/About-us/Organisation/Organisation-Chart/President/Department-8/Division-84/division84.html>

4. Contact person (name and e-mail address):

Dr.-Ing. Jens Prager

Email: jens.prager@bam.de

¹ MSCA Individual Fellowships are selected on the basis of annual calls for proposals. Forthcoming and open calls for proposals can be found on the [Participant Portal](#) of the European Commission under “Funding Opportunities” and “Calls/H2020”.

5. Project idea/position (scientific requirements, topic, discipline):

Rough outline of idea/position:

Our division has a strong background in acoustics, acoustic wave propagation and non-destructive testing (NDT) using ultrasound. With more than 40 scientists and technicians, we develop NDT methods and ultrasonic sensors. We are a leading institution in the field of simulating wave propagation using the Scaled Boundary Finite Element Method for guided wave propagation and wave propagation in periodic structures. Our work combines fundamental research on the physics of acoustical wave propagation and their numerical simulation with applied research on NDT and acoustic sensor technologies.

For our future research, we are looking for post doc support for the following projects:

- wave propagation in phononic crystals and acoustic metamaterials, e.g. for sensor applications in NDT and fluid analysis
- acoustical sensors for concentration measurements in fluids, e.g. using photoacoustics and acoustic absorption
- structural health monitoring (SHM) of composite materials and safety relevant components
- development of efficient numerical simulation tools using Scaled Boundary Finite Element Method

We encourage scientist from engineering, physics, mathematics and material sciences to apply for a funding and to participate in our research projects. All projects comprise theoretical and experimental investigations and will be carried out in peer collaboration with researchers from our division and other departments of the BAM and external research institutions.

Please tick:

- Life Sciences
- Natural Sciences
- Engineering Sciences
- Social Sciences and Humanities

6. Deadline² for considering interests by post-doctoral applicants:

There is no deadline for considering interest as our projects are ongoing.

² Please consider that the preparation of a Marie Skłodowska-Curie proposal requires some time. Fellow and supervisor have to agree on a project and training opportunities for the fellow.