

GLOBAL TRAINING PROGRAMME

FORM 1 APPLICATION FORM: GLOBAL TRAINING PROGRAMME


REFERENCIA: EHU22

| CORPORATIVE INFORMATION | | | |
|---|--|---|--------|
| Name of the company | | JOANNEUM RESEARCH Forschungsgesellschaft mbH | |
| Contact Person | | Rita Eckhard | Email: |
| Location | Country | Austria | |
| | City | Weiz | |
| | Address | Franz Pichler-Strasse 30 | |
| Sector | | RIS3 sector: BIOSCIENCE - HEALTH | |
| PROPOSED INTERNSHIP INFORMATION | | | |
| Number of trainees to host (in case you want more than 1 trainee, indicate the different departments where they will work) | | 2 | |
| Extension time (extra months and salary) OPTIONAL SEE DOCUMENT: "FORM 2_Global Training 2024 extension preliminary agreement" | Extra months | 6 | |
| | Monthly payment for extra months (between 0-1600€/month) | see APPLICATION FORM 2 according to our COLLECTIVE AGREEMENT for employees in non-university research 2024 | |
| INTERNSHIP/PLACEMENT INFORMATION | | | |
| Department | | MATERIALS - Institute for Sensors, Photonics and Manufacturing Technologies | |
| Description of project/activities | | <p>Our department is specialized in roll to roll nanoimprinting of different structures, such as optical structures, microfluidic structures and lab on chip developments. We have experience in material development for UV imprinting including optical properties. One part of the institute is specialized in optical simulations, one other part in development of sensors, microfluidic lab-on-chip devices, fabrication of optical microlenses, etc.</p> <p>Possible activities/ projects could be:</p> <ul style="list-style-type: none"> ■ Development of mastering techniques and replication of lab on foil based chips ■ Development and fabrication of outcoupling refractive structures or transparent heating elements for lab on chips ■ Development of a foldable lab on chip device fabricated by means of roll to roll nanoimprinting ■ Development of sensor chemistry or onchip amplification for lab on chip devices ■ Simulation of optical elements and fabrication of those (microlenses, optical decorative elements ...) ■ Inkjet printing in combination with other structuring techniques (3D printing, microimprinting, ...) ■ Nanostructuring of surfaces with Laser ablation or laser structuring technologies | |
| COMPETENCES, SKILLS and EXPERIENCE REQUIREMENTS | | | |
| Requested profile(s) information (Studies, previous experience, language skills, other skills...) | Studies | mechanical engineering, biomedical engineering, physics or chemistry | |
| | Language skills | English | |

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| | Other <i>(professional experience, software, other skills...)</i> | |
| Other commentaries | | |

| COMPANY/INSTITUTION | SIGNATURE | DATE |
|-------------------------|--|---|
| REPRESENTATIVE : | JOANNEUM RESEARCH Forschungsgesellschaft mbH   <small>DI Helmut Wiedenhofer, 07.05.2024 16:00 Digital signert.gem. EU Reg. No 910/2014</small> | 07.05.2024   <small>Renate Agnes Reinisch, 07.05.2024 11:40 Digital signert.gem. EU Reg. No 910/2014</small> |

INFORMATION ABOUT THE COMPANY/INSTITUTION

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| <p>LOGO</p> |  |
| <p>WEBSITE</p> | <p>www.joanneum.at</p> |
| <p>INFORMATION ABOUT THE CITY AND THE AREA WHERE THE COMPANY/STITUTION IS LOCATED</p> <p>(General information about SECURITY, ACCOMODATION, PUBLIC TRANSPORT...)</p> | <p>Weiz is a small and nice town in the eastern part of Austria with about 11.000 inhabitants (www.weiz.at). It is 30 km north of Graz, the capital of Styria. There is plenty of private accommodation in Weiz, but there is also public transport to Graz either by bus or train every half hour (takes about 50 minutes), many of our students and staff live in Graz and commute by bus or train or in the summer by bike (quite hilly). Graz has a very active student social life and a fairly large Basque student community.</p> |
| <p>GENERAL INFORMATION ABOUT THE COMPANY/INSTITUTION</p> | <p>JOANNEUM RESEARCH is a professional innovation leader and technology provider. It is distinguished by its entrepreneurial focus and a track record of 30 years of cutting-edge research at an international level. Its key role is to facilitate the transfer of technology and knowledge in South East Austria. For these reasons, it is ideally suited for applied research and technology development. JOANNEUM RESEARCH networks with members of the national and international scientific and research communities. It is a recognised research partner whose scientific work meets the highest international standards. It supports companies in the development of technologies and processes. In this way, it makes a decisive contribution to securing and increasing the competitiveness of Styria and Carinthia as a location for research, innovation and business. The MATERIALS - Institute provides a link between the development of large-scale processes and industrial application. By forming strategic partnerships with regional and international partners in science and industry, MATERIALS develops comprehensive, interdisciplinary solutions to problems in the fields of optical applications, medical technology and many other applications.</p> |
| <p>SIZE OF THE COMPANY (EMPLOYEES)</p> | <p>~ 500</p> |
| <p>NUMBER OF PEOPLE AT THE DEPARTMENT WHERE THE TRAINEESHIP WILL TAKE PLAKE</p> | <p>~ 77</p> |
| <p>MAIN ACTIVITY OF THE COMPANY/INSTITUTION</p> | <p>JOANNEUM RESEARCH's institute MATERIALS - Institute for Sensors, Photonics and Manufacturing Technologies is dedicated to the applied materials research.</p> <p>Main activities include medical sensor development, development of materials for optical and imprinting purposes, simulation and prototyping of manifold applications.</p> |
| <p>A BRIEF EXPLANATION OF MAIN PROJECTS</p> | <ul style="list-style-type: none"> • Large-scale production of organic layers (roll-to-roll, screen printing): any kind of structure (optical, biomimicing (gecko effect, lotus effect, ...), microfluidic channels • Microfluidic chip development: new layout design, mastering with several techniques (photolithography, e-beam lithography, grey scale laser lithography), master upscaling for R2R imprinting, R2R UV-NIL imprint, chip assembly • Green Photonics and Electronics • Structured (biomimetic) surfaces in the nanoscale: mastering up to large area replication via UV-Nanoimprint Lithography • Piezoelectric sensors and energy harvesters • (Optical) Chemo-and Biosensors • Laser Production Technology • Aerosol and inkjet printing |

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| | <ul style="list-style-type: none"> • Laser and plasma-assisted vacuum deposition process |
| <p>PREVIOUS COLLABORATION IN INTERNSHIP/TRAINING PROGRAMMES?</p> | <p>JOANNEUM RESEARCH Materials is participating for the fifth time in this internship project. In the year 2017/2018 we participated the first time and hosted two students: Elena Gonzalez and Asier Alvarez. Asier is still in Weiz, doing a PhD in microfluidic simulation. In the year 2018/2019 we also participated and Izar Gorroñoigoitia Uribarren was doing her internship. She left after 12 month for a research job in Basque country. In the year 2019/2020 we were hosting again two students: Jon Ostolaza and Mikel Arocena. Mikel prolonged his internship for 6 months and and was then employed for about a year as a member of our scientific staff. In the year 2022/2023 we were hosting Conzalo Lucas Herran at our Niklasdorf site. Within the current programme period (2023/2024), we are currently hosting Angela Diez Sanches at our Niklasdorf site.</p> |
| <p>OTHER COMMENTARIES</p> | |