GLOBAL TRAINING PROGRAMME

FORM 1 APPLICATION FORM: GLOBAL TRAINING PROGRAMME

REFERENCIA: EHU25

CORPORATIVE INFORMATION				
Name of the company		**JOANNEUM RESEARCH Forschungsgesellschaft mbH**		
Contact Person		**Rita Eckhard**	Email:	
Location	Country	Austria		
	City	8160 Weiz		
	Address	Franz Pichler-Strasse 30		
Sector		**RIS3 sector: BIOSCIENCE - HEALTH**		
PROPOSED INTERNHISP INFORMATION				
Number of trainees to host (in case you want more than 1 trainee, indicate the different departments where they will work)		1		
Extension time (extra months and salary) OPTIONAL SEE DOCUMENT: *"FORM 2_Global Training 2023 extension preliminary agreement"*	**Extra months**	Si al finalizar los 6 primeros meses la empresa y el becario desean prorrogar la estancia, la empresa ofrece la posibilidad de prorrogar la estancia hasta 6 meses más.		
	Monthly payment for extra months (between 0-1600€/month)			
INTERNSHIP/PLACEMENT INFORMATION				
Department		MATERIALS - Institute for Sensors, Photonics and Manufacturing Technologies		
Description of project/activities		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. Possible activities/ projects could be: ■ 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
Other commentaries	

COMPANY/INSTITUTION	SIGNATURE	DATE
REPRESENTATIIVE : DI Dr. Heinz Mayer	JOANNEUM RESEARCH DI Dr. Heinz Mayer, Apr 27, 2023 12:20 PM Digital signiert gem. EU Reg. No 910/2014	

INFORMATION ABOUT THE COMPANY/INSTITUTION

LOGO	JOANNEUM RESEARCH
WEBSITE	www.joanneum.at
INFORMATION ABOUT THE CITY AND THE AREA WHERE THE COMPANY/ISTITUTION IS LOCATED (General information about SECURITY, ACCOMODATION, PUBLIC TRANSPORT…)	Weiz is a small and nice city in the eastern part of Austria with approx 11.000 inhabitants (www.weiz.at). It is 30 km in the North of Graz, the capital of the province of Styria. Many private accommodation in Weiz are available, but there is also public transport to Graz either by bus or by train every half hour (takes approx. 50 min), many of our students and co-workers live in Graz and commute by bus or train or in summertime by bike (quite hilly). Graz has a very active student social life (if Corona is not restricting) and also a quite large basque students community.
GENERAL INFORMATION ABOUT THE COMPANY/INSTITUTION	JOANNEUM RESEARCH is a professional leader of innovation and provider of technology. Its entrepreneurial focus and track record of 30 years of cutting-edge research performed on an international scale has made it stand out from the crowd. The key function is to facilitate the transfer of technology and knowledge in South-East-Austria. For these reasons, it is perfectly suited for applied research and technology development. JOANNEUM RESEARCH networks with members of national and international scientific and research communities. It is a recognized research partner whose scientific work fulfills the highest international standards. It supports companies during the development of technologies and processes. In this way, it makes a crucial contribution to secure and increase the competitiveness of Styria and Carinthia as a location for research, innovation and business. The MATERIALS - Institute provides a link development of large area processes and industrial application. By forming strategic partnerships with both regional and international partners in the scientific and industrial sectors, MATERIALs develops comprehensive, interdisciplinary solutions to problems encountered in the fields of optical application, medical technology and manifold other applications
SIZE OF THE COMPANY (EMPLOYEES)	500
NUMBER OF PEOPLE AT THE DEPARTMENT WHERE THE TRAINEESHIP WILL TAKE PLAKE	77
MAIN ACTIVITY OF THE COMPANY/INSTITUTION	JOANNEUM RESEARCH's institute **MATERIALS - Institute for Sensors, Photonics and Manufacturing Technologies** is dedicated to the applied materials research. Main activities include medical sensor development, development of materials for optical and imprinting purposes, simulation and prototyping of manifold applications.
A BRIEF EXPLANATION OF MAIN PROJECTS	• 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 • Laser and plasma-assisted vacuum deposition process
PREVIOUS COLLABORATION IN INTERNSHIP/TRAINING PROGRAMMES?	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 Gorroñogoitia 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 current year 2022/2023, we are hosting Gonzalo Lucas Herran at our Niklasdorf site.
OTHER COMMENTARIES	