

Placement Offer Form

SLOVENIA

CMEPIUS, Ob železnici 30 a, 1000 Ljubljana, Slovenia E mail: <u>erasmusplus-ka1@cmepius.si</u>

EMPLOYER INFORMATION		
Name of organization	Jožef Stefan Institute	
Address	Jamova cesta 39	
Postal Code	1000	
City	Ljubljana	
Country	Slovenia	
Telephone	+386 1 477 3936	
Fax	+386 1 477 3887	
E-mail	hana.ursic@ijs.si	
Website	http://www.ijs.si/ijsw/V001/JSI	
Number of employees	900	
Year of foundation	1949	
Contact person	Dr. Hana Uršič	
Department / Function	Electronic Ceramics Department K5	
Direct telephone number	+386 1 477 3936	
Direct mobile	+386 051 30 51 54	
Direct e-mail address	hana.ursic@ijs.si	
Short Description of the	The Jožef Stefan Institute is the main research institute in Slovenia. It gathers more than 800 employees within several	

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Company	research departments in physics, chemistry, electronics, energetics etc. The Jožef Stefan Institute has collaborations with national and international companies and universities. The Electronic Ceramics Department is active in the field of synthesis, properties and applications of ceramic materials for electronics and energetics including mainly piezoelectrics, ferroelectrics, relaxors and conductive oxides. At the department, the studies focus mainly bulk materials, thick and thin films and printed structures prepared from lead-based as well as lead-free materials.
Other	

PLACEMENT INFORMATION	
Department / Function	Electronic Ceramics Department K5, Jožef Stefan Institute
	http://www-k5.ijs.si/
Description of activities	The work will be focused on the study of functional properties of piezoelectric materials. Domain structure and the local conduction of different ferroelectric and relaxor materials will be studied. In order to characterize these materials, the piezo- response force microscopy (PFM) and conductive atomic force microscopy (CAFM) will be used for providing the information about the domain structure and local conduction of the selected samples. The study is interesting and scientific.
	The aims of the internship job will be 1) to understand the basic principles of the atomic-force, piezo-response force and conductive atomic-force microscopes, 2) learn how to use these techniques and 3) characterize some selected materials by them.
	Also some other techniques on structural and electrical characterization of materials will be introduced.
Duration	at least 2 and a half months, if possible more, first possible start date: 11 th January 2016
Working hours / Weekly hours	8 hours/ day
	40 hours/week
City	Ljubljana
Help with finding Accommodation	yes
Financial Contribution	no

Other	

LANGUAGE REQUIREMENTS ¹				
Language	Listening	Reading	Writing	Speaking
English	2	2	2	2
German				
French				
Italian				
Spanish				

ICT REQUIREMENTS	
requirement	Expertise level ²
Students and master student of chemistry, physics, material science or some related studies	
Student from EU countries	
Duration time at least 2 and a half month.	

OTHER REQIUE	REMENTS
Driver's license	Not needed
license	
Other	Student or master students of chemistry, physics, material science, electrical engineering or some related studies.
	The applicant needs to be interested in characterization of new materials and motivated to work on high level scientific research in the area of piezoelectric and ferroelectric materials. The previous knowledge on the AFM technique is not needed; all the training will be provided at the host

¹ Required language skills are rated from 1 to 3:

- 1 basic level
- 2 intermediate level
- 3 proficient level
- ² ICT skills are rated with 3 levels of expertise:
- Basic level
- Intermediate level
- Proficient level

institute, however high motivation and interest of the applicant in such
type of scientific work is required.