**Placement Offer Form**

**SLOVENIA**

**CMEPIUS, Ob železnici 30 a, 1000 Ljubljana, Slovenia**

E mail: [erasmusplus-ka1@cmepius.si](mailto:erasmusplus-ka1@cmepius.si)

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| **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 Company** | The Jožef Stefan Institute is the main research institute in Slovenia. It gathers more than 800 employees within several 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** |  |

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| **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: 11th January 2016 |
| **Working hours / Weekly hours** | 8 hours/ day  40 hours/week |
| **City** | Ljubljana |
| **Help with finding Accommodation** | yes |
| **Financial Contribution** | no |
| **Other** |  |

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| **LANGUAGE REQUIREMENTS**[[1]](#footnote-1) | | | | |
| Language | Listening | Reading | Writing | Speaking |
| English | 2 | 2 | 2 | 2 |
| German |  |  |  |  |
| French |  |  |  |  |
| Italian |  |  |  |  |
| Spanish |  |  |  |  |

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| **ICT REQUIREMENTS** | |
| **requirement** | **Expertise level[[2]](#footnote-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. |  |

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| **OTHER REQIUREMENTS** | |
| **Driver’s license** | Not needed |
| **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 institute, however high motivation and interest of the applicant in such type of scientific work is required. |

1. Required language skills are rated from 1 to 3:

   1 - basic level

   2 - intermediate level

   3 - proficient level [↑](#footnote-ref-1)
2. ICT skills are rated with 3 levels of expertise:

   - Basic level

   - Intermediate level

   - Proficient level [↑](#footnote-ref-2)