



2 Research Associate Positions - Oxide Thin Films

Within the international M-ERA.NET project “Engineering of silicon-oxide interface using the pulsed-laser deposition technique” (SIOX) two research associate positions are immediately available at Advanced Materials Department of Jožef Stefan Institute, Slovenia.

Together with other partners SIOX aims to exploit rich functionalities of oxides and their heterostructures, which show great promise within the emerging field of oxide electronics. For their implementation, epitaxial integration of oxides with silicon platforms using industrially appropriate technology is urgently needed, and its development represents the main goal of the project. The open positions relate to:

- Epitaxial integration of ultra-thin oxides with silicon or germanium,
- Interface engineering of functional properties in oxide heterostructures.

The study will be performed using state-of-the-art pulsed laser deposition systems, equipped with high-pressure RHEED, UHV pumps, oxygen plasma source, laser heating and load-lock. Growth will be followed *in situ* by RHEED and *ex situ* using XPS, STM and TPD. Crystal-structural properties of as-grown films will be tested using high-resolution X-ray diffractometer.

Requirements:

- PhD degree in physics, material science or related field,
- A very good knowledge of English language,
- Creative, motivated candidate should be able to work independently, as well as in a collaborative environment.

Post-doc and established researchers from all countries are invited to submit their applications. The positions are available from one up to three years. The salary is according to Slovenian Research Agency regulations.

For additional information please contact Matjaž Spreitzer, PhD, Advanced Materials Department, Jožef Stefan Institute, Jamova 39, 1000 Ljubljana, Slovenia (matjaz.spreitzer@ijs.si, tel.: 00386 1 477 3705) or visit www-k9.ijs.si/en.

Each applicant should send to the above mentioned e-mail address:

- A covering letter describing the applicant’s research motivation,
- A CV with detailed description of candidate’s education and professional career,
- Bibliography list,
- At least three references.

Please submit your application before October 5, 2018.

