



## ILSES

**Project ID:** 612620

**Funded under:** FP7-PEOPLE

## Metal nanoparticle interactions with bioorganic molecules and their applications in biosensing

**From** 2013-08-01 **to** 2017-12-31, ongoing project

### Project details

<b>Total cost:</b> EUR 196 100	<b>Topic(s):</b> FP7-PEOPLE-2013-IRSES - Marie Curie Action "International Research Staff Exchange Scheme"
<b>EU contribution:</b> EUR 196 100	<b>Call for proposal:</b> FP7-PEOPLE-2013-IRSES <a href="#">See other projects for this call</a>
<b>Coordinated in:</b> Estonia	<b>Funding scheme:</b> MC-IRSES - International research staff exchange scheme (IRSES)

### Objective

This project aims strengthening interdisciplinary and technological collaboration between the scientists working in the topical areas of nanooptics and nanoplasmonics. These subjects investigate unique optical properties of nanoparticles and nanostructured surfaces, which are amazingly useful for improving optical materials, sensing bioorganic molecules, progress in solving of biophysical and biochemical tasks. Exchange by knowledge in such subject matter as giant Raman scattering (SERS), Surface Enhanced Infrared Absorption (SEIRA), metal enhanced fluorescence et al. is planned to organize in form of International Laboratory of Surface Enhanced Spectroscopy(ILSES). It is proposed to organize such laboratory by means of collective access to existing scientific equipment and technological achievements of partners using a system of mutual scientific journeys, meetings and workshops. From the viewpoint of applied science, the proposed partnership contributes to the extremely important and innovatively attractive field: the development of the new complex nanoparticle/bioorganic molecules and development of cheap and effective SEIRA and SERS nanostructured substrates. Since each partner brings its unique and specific expertise to reach the project objectives, the proposed partnership is very important, both for the area of collaboration and for the ERA as a whole. The main expertise of the participating teams cover different areas of present-day physics, biology and chemistry. Thus, the consortium joins scientists from several scientific communities under the common roof of the interdisciplinary research on metal nanoparticle interactions with bioorganic molecules. In addition to the interdisciplinarity of the teams, young scientists are to be widely involved which will allow a sustainable dissemination of knowledge. Thus, besides the scientific results, the project is expected to bring new research experience for young participants unavailable at home institutions.

### Related information

<b>Report Summaries</b>	<a href="#">Periodic Report Summary 1 - ILSES (Metal nanoparticle interactions with bioorganic molecules and their applications in biosensing)</a>
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## Coordinator

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## Subjects

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[Life Sciences](#)

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