

### **Fully Funded PhD studentship-3.5 years**

**Eligibility:** a) 2.1 honours degree or higher, b) Only for British or EU nationals who obtained a degree from a UK Institution.

**English requirements:** as described in the following link <http://www.ecs.soton.ac.uk/phd/how-to-apply>

**Starting date:** From now until October 2017

**Closing date:** 1<sup>st</sup> May 2017

**Title:** Chemical synthesis of inorganic nanoparticles and their applications in Physical and Biomedical sciences

Nanomaterials are employed in several fields of science ranging from biology and medicine and the development of new diagnostic methods, drug delivery, and imaging, to physics and engineering and the fabrication of novel devices for energy conversion and storage. The major reason for the vast range of applications of nanomaterials is the ability to easily tune the density of their electronic states, which allows the control of their magnetic, optical, electrical, catalytic and mechanical properties, characteristic for different materials. Therefore mastering of nanomaterials' design is of high importance in order to customize their ultimate properties.

The aim of this project is to chemically control the design and function of nanoparticles with the ultimate goal to use them in applications related in Biomedicine and/or physical sciences. The successful candidate will obtain important interdisciplinary skills. The completion of this project will lead to first class publications at the area of nanoscience.

Candidates should have a degree to one of the following disciplines chemistry, physics, materials or biology.

For more information please contact Dr Antonios Kanaras ([a.kanaras@soton.ac.uk](mailto:a.kanaras@soton.ac.uk)).