

## **SUMMER INTERNSHIPS 2016**

**TITLE:** Hybrid Materials

## **DESCRIPTION (Objectives, tasks, materials, equipment...)**:

The objectives for this internship are to investigate changes of chemical and physical properties of polymers after incorporation of various amounts and types of metals. The incorporation will be based on a gas phase process in vacuum making use of the atomic layer deposition (ALD) technique. The investigation of the chemical and physical properties after the incorporation will be performed by FTIR, MS, mechanical and electrical tests.

The internee will get into touch with processing technologies as well as with characterization technologies and will during this time be part of ongoing actual research performed in the "Nanomaterials" group. Depending on the background of the internee, he/she will be focusing on either development of the processing instrumentation (engineer) or the modification and characterization of the synthesized materials (chemist, materials scientist).

SUPERVISOR: M. Knez

**SUITABLE FOR:** Chemists, Materials Scientists, Physicists, Engineers