# Inaugural lesson Chaires d'Alembert Université Paris-Saclay

Date, time

OCTOBER 8th 2018

11:00

#### Place

LABORATOIRE DE CHIMIE PHYSIQUE, CAMPUS ORSAY BAT. 349, SALLE MAGAT.

## Properties of nanostructures in the interfaces.

### Khashayar Ghandi

Khashayar Ghandi is an Associate Professor in the Department of Chemistry, University of Guelph Ontario, Canada. He has been the past president of the International Society for µSR Spectroscopy.

He holds a Paris-Saclay «Jean d'Alembert» Chair.



This lecture will present the results obtained to elucidate the interaction of certain nanostructures and their precursors with light, magnetic field and ionizing radiation as external fields. Nanostructures have potential applications in many technologies and in medicine. The studies of interaction of light with titanium oxide nano-composites led to new method for hydrogen generation using sun light. The studies of interaction of magnetic and electric

fields with precursors of ZnO have revealed new methods for making new nanostructures that can work as sensors while studies of interaction of nanostructures with radiation provided information that can be used in nanomedicine and energy technologies. I hope that the lecture will provide evidence that studies of interaction of nanostructures with external fields have many potentials that remains to be explored.

### **Host Laboratory**

Laboratoire de Chimie Physique Unité mixte CNRS-Université Paris-sud Campus d'Orsay

