



**Ben-Gurion University of the Negev  
Blaustein Institutes for Desert Research**

The Swiss Institute for Dryland Environmental and Energy Research  
Alexandre Yersin Department of Solar Energy and Environmental Physics

**Date & Location:**

**Tuesday, November 26, 2019, 11:00**

**Nanomaterials @ interfaces:  
New insights on wet chemical preparation  
of functional nanomaterials**

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Abstract:

The talk will highlight several “wet” chemical routes for synthesizing functional materials and nanomaterials in particular. The first part of the talk will present the synthesis of highly uniform surfactant capped semiconductor nanoparticles, with emphasis on the critical role of ‘beneficial impurities’ in controlling shape, aspect ratio and phase. Materials systems include anisotropic wurtzite ZnS nanoparticles, and the newly reported cubic (pi-phase) tin mono-chalcogenides. The second part will focus on chemical deposition of semiconductor thin films, including “chemical epitaxy”, which refers to solution growth of monocrystalline thin films with well-defined orientation relations with respect to the substrate.

**Date & Location:**

**Tuesday, March 31, 2020, 11:00  
Lecture room, Physics Building (ground floor)**