

## **COST Training School on Photophysics of Hybrid Interfaces**



**15.-19. January 2017, Ambroz pod Krvavcem, Slovenia**

In the last decades, organic optoelectronics have made their way from academic imagination to real devices. To push efficiencies or generate novel functionalities, next generation materials are now based on complex multi-component 'hybrid' structures, which combine organic semiconductors with other organic or inorganic semiconductors or metals. Application of such hybrid structures in functional systems however requires an understanding of the photo-/physical properties at the nanoscale level, which often crosses the boundaries of the single disciplines and thus requires inter-disciplinary communication. The COST training school in fact seeks for such understanding, inviting experts working on different hybrid systems both from experimental and theory. The young audience, i.e. Master & PhD students and postdocs from physics, chemistry, materials science and engineering will receive a unique insight into the current status of hybrid structures, stimulating discussions to overcome classical boundaries between the disciplines. The lecture series will be complemented by hands-on training in advanced data analysis.

*Intended list of subjects & speakers*

**Subject**

*Metal/Dyes*

Metal nanoparticles / dye systems &

Molecules on Metals

Pierre-Michel Adam

Molecules on Metals

Egbert Zojer

Metal-Organic Frameworks

Thomas Heine

*Inorganic/Organic Semiconductors*

Quantum dots in Polymers

to be confirmed

Organic/Inorganic 2D materials

Christoph Gadermaier

Perovskite Solar Cells 1

Annamaria Petrozza

Perovskite Solar Cells 2

to be confirmed

*Organic/Organic & Organic/Carbons*

Organic Co-crystals for Optoelectronics

Johannes Gierschner

Photophysics of Bulk Heterojunction Solar Cells

Larry Lüer

Optical/Raman Imaging of Bulk Heterojunctions

Dai Zhang

Molecules on Graphene

to be confirmed

Non-covalent organic/CNT systems

Dirk Guldi