



Dynamical Processes of Light Harvesting Surfaces Symposium

Chemistry of Clean Energy Conversion, Storage, and Production

PACIFICHEM 2015

The last few years have seen a tremendous amount of exciting research related to light harvesting processes on semiconductors, such as TiO_2 and ZnO . This is being driven by the energy imperative. Our fundamental atomic-level understanding of processes associated with dye sensitized photocells and photocatalysis has advanced hugely due to the availability of advanced characterization techniques. To take our understanding to the next level will require knowledge of the dynamical processes at a variety of timescales from femtoseconds to seconds.

In this symposium we will bring together the world's experts in the study of dynamical processes of light harvesting surfaces for two days of intensive discussion. We will emphasize but not be limited to inorganic oxides. Examples of other systems of interest include metal organic frameworks and organometallic perovskites as well as polymer systems.

We anticipate that the following experimental areas will be included: photoemission measurements in the femtosecond regime looking at the lifetime of excited electronic states exploiting laser sources, including FELs as well as the core clock hole method; measurement of the evolution of surface species by infra-red spectroscopy in photooxidation reactions; measurement of charge separation dynamics and recombination kinetics; and EPR studies. Corresponding modelling will also be included, for instance time-dependent density functional theory calculations of charge transfer processes.

Symposium organisers:

Geoff Thornton* (UCL, UK)
Mike Henderson (PNNL, US)
Can Li (DICP, CN)
Hiroshi Onishi (Kobe Uni., JP)
Greg Herman (Oregon State Uni., US)

*Coordinator's email: g.thornton@ucl.ac.uk



CHEMICAL NETWORKING: BUILDING BRIDGES

ACROSS THE PACIFIC

January 1 - April 3 | Call for abstract
February 2 | Housing Opens
June 25 | Early Registration

Confirmed speakers:

Victor Batista (US)
Akihito Furube (JP)
Harendra Ghosh (IN)
Lars Grundlach (US)
Nic Harrison (UK)
Hicham Idriss (KSA)
Tim Lian (US)
Anders Nilsson (US)
Hrvoje Petek (US)
Oleg Prezhdo (US)
Annabella Selloni (US)
Taro Toyoda (JP)
Yuxiang Weng (CN)
Christof Woll (DE)
Xueming Yang (CN)
Yu Zhang (UK)

