



Univerzita Karlova v Praze, Přírodovědecká fakulta

Department of Inorganic Chemistry, Faculty of Science, Charles University
invites for a lecture from the lecture series

Quo Vadis Chemie

Light induced redox catalysis for artificial photosynthesis



which will be delivered by

Prof. Antoni Llobet

from:

**Institute of Chemical Research of Catalonia (ICIQ),
Tarragona and Universitat Autònoma de Barcelona,
Barcelona**

Monday, November 7, 2016 at 15:00

**Lecture Hall CH2, Department of Chemistry, Faculty of Science,
Charles University, Hlavova 8, Prague 2**

Abstract: Renewable energy sources are one of the most urgent and challenging issues we are facing today. Nature has been using sunlight as the primary energy input to oxidize water and generate carbohydrates (a solar fuel) for over a billion years. Inspired, but not constrained, by Nature, designed artificial systems can carry out light induced redox catalysis, *e.g.*

to oxidize water and reduce protons or other organic compounds to generate useful chemical fuels.

In this context, the lecture will present a variety of molecular water oxidation and proton reduction catalysts based on the first/second row transition metal complexes. Their capacity to carry out these light induced reactions will be analyzed and discussed.

