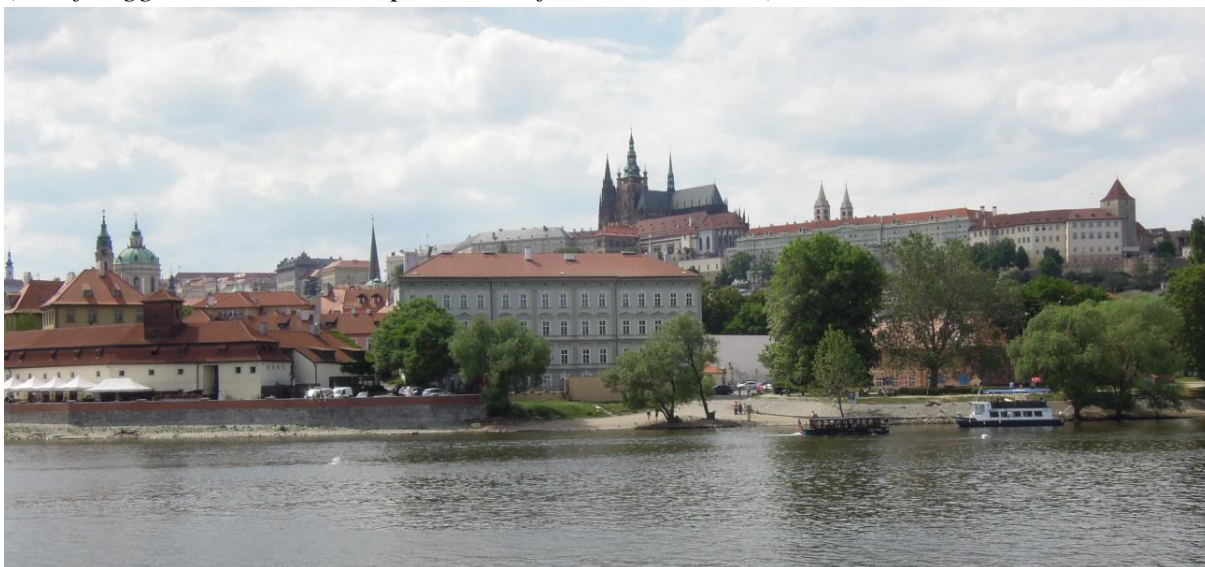


11th EERA AMPEA Joint Programme Steering Committee
AMPEA workshop: *Photo- and Electro- Catalysis in Energy Conversion*

J. Heyrovský Institute, Prague, 20 – 21 November 2017

Agenda

- **Sunday, 19 November 2017:** Arrival of participants on an individual basis, hotel check-in (*list of suggested hotels in the practical information section*)



Location: J. Heyrovský Institute of Physical Chemistry, Dolejškova 3, Prague,
Web page: <http://www.jh-inst.cas.cz/www/>

Monday, 20 November, morning

08:30-09:00	Registration
09:00-09:15	Welcome and general information: Prof. Hof, director JHI, representative of EERA of the Czech Rep., Frédéric Chandezon, Stanislav Záliš
9:15 -12:00	General information on EERA, AMPEA and H2020 actuality (detailed agenda under construction)
12:00-13:10	<i>Buffet lunch for attendees of JPSC and AMPEA workshop</i> <i>Registration for AMPEA workshop</i>

AMPEA workshop: Photo- and Electro- Catalysis in Energy Conversion

Renewable energy such as solar-photovoltaic or wind often is intermittent, producing electricity when the primary source (sun, wind) is available, instead of when the demand is high. Solar photochemistry opens a promising route to energy storage, whereby sunlight would be used to produce energy-rich molecules (solar fuels) from energy poor-ones: hydrogen from water, methanol or hydrocarbons from carbon dioxide, ammonia from dinitrogen, etc. Similarly to photosynthesis (the ultimate energy source on Earth), such artificial processes would require efficient multielectron/proton transfer catalysts and ingenious reactor engineering, likely involving compartmentalization, inorganic or organic membranes, and photoelectrodes. Electrocatalytic production of hydrogen, methanol, or ammonia using solar (wind, tide, nuclear,...) electricity are closely related processes capable of storing energy by chemical means. Again, redox catalysis, electrode design, and product separation are needed to run these processes efficiently and with the overpotential as low as possible. Electrochemical energy storage in new types of high-capacity batteries is a conceptually related approach. Energy storage in artificial chemical fuels is a vigorous research area where photochemistry, electrochemistry, catalysis, materials, engineering, and even microbiology meet. New ideas, high-level experimental instrumentation ranging from ultrafast laser spectroscopy to surface characterization and manipulation, as well as new theoretical methods, are needed. It is the aim of the forthcoming AMPEA workshop to address current challenges of photochemical and electrochemical energy storage and to find new common grounds for future research.

Monday, 20 November, afternoon

12:00-13:10	Buffet lunch and registration
13:10 – 13.20	Welcome and general information: Antonín Vlček, Stanislav Zális
Chairman Petr Vanýsek	
13:20-13:50	Ladislav Kavan, Prague, Czech Republic <i>Semiconducting Oxides (TiO₂ and SnO₂): Fundamentals and Energy Applications</i>
13:50-14:20	Erwin Reisner, Cambridge, U.K. <i>Solar-driven Catalysis with Hybrid Semiconductor Systems</i>
14:20-14:40	Sebastian Fiechter, Berlin, Germany <i>On the role of electrocatalysts in the process of light-driven water splitting</i>
14:40-15:00	Esperanza Ruiz, Madrid, Spain <i>Solid Oxide Electro-catalysis for Energy Conversion to Fuels</i>
15:00-15:20	M. Chavarot-Kerlidou, Grenoble, France <i>Dye-Sensitized NiO-Based Photocathodes: Toward Functional Molecular Devices for Hydrogen Production</i>
15:20-15:50	Coffee break
Chairman Antonín Vlček	
15:50-16:20	Leif Hammarström, Uppsala, Sweden <i>Molecular and Biomimetic Approaches to Solar Fuels</i>
16:20-16:50	Sebastiano Campagna, Messina, Italy <i>Multinuclear dendritic Ru(II) and Os(II) complexes for light-harvesting purposes and photochemical water oxidation</i>

16:50-17:10	Z. Xiao Guo, London, UK <i>Photocatalysts from band-gap and band-edge design - Cases for water-splitting and CO₂ conversion</i>
17:10-17:30	A. Bonduelle-Skrzypczak, Solaize, France <i>Strategies for the development of CO₂ photoreduction materials</i>
17:30-17:45	Carlo Nervi, Torino, Italy <i>Electrochemical Reduction of Carbon Dioxide Catalyzed by Selected Organometallic Complexes</i>
17:45-18:00	Maria Cristina Paganini, Torino, Italy <i>New Photoactive Materials Based on Transition Metal Oxides Doped with Rare Earth Metal Ions</i>
18:00-19:00	EERA AMPEA Management board meeting (for AMPEA management board members only!)

Monday, 20 November, evening:

20:00 Conference dinner – **Restaurant Vojanuv dvur, center of Prague,**

Tuesday, 21 November, morning

Chairman Frédéric Chandezon	
8:45-9:15	Günther Knör, Linz, Austria <i>Photochemical Enzyme Models for Solar Energy Utilization and Artificial Photosynthesis</i>
09:15-09:40	Petr Krtil, Prague, Czech Republic <i>Surface sensitivity of the photo- electrochemical activity of anatase TiO₂</i>
09:40-10:00	Luca Pasquini, Bologna, Italy <i>Element-specific channels for the photo excitation of V-doped TiO₂ nanoparticles</i>
10:00-10:20	M.N. Tsampas, Eindhoven, The Netherlands <i>Solid state photoelectrochemical cells for hydrogen production</i>
10:20-10:40	Marie-Laure Fontaine, Norway <i>Electrocatalytic production of fuels by proton ceramic based devices.</i>
10:40-11:10	Coffee Break
Chairman Vincent Artero	
11:10-11:30	J.R.Morante, Barcelona, Spain <i>Distributed PhotoElectroChemical systems and artificial leaves on the base of filter-press cells</i>
11:30-11:50	Stefano Caramori, Ferrara, Italy <i>Photoelectrochemical Properties of WO₃/BiVO₄ junctions and their application to the degradation of emerging contaminants in aqueous solution.</i>
11:50-12:10	Ragnar Kiebach, Roskilde, Denmark <i>Continuous Hydrothermal Flow Synthesis of Functional Oxide Nanomaterials Used in Energy Conversion Devices</i>
12:10-12:30	J. C. Conesa, Madrid, Spain <i>In₂S₃-bonded laccase as photoelectrode for H₂O oxidation to O₂</i>
12:30-12:50	A. Bieberle-Hütter, Eindhoven, The Netherlands <i>Simulation of Oxygen Evolution at Hematite Surfaces: the Impact of Structure and Local Chemistry</i>
12:50-13:00	General Discussion and Closing
13:00 -	Buffet lunch

Practical information

How to get to conference place

- J. Heyrovský Institute of Physical Chemistry is situated in the northern part of [Prague](#), the capital of the Czech Republic, in a small campus together with other research institutes (see the map of Prague and its part covering the campus and its neighborhood – google.com – Dolejskova 3, Prague 8).
- The transportation to the Institute from **the airport and the Main Railway station is described the Web page of the J. Heyrovský Institute**
<http://www.jh-inst.cas.cz/www/detail.php?p=11>
You can find the general public traffic information on <http://www.dpp.cz/en/>.

Accommodation

Prague offers a large choice of hotels in different price categories:

www.pis.cz/en

www.visitprague.cz/gb

For organizing of your stay on meeting we recommend accommodation close to the Institute. Following hotels are in the vicinity of the Institute and close to the Metro and Tram. From all hotels you can reach the centrum of Prague in 15 min when using the Metro line C.

Hotel Troja (20 min walk to the Institute)

<http://www.hoteltroja.cz>

Hotel Henrietta (15 min walk)

<http://www.henrietta.cz/en>

Pension M (5 min walk)

http://www.pension-m.cz/index_en.html

Hotel Antonie (10 min walk)

<http://www.hotelantonie.cz/setlang/en/>

Hotel-Pension Berg

<http://www.pension-berg.cz/en/index-en.php>

Hotel Mazanka

<http://www.hotel-mazanka.cz/>