Program for the SPP 1613 Evaluation Meeting, Altes Schalthaus Darmstadt, 23rd-24th April 2015

Registration will be open from 17:00 to 19:00 on the 22^{nd} and from 08:00 to 12:00 on the 23^{rd} in the great hall.

Oral presentations will take place on the 23rd in the great hall: Single applications are assigned a time slot of five minutes including discussions. Applications with more than one participant are assigned a time slot of ten minutes including discussions.

Poster presentations are set up in the great hall on the 23rd and the 24th. Poster walls are numbered according to your presentation ID (see following list). Please put up your poster at the corresponding number. There are two side-by-side walls available for posters with more than one applicant and one wall for single applicants, i.e. one poster (A0) for single applicants; a maximum of two posters (A0) for proposals with two and more applicants. Posters can be set-up during the registration on the 22nd and during the morning of the 23rd.

Applicants ID Time Topic 09:00 - 09:05 Welcome Jaegermann, Darmstadt Behnke, DFG, Bonn 09:05 - 09:30 Jaegermann, Darmstadt Introduction of the SPP 1613 and of the 1 **Coordination Project** 2 09:30 - 09:40 Bahnemann, Hannover Ferrites for photoelectrochemical water splitting Bredow, Bonn Wark, Oldenburg 09:40 - 09:50 3 Bein, München Metal oxide nanostructures for electrochemical Fattakhova-R., München and photoelectrochemical water splitting Pentcheva, Duisburg Scheu, Düsseldorf Bein, München Wide Bandgap Organometal Halide Perovskites 09:50 - 10:004 Jaegermann, Darmstadt as Tandem Partners for Bias Free H2 Producing Integrated Photoelectrochemical Cells 10:00 - 10:10Nanostructured Mo, W and Sn Sulfide - Base 5 Beller, Rostock Brückner, Rostock Metal - Composite Materials for the Brüser, Greifswald Photoelectrocatalytic Hydrogen Generation from Lochbrunner, Rostock Water 10:10 - 10:20Bernhardt, Ulm A hierarchical cluster-model approach to 6 Lang, Ulm understand the catalytic water splitting at calcium-manganese-oxide centers 7 10:20 - 10:25 A monolithic all-silicon multi-junction Berghoff, Aachen photovoltaic electrolysis device for solar hydrogen production by direct water splitting 8 10:25 - 10:35Behrens, Essen Novel thin film composites and co-catalysts for Fischer, Freiburg visible light-induced water splitting Lerch, Berlin Schedel-Niedrig, Berlin 9 10:35 - 10:45Development of optimum bandgap photoanodes Beránek, Bochum Devi, Bochum for tandem water-splitting cells based on doped complex metal oxides and III-V semiconductors Eichberger, Berlin

coupled to water oxidation electrocatalysts

23rd April 2015:

10	10:45 – 10:55	Bräuer, Braunschweig Waag, Braunschweig	3D H-TiO2 Nanostructures Coated on Stable Nb:TiO2 TCOs for Highly Efficient Water Splitting: Optimization of Hydrogenation and Surface Modification (3D-OHM)
	10:55 - 11:25		Coffee break
11	11:25 – 11:35	Bund, Ilmenau Hannappel, Ilmenau	III-V Semiconductors on Si: Functionalized Tandem Structures for Solar Water Splitting
12	11:35 – 11:45	Dau, Berlin Fiechter, Berlin Kurz, Freiburg	Development of catalysts, namely manganese oxides and molybdenum sulphides, for implementation in a light-driven water-splitting device using a multi-junction solar cell
13	11:45 – 10:50	Dionigi, Berlin	Ta3N5 nanotubes and -rods: doping, band-gap engineering and stabilization (co-catalysis)
14	11:50 – 12:00	Feldmann, München Stolarczyk, München	Photocatalytic water splitting with CdS nanocrystal – nickel ferrite nanoparticle composites
15	12:00 - 12:10	Fiechter, Berlin Ludwig, Bochum Schuhmann, Bochum	High-throughput characterization of multinary transition metal oxide and oxynitride libraries. New materials for solar water splitting with improved properties
16	12:10 - 12:20	Finger, Jülich Jaegermann, Darmstadt Kaiser, Darmstadt Schäfer, Darmstadt	Photoelectrochemical water splitting using adapted silicon based semiconductor multi- junction cell structures
17	12:20 - 12:30	Heine, Bremen Mädler, Bremen	Systematic identification and benchmarking of single- and heterostructured mixed-metal oxide nanoparticles for photocatalytic water splitting
18	12:30 - 12:40	Hilleringmann, Paderborn Wilhelm, Paderborn	Photocatalytic Carbon-Nanomaterial Composites from Organometallic Compounds for Hydrogen Evolution
19	12:40 - 12:50	Jacob, Ulm Over, Gießen	Elementary Steps in the photocatalytic Water Splitting over TiO2-based Model Electrode Systems
20	12:50 – 12:55	Jooß, Göttingen	In-situ environmental TEM studies of electro- and photoelectrochemical systems for water splitting
21	12:55 – 13:00	Karl, Augsburg	Oxide-Silicon Tandem Cell Colloids for Solar Hydrogen Production
22	13:00 - 13:05	Klüner, Oldenburg	Quantum chemical and quantum dynamical studies of the photocatalytic water splitting on titanium dioxide surfaces
	13:05 - 14:30		Lunch & Poster session I
23	14:30 - 14:40	Kortz, Bremen Vankova, Bremen Wagner, Bremen	Highly Robust and Efficient Water Oxidation Catalysts based on Nanoscopic Metal Oxide Species (Polyoxometalates): from Fundamental Science to Devices

24	14:40 – 14:45	Kramm, Darmstadt	Investigation of the catalyst support interaction for an implementation of Me-N-C catalysts as bifunctional materials for the water oxidation and oxygen reduction reaction
25	14:45 – 14:55	Mathur, Köln Moseler, Freiburg	PhotoElectroChemical applicCation of Uranium oxides for enhanced LIght AbsoRption (PECULIAR)
26	14:55 – 15:00	Marschall, Gießen	Sustainable solar energy conversion with defined ferrite nanostructures
27	15:00 – 15:10	Muhler, Bochum Winterer, Duisburg	Zn-doped Gallium Oxynitride Nanoparticles as Efficient Photocatalyst for Water Splitting
28	15:10 – 15:15	Schmuki, Erlangen	Ta3N5 nanotubes and -rods: doping, band-gap engineering and stabilization (co-catalysis)
29	15:15 – 15:25	Strasser, Berlin Teschner, Berlin	Nanostructured mixed metal oxides for the electrocatalytic oxidation of water
30	15:25 – 15:30	Toimil-Molares, Darmstadt	Investigation and optimization of the physical processes in light induced water splitting with 3D nanowire model systems
31	15:30 – 15:35	Weidenkaff, Stuttgart	Photocatalytic anion substituted perovskite phases PAP
	15:35 – 17:00		Coffee & Poster session II

19:00

Dinner for participants in the restaurant (first floor)

24th April 2015:

09:00 - 10:00	Poster session III

Departure