

YounGeCatS Summer School – Report

„Let the Dream(Reaction) come true” was the subject of the first YounGeCatS Summer School at the Fritz Haber Institute of the Max-Planck-Society, Berlin (FHI) in mid-September (18-21). 34 participants formed five interdisciplinary groups to discuss new approaches to their dream reactions: (i) direct production of hydrogen peroxide from hydrogen and oxygen, (ii) direct oxidation of nitrogen to nitrogen dioxide, (iii) production of aromatics from methane, (iv) synthesis of oxomethylene ethers by carbon dioxide reduction, and (v) insertion of carbon dioxide in a carbon-hydrogen bond of ethylene to produce acrylic acid. In various lectures, our young catalysis scientists learned more about the synthesis of heterogeneous catalysts, new characterization methods and scale-up. Additionally, detailed lectures were given on photo/electro-catalysis and advanced XPS and electron microscopy techniques. These lectures were alternated with sessions of group work on the “dream reaction”. Presentations of the obtained results of each group as well as a visit at the department of Inorganic Chemistry at the FHI were scheduled in the diversified program.

The combination of lectures and group work induced the development of new ideas and concepts on the dream reactions and, furthermore, encouraged new perspectives on the catalytic research topics for each participant beside the known work in her/his home institute. Thus, each group developed a considerable concept for a heterogeneous catalyst/suitable characterization methods/possible reactor design for their dream reaction and probably took home plenty of new ideas.



Nothing encourages solving of scientific issues more than discussions with other researchers. The organizers further promoted such conversations by accommodating the participants of the Summer School all together at a houseboat-hostel on the river Spree. Located in the heart of Berlin, close to the East Side Gallery in Friedrichshain, this was an outstanding location to develop and to discuss new ideas in one of the many bars in this area.

Concluding, I'm sure that this kind of event strengthen the innovative power of the German Catalysis Society and thank the organizers for this Summer School.

- written by Felix Hemmann