

16th EC2/BIG-NSE Workshop

Start Time: Friday, January 13, 2023

End Time: Friday, January 13, 2023

C 130

Technische Universität Berlin





Invitation to this year's EC²/BIG-NSE Workshop

As every year once their "initial phase" is finished, the <u>new PhD students</u> of EC²/BIG-NSE have the opportunity to present their PhD work plan in front of the UniSysCat community.

The first presentation is planned to start at about **13:10** and the last one to finish around **17:30**. Scope of the presentations ranges from theory to application on all aspects of catalysis: Organic/Inorganic chemistry, heterogeneous catalysis, biotechnologies, biocatalysis etc.: all interested scientists are welcome!

Preliminary program

13:00-13:10 Maria Andrea Mroginski, EC² director: Welcoming Words

13:10-13:35 Warisha Tahir: "Interfacial catalysts for overall water splitting (InterCat)"

13:35-14:00 Yaxin Liu: "Application of substitutional and intermetallic alloys to carbon dioxide hydrogenation by tandem catalysts"

14:00-14:25 Badr/Elkamash: "Stabilization of RuO_2 electrocatalysts by surface modification for water splitting under operating conditions"

14:25-14:45 Coffee break

14:45-15:10 Yao Xiao: "C(sp³)-Si cross-coupling asymmetric synthesis of alpha-silyl alpha-aminoacids"

15:10-15:35 Francisco De La Fuente/Kratzborn: "Development and scale-up of a fed-batch process for heterologous hydrogenase production in E. coli"

15:35-16:00 Liza Kobeleva: "Understanding catalyst reactions by time-resolved spectroscopy and mathematic modeling"





















16:00-16:20 Coffee break

16:20-16:45 María González Viegas: "Flavin/protein interactions that differently shape the reactivities of the two cofactors in bifurcating electron transfer flavoproteins"

16:45-17:10 Anushka Ghosh: "Semi-artificial metallo-enzymes for CO_2 reduction and oxygenation"

17:10-17:30 Maria Andrea Mroginski, EC² director: Closing remarks

After the EC²/BIG-NSE workshop, the annual UniSysCat New Year's reception will take place on the empore in front of the room C 130 at Technische Universität Berlin. All UniSysCat members are welcome!

 EC^2/BIG -NSE is a doctoral program on the field of catalysis funded by the Einstein Foundation Berlin. It is located a TU-Berlin but involves several other Berlin research <u>institutions</u>. Please find further information on the EC^2/BIG -NSE workshop and other events of the graduate program on the <u>website of EC^2/BIG -NSE</u>.

Jean-Philippe Lonjaret

Organizer

















