

# 16th EC<sup>2</sup>/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 EC<sup>2</sup>/BIG-NSE Workshop

As every year once their "initial phase" is finished, the [new PhD students](#) of EC<sup>2</sup>/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, EC<sup>2</sup> 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<sub>2</sub> electrocatalysts by surface modification for water splitting under operating conditions"

**14:25-14:45** Coffee break

**14:45-15:10** Yao Xiao: " C(sp<sup>3</sup>)-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<sub>2</sub> reduction and oxygenation"

**17:10-17:30** Maria Andrea Mroginski, EC<sup>2</sup> director: Closing remarks

After the EC<sup>2</sup>/BIG-NSE workshop, the annual UniSysCat New Year's reception will take place on the emporium in front of the room C 130 at Technische Universität Berlin. All UniSysCat members are welcome!

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

Jean-Philippe Lonjaret

Organizer