International Workshop & NIS colloquium

(Photo)catalysts for sustainable fuel production

21 September 2023
Aula Vallauri (C.so Massimo D'Azeglio 42, Torino)

Morning session
Chair: Lorenzo Mino

9.15-9.30
Gabriele Ricchiardi
Director of NIS Centre of Università di Torino
Welcome address

9.30-10
Francesco Parrino
Università di Trento, Trento (Italy)
Photocatalytic generation of nitrate radicals for the synthesis of industrial relevant compounds

10-10.30
Angel Morales-Garcia
Universitat de Barcelona, Barcelona (Spain)
Realistic photoactive TiO$_2$ nanoparticles: a trip from anhydrous to hydrated environments

10.30-11 Coffee Break
Chair: Fabrizio Sordello

11-11.30
Elizaveta Kozyr
Università di Torino, Torino (Italy)
Tracking active sites in metal-TiO$_2$ systems for photocatalytic H$_2$ production by in situ and operando spectroscopies

11.30-12
Sergio Tosoni
Università di Milano Bicocca, Milano (Italy)
Single-atom active species grafted on C$_3$N$_4$ for catalytic and photocatalytic reactions: hints from DFT simulations

12-12.30
Afternoon session
Chair: Elisa Gaggero

14.30-15
Silvia Nappini
CNR-IOM – Elettra Synchrotron, Trieste (Italy)
*In situ and quasi operando* soft X-ray spectroscopy of catalytic materials at the BACH beamline: a deep dive into solid/liquid interfaces

15-15.30
Alberto Naldoni
Università di Torino, Torino (Italy)
Harnessing visible and infrared light with nanometal photocatalysts for solar to chemical energy transduction

15.30-16 Coffee Break
Chair: Francesco Pellegrino

16-16.30
Simelys Hernández
Politecnico di Torino, Torino (Italy)
Renewable-energy-driven CO₂ conversion: engineering of the electrocatalytic process from the lab to the demonstration scale

16.30-17
Andrea Martini
Fritz Haber Institute, Berlin (Germany)
Tracking the evolution of Ni-based single atom catalysts for the CO₂ electroreduction reaction: an operando XAS and XES study

17 Closing remarks

Organizers:
Lorenzo Mino
Francesco Pellegrino
Fabrizio Sordello

Attendance is free but you are required to register at:
NIS Colloquium UniTO (by 19/09/2023)
For any further information please write to: lorenzo.mino@unito.it