

Research in Chemistry for Sustainability

@ Leiden Institute of Chemistry

Electrocatalysis & sustainable energy

Marc Koper

Studies electrochemical surface science for sustainable energy and chemistry



Lars Jeuken

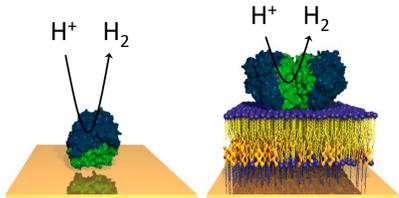
Studies bioelectrocatalysis in energy conversion for sustainable energy

Dennis Hetterscheid

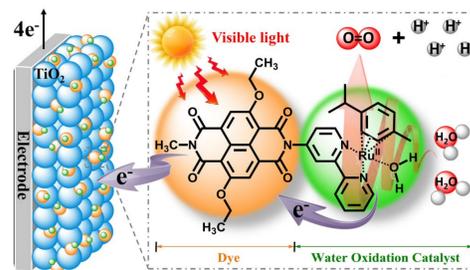
Tries to mimic biological systems for multi-electron processes

Rik Mom

Studies electrocatalysts during operation using in situ spectroscopy



Photosynthesis & photocatalysis



Sylvestre Bonnet

Designs metal-functionalized lipid vesicles for photocatalysis

Francesco Buda

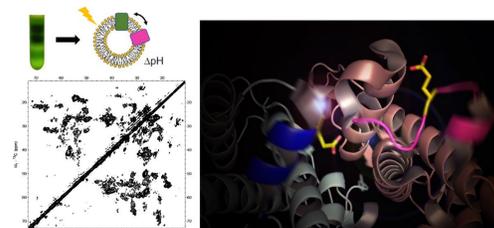
In silico design of molecular complexes for solar-to-fuel conversion

Anjali Pandit

Studies molecular mechanisms in photosynthesis using protein biochemistry, membranes and advanced spectroscopy

Jaco Geuchies

Uses advanced spectroscopic techniques to study the flow of energy, electrons and heat

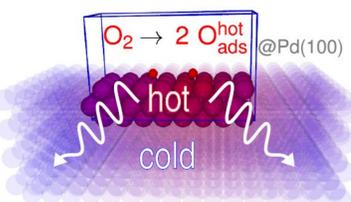


Theoretical & computational chemistry

Physical chemistry

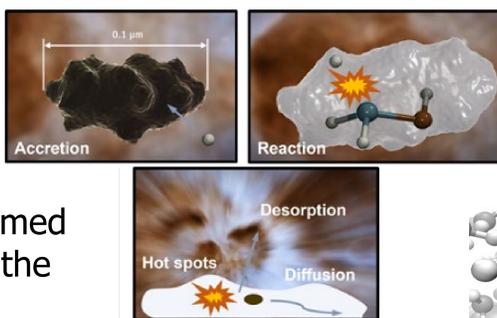
Geert-Jan Kroes

Aims to accurately model molecule-metal surface interactions and reaction dynamics



Thanja Lamberts

Unravels which molecules can be formed on icy dust grains in the interstellar medium

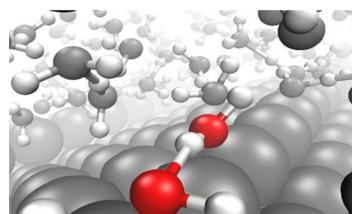


Katharina Doblhoff-Dier

Investigates heterogeneous (electro-) chemical reactions using theoretical and computational approaches

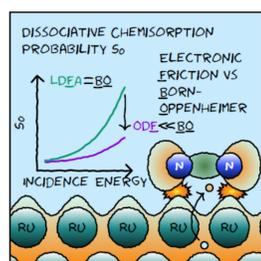
Mark Somers

Studies the role of surface atoms in the scattering of hydrogen atoms on metal surfaces



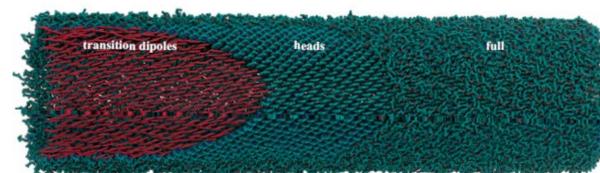
Jörg Meyer

Develops computational methods to understand energy conversion dynamics



Agur Sevink

Develops computational descriptions at multiple scales to investigate structure and function of (bio)materials such as cell membranes

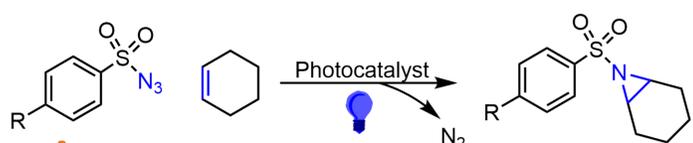


Heterogeneous and homogeneous catalysis



Irene Groot

Studies the nanoscale structure of catalysts under reaction conditions



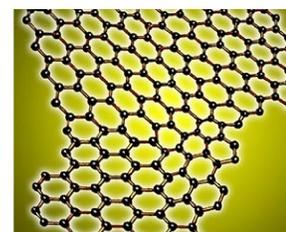
Lies Bouwman

Teaches homogeneous catalysts to perform novel types of reactions

Development of novel materials

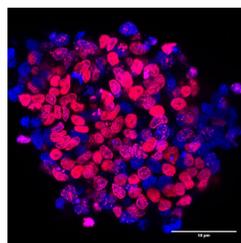
Grégory Schneider

Synthesis of polyaromatic 2D membranes and edge derivatization of graphene nanosensors



Irene Groot

Synthesizes novel 2D materials on liquid and solid metal catalysts



Roxanne Kieltyka

Designs and prepares supramolecular materials for biomedical applications

