

## Energy of the Future: UniSysCat Cluster at the exhibition "ENERGY IN MOTION @TU Berlin"

Start Time: Tuesday, April 9, 2019

End Time:



"ENERGY IN MOTION @TU Berlin" is an exhibition in the old library, located on the 3<sup>rd</sup> floor in TU Berlin's main building. It deals with present and future aspects of energy production.

Day in, day out we need energy to generate electricity, heat and mobility. "ENERGY IN MOTION @TU Berlin" raises questions as to what it actually means to meet our basic needs with different energy carriers and provides answers.

The exhibition highlights numerous fossil primary energy sources like coal and oil and their availability and use. Renewable energies like wind and solar power are analyzed with regard to their potential to replace fossil fuels in the future.

The energy of the future is the playing field at TU Berlin, both in research and teaching. UniSysCat's exhibit highlights the approach to further increase efficiency of sustainable energy production like hydrogen through a basic understanding of the coupling of catalytic systems in biology and chemistry.

"In the future, the chemical processes implemented in large factories will be much more efficient and confined in the smallest spaces," says Arne Thomas, spokesperson for the Cluster of Excellence. "UniSysCat's vision is to design and control catalytic networks that are as efficient as the metabolism of a living cell."

Funded by the German Research Foundation as part of the Excellence Strategy, UniSysCat

consists of nine partner institutions in Berlin and Potsdam, working in five interdisciplinary research fields. The main objective is to understand how chemical catalysts can be coupled with highest accuracy to produce useful products for humans on an industrial scale with the precision and efficiency of a living cell.

Using this procedure, hydrogen production for the energy supply of the future would be revolutionized. Large-scale facilities, today requiring thousands of square meters, would be feasible in a confined space. Energy consumption during production and undesirable by-products or waste would be reduced.

"ENERGY IN MOTION @TU Berlin" opens June 15, 2019 6 p.m. during the "Long Night of the Sciences" in H 3021 (Old library on 3<sup>rd</sup> floor of Main Building of TU Berlin, Straße des 17. Juni 135, 10623 Berlin)