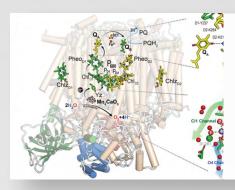


Newsletter Summer 2024



Research Highlights

Click here to take a brief look at what researchers at UniSysCat have been working on the past few months.



Current Affairs

Click here to view the most recent events, awards and other affairs hosted by UniSysCat.

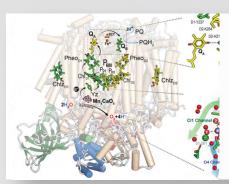


Upcoming Events

Click here to take a look at the colloquia and other events coming up.

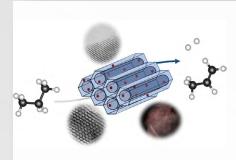


Research Highlights



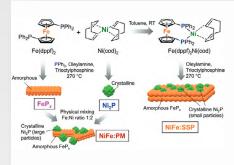
Photosynthesis seen at new precision

A team around the UniSysCat groups of Holger Dobbek, Petra Wendler and Athina Zouni visualizes the structure of photosystem II at unprecedented resolution - thanks to cryo-electron microscopy.



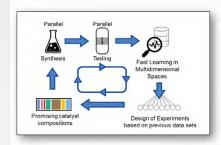
Promising new catalyst for propylene production

A team of UniSysCat scientists from TU Berlin, Fritz Haber Institut and BasCat (UniCat BASF JointLab) developed a new catalyst for propane dehydrogenation based on cobalt nanoclusters.



Hydrogen production from water: How stable are the electrodes we design really?

In a recent study, a team of UniSysCat researchers investigated the extent to which their heterostructured electrocatalysts based on non-noble metals can actually compete with noble metals when operated for longer times.

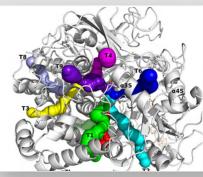


Theory accelerates experiment: Innovative approach saves years of trial and error in the laboratory

Scientists from BasCat (UniCat BASF JointLab) and the Fritz Haber Institute developed an accelerated discovery approach for the catalytic production of propylene that can compete with a procedure developed over decades.

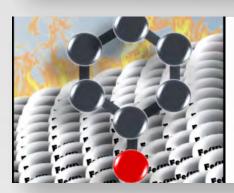


Research Highlights



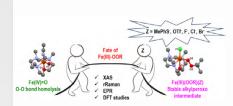
Video research highlight: Many paths lead to the catalytic center

The research group of Ariane Nunes Alves studied the pathways of hydrogen and inhibitory gases through a selected hydrogenase in order to improve its inhibitor resistance for clean energy applications.



Video research highlight: Unexpected behaviour of an iron-containing enzyme

A new publication in Nature Chemistry offers insights into a reaction that didn't seem possible before. First author Dustin Kass explains what they found out in a video. It is a story of success, but also one of persistence.



A deeper understanding of nature's catalysts

By combining different spectroscopy methods, the UniSysCat groups of Holger Dau, Peter Hildebrandt and Kallol Ray have gained new insights into the function of the active site of the enzyme SOR.





Gerhard Ertl Lecture Award 2024 goes to Graham Hutchings. Congratulations!

Prof. Graham Hutchings from Cardiff University wins this year's Gerhard Ertl Lecture Award for his pioneering work on novel heterogeneous catalysts, in particular with gold nanocrystals and gold-palladium alloy catalysts.



Out now: Atlas of Petromodernity

The 'Atlas of Petromodernity' written by UniSysCat Postdoc Benjamin Steininger and Alexander Klose consists of 44 short essays on the era of petroleum modernity. Their book is now available for free download or as paper copy!



2024 EC²/BIG-NSE retreat

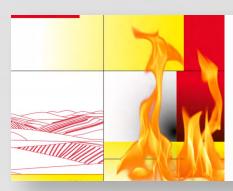
On June 6 and 7, the annual EC²/BIG-NSE retreat took place at the picturesque Hotel Döllnsee, located two hours from Berlin. The weather cooperated, offering pleasant conditions for the event, which was held in person with around 45 attendees.



Markus Antonietti receives the Solvay Chair in Chemistry 2024

UniSysCat member Markus Antonietti, director at the Max Planck Institute of Colloids and Interfaces, has been awarded by the Belgian Solvay Institutes, enabling him to give lectures about his research on a tour of Belgium.





"Tank oder Teller" festival and exhibition on the conflict over resources

UniSysCat scientist Benjamin Steininger co-curated the exhibition "Tank oder Teller", which deals with conflicts over the distribution of agricultural production. Festival and exhibition took place from May 31 to June 9 in Halle/Saale.



Latest releases of "exzellent erklärt -Spitzenforschung für alle"

Listen to the newest episodes of the podcast "exzellent erklärt" with a variety of different science topics- from the use of bacteria to tattoos as signs of power.



EC²/BIG-NSE workshop on Research Data Management

On April 8, 2024, UniSysCat's data steward gave a workshop on Research Data Management for the students of the doctoral program EC²/BIG-NSE.



Revolutionizing nitrogen fixation and functionalization

The UniSysCat group of Prof. Matthias Driess from TU Berlin receives one Million Euros from the DFG for their highly innovative research on the fixation and functionalization of nitrogen at mild conditions using silicon.





John Warner Center for start-ups in Green Chemistry

Approval by the Berlin House of Representatives: Chemical Invention Factory to be built

With the decision of the Berlin House of Representatives to provide co-financing, it is now finally certain that the "Chemical Invention Factory - John Warner Center for Start-ups in Green Chemistry" will be built from 2025.



In demand from Seoul to Berlin: green energy of the future

The UniSysCat group of Prof. Kallol Ray welcomes Prof. Wonwoo Nam from the Ewha Womans University in Seoul, Korea for a four-year research stay to work on green catalytic systems.





In the final for an innovate! Center

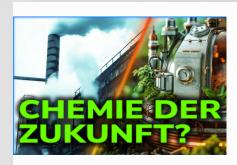
Berlin University Alliance (BUA) has been chosen as a finalist in a Germany-wide competition to realize a forward-looking Transfer Center for "New Materials for Sustainable Technologies".



UniSysCat member Prof. Dr. Beatriz Roldán Cuenya is admitted to the Leopoldina

Prof. Dr. Beatriz Roldán Cuenya, director at the Fritz Haber Institut Berlin has recently been named a new member of the Deutsche Akademie der Naturforscher Leopoldina. Congratulations from UniSysCat!





New video with science influencer Tom Bötticher

Now available on Youtube: "Chemie der Zukunft? - Energie-Zeitenwende: mehr Effizienz durch bessere Katalysatoren". The first Youtube collaboration of UniSysCat and science influencer Tom Bötticher is out now!



Kindergarten place for visiting scientists is still available!

Since 2022, UniSysCat has a "Beleg" kindergarten place for visiting scientists. At the moment, it is available! If you're interested, please contact UniSysCat's Advisor on Gender Equality Claudia Ben Nasrallah.



UniSysCat visiting program for female scientists

UniSysCat members have the opportunity to invite excellent female scientists from all over the world to Berlin for a research stay of up to three months, with UniSysCat contributing significantly to the costs. For details, please contact Claudia Ben Nasrallah.



Upcoming Events

EC²/BIG-NSE Jubilee and Alumni meeting





The 17th anniversary of the doctoral program EC²/BIG-NSE will be celebrated with a big alumni reunion at TU Berlin! We will meet for two days to network, listen to presentations and celebrate the anniversary together.

Date: 28.&29.10.2024, TU Berlin



Gerhard Ertl Lecture 2024

We cordially invite to the Gerhard Ertl Lecture Award ceremony, which will be held on December 10, 2024, at the Fritz Haber Institute Berlin. Prof. Hutchings will deliver his award lecture on "Catalysis using gold containing materials".

Date: 10.12.24, FHI Berlin



Imprint

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