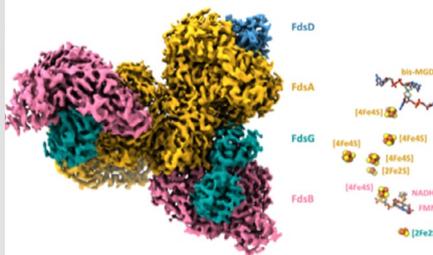




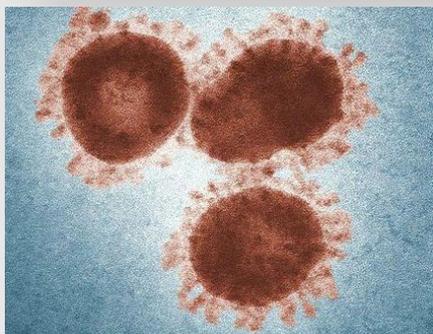
# Newsletter

Spring 2020



## Research Highlights

[Click here](#) to view 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.

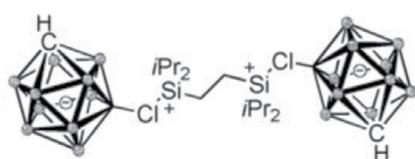


## Upcoming Events

[Click here](#) to take a look at the colloquiums and other events coming up.

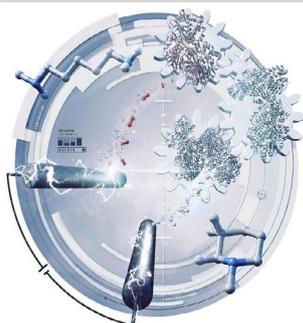


# Research Highlights



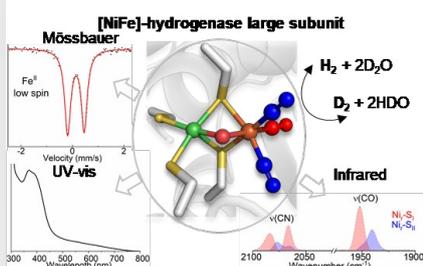
## Synthesis of a Counteranion-Stabilized Bis(silylium) Ion

The preparation of a molecule with two alkyltethered silylium-ion sites from the corresponding bis(hydrosilanes) by two-fold hydride abstraction is reported.



## Powering Artificial Enzymatic Cascades with Electrical Energy

The UniSysCat team of Lars Lauterbach in cooperation with Bettina M. Nestl from the Universitaet Stuttgart and Ulf-Peter Apfel from the Ruhr-Universität Bochum coupled chemical and enzyme catalysts for synthesis of fine chemicals.



## A Minimal Model Hydrogenase

In an interdisciplinary approach, six UniSysCat-related research groups investigated the isolated core unit of a [NiFe]-hydrogenase, which displays basic catalytic properties and may serve as blueprint for chemically synthesized, H<sub>2</sub>-cycling catalysts.

# Current Affairs



## **New UniSysCat Junior Research Group in the Field of Artificial Chemical Intelligence**

Tobias Gensch is fascinated by the vision of an artificial chemical intelligence, an algorithm that could predict new catalytic reactions before the experiment to facilitate the chemical discovery process and help address synthetic challenges.



## **New junior research group in the field of chemical catalysis at UniSysCat**

UniSysCat welcomes Franziska Hess, who is appointed as junior professor for chemical catalysis at TU Berlin. Her area of work lies in the modeling of heterogeneous catalysts and catalyst stability.



## **New UniSysCat Junior Research Group**

Dr. Marius Horch has joined UniSysCat as a Junior Research Group, where they will specialize in understanding the structure, function and dynamics of complex catalytic systems via ultrafast and multidimensional spectroscopy.



## **Modern Fossil Way of Life?**

Dr. Benjamin Steininger, researcher at the Cluster of Excellence UniSysCat and at the Max Planck Institute for the History of Science Berlin, explains in an interview for the National Geographic that we first must understand the era's dependence on fossil resources in order to emancipate society.

# Current Affairs

## NEUE DIMENSIONEN IN DER KATALYSE

Eröffnung des Exzellenzclusters „Unifying Systems in Catalysis“ und des „Einstein Center of Catalysis“

**Experimentelle Leitung**  
Prof. Dr. Arne Thomas, TU Berlin

**Staatliche Performance**  
Team der LMU Berlin

**Festvortrag**  
Prof. Dr. Cynthia Friend, Harvard

**Empfang**



## Inauguration Event of UniSysCat - YouTube Videos are now online

Individual videos to the inauguration event of UniSysCat have now been publicized on our YouTube channel.



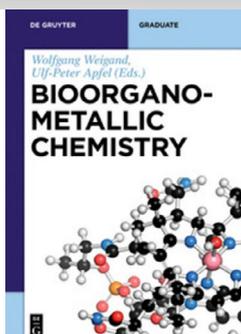
## UniSysCat researcher Peter Hegemann receives the Shaw Prize 2020

Peter Hegemann, Gero Miesenböck and Georg Nagel receive the 2020 Prize in Life Science & Medicine!



## GDCh-Prize for UniSysCat Researcher Markus Antonietti

Markus Antonietti, member of UniSysCat, receives the 2020 Hermann Staudinger Award for excellence in macromolecular chemistry from the German Chemical Society (Gesellschaft Deutscher Chemiker, GDCh).



## Unifying Lessons in Biocatalysis

The UniSysCat researchers Marius Horch, Oliver Lenz, Ingo Zebger, Holger Dobbek, and Kallol Ray have contributed together with the former Einstein visiting fellow Stephen P. Cramer and many other renowned experts to a new textbook on "Bioorganometallic Chemistry".

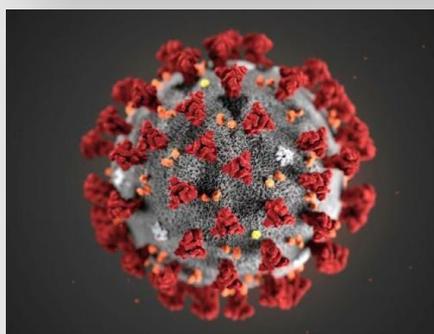


# Current Affairs



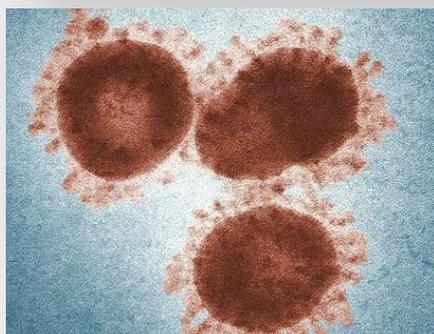
## Researchers at UniSysCat join together for the annual retreat at Golem

On the 10th of Feb., researchers at UniSysCat went to various presentations by the different group leaders within UniSysCat to learn about current research topics and affairs within the organisation.



## UniSysCat Scientists Work on COVID-19 Virus

Prof. Dr. Juri Rappsilber from the TU-Berlin is working together with other colleagues from the TUB and the Charite on the SARS-CoV-2 virus. They are collecting specific information regarding structure and interaction of viral proteins in cells.



## UniSysCat COVID-19 Research: Immune Status of the Population

Dr. Matthias Gimpel and colleagues from the group of Prof. Peter Neubauer are developing together with the group of Prof. Roland Lauster (both TUB) and the Charité a test system to evaluate the immune status of the population.



## Dr. Sophie Careno is awarded the Clara Immerwahr Award

UniSysCat is proud to announce Dr. Sophie Careno as the recipient of this year's Clara Immerwahr Award. The award is given to young female scientists for their outstanding results in the field of catalytic research.



# Upcoming Events



## **UniSysCat Events goes online!**

Due to the nature of the quarantine situation, upcoming events from UniSysCat will be held online. More information following soon.



## **Online Colloquium in June**

UniSysCat will be hosting its first colloquium post-quarantine on the 24.06.20. Dr. Inês A. Cardoso Pereira from the Universidade Nova de Lisboa will be speaking on the topic of Biocatalysis of H<sub>2</sub> Production and CO<sub>2</sub> reduction.

Date: 24.06.20



## **Online Colloquium in July**

Prof. Dr. Anne-Frances Miller, University of Kentucky and Einstein Visiting Fellow at the TU-Berlin, will provide insights into how electron bifurcation can exploit abundant cheap fuel to drive demanding reactions. This colloquium will take place online.

Date: 08.07.20



## **Digital SAB-Meeting in 2020**

The first UniSysCat – Scientific Advisory Board meeting (SAB) will take place from 30 September until 1 October 2020. This year, due to the current COVID-19 – Pandemic, the meeting will take place digitally and remotely.

Date: 30.09.20



## Imprint

Cluster of Excellence "Unifying Systems in Catalysis" (UniSysCat)  
Technische Universität Berlin

Sekr. BEL 4  
Straße des 17. Juni 135  
10623 BERLIN  
GERMANY

Tel.: +49 (0)30 314-28 590  
Fax: +49 (0)30 314-28 594  
E-mail: [info@unisyscat.de](mailto:info@unisyscat.de)

Spokesperson: Prof. Dr. Arne Thomas(TU Berlin)  
Website: [www.unisyscat.de](http://www.unisyscat.de)

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