

May 2021

## Online colloquium at the Leibniz ScienceCampus ComBioCat - young researchers draw up interim balance sheet

*A good dozen of the state's young researchers will meet on May 27 and 28 at the Leibniz ScienceCampus ComBioCat to discuss trends in catalysis and take stock of their project. They come from both universities in Mecklenburg-Vorpommern as well as two Leibniz institutes and are doing their doctorates there on a promising topic: the linking of natural and chemical catalytic processes. ComBioCat is funded by the Leibniz Association for four years (until 2023) with 1.13 million euros and coordinated by the Leibniz Institute for Catalysis in Rostock.*

The project focuses, for example, on enzymes that are responsible for metabolism in all living organisms. In their work at the ScienceCampus, the doctoral students modify such proteins and combine them with chemical substances to create novel catalysts. And they are exploring photocatalytic materials for their ability to drive chemical processes under mild reaction conditions.

The campus' scientific coordinator, Dr. Alexander Zapf of LIKAT, says, "Such research aims at a 'green' chemistry based on renewable raw materials that consumes much less energy and resources than before." Catalytic processes in nature, such as photosynthesis, which green plants use to produce energy-rich carbohydrates with the help of sunlight, serve as a model, from carbon dioxide and water alone.

The 13 women and men involved in the ComBioCat ScienceCampus represent a variety of disciplines: such as catalytic and analytical chemistry, biochemistry and photochemistry, protein engineering and plasma physics. The first day of the colloquium, then, is also for their continuing education, as Dr. Zapf says. "Of course, young people need to be well-versed in the field of neighboring disciplines if they want to do cutting-edge interdisciplinary research."

In addition to the Universities of Rostock and Greifswald, the ComBioCat ScienceCampus involves young researchers from LIKAT and the Leibniz Institute for Plasma Science and Technology (INP). The campus is also well positioned internationally. Doctoral students from China, Greece, India, Iran, Mexico and Serbia work there with their German colleagues.

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