

June 2020

## LIKAT at „Leibniz im Bundestag“

Successful communication between politics and research

"Leibniz in the Bundestag" is a format of the Leibniz Association that has been bringing together scientists from various Leibniz institutes with members of the Bundestag in personal talks since 2008. The researchers offer MPs an insight into their work on a wide range of topics. They learn about the very specific problems for which the members of parliament are looking for solutions and can outline the approaches their research provides.

On May 26, Prof. Dr. Jennifer Strunk, head of the department "Heterogeneous Photocatalysis" at the Leibniz Institute for Catalysis (LIKAT), and Norbert Altenkamp, CDU, direct mandate Main-Taunus-Kreis, met in this way - this year only virtually. They talked about the topic "Recycling instead of emitting: Returning carbon dioxide to chemical production with the help of renewable energies".

Norbert Altenkamp has been a member of parliament for the Main-Taunus constituency since 2017 and is, among other things, a member of the Committee on Education and Research. As he said at the beginning of the conversation, he would like to set a new focus on recycling management and resource conservation in the future. He appreciates the contact with experts in order to choose realistic starting points and to be able to estimate approaches. Specifically, he mentioned the possibility of CO<sub>2</sub>-neutral steel production and asked Prof. Strunk about opportunities for a quick market launch and potential problems.

Jennifer Strunk explained that one of the greatest challenges is to activate the extremely stable carbon dioxide and thus make it available as a raw material, as well as to extract the CO<sub>2</sub> from the air. Although CO<sub>2</sub> is present in the atmosphere in huge quantities, its concentration is far too low for chemical reactions. This requires technologies, some of which are still in their infancy. Besides thermal-catalytic or electrochemical activation, the photocatalytic activation of CO<sub>2</sub> and its conversion with water to form new compounds is a promising approach, similar to photosynthesis in plants. Exactly the latter process is one of Prof. Strunk's research foci at the Leibniz Institute for Catalysis in Rostock (more information about the research on "artificial photosynthesis" by Jennifer Strunk <https://www.catalysis.de/forschung/heterogene-photokatalyse/>).

Another major challenge is the transfer from basic research to a larger industrial scale. The economy often lacks the financial motivation and willingness to take risks, as profitability is difficult to assess in the short term. This is where basic research has to overcome a "Valley of Death" on its way to practical application, and this is exactly where investments would be useful to convert know-how into practical benefits.

Altenkamp referred to the Agency for Jump Innovation (Agentur für Sprunginnovation), which was founded in December 2019 and is intended to help groundbreaking ideas from science to break through to the markets more quickly. It acts on behalf of the BMBF and BMWi as a state funding instrument for this very interface. A commission consisting of members from science, industry and politics evaluates open-topic proposals in various innovation competitions and provides extensive project funding.

The Leibniz Association's format is a good example of successful science communication at the interface between politics and research. In addition to new impulses for both sides, dialogue also increases mutual understanding. LIKAT will - out of conviction - continue to participate in this format in the future.