



THE EUROPEAN SUSTAINABLE
CHEMISTRY AWARD

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European Association for Chemical
and Molecular Sciences
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News Release

First Laureate of the Newly Launched 'European Sustainable Chemistry Award'

Matthias Beller has been chosen as the first laureate of the newly launched European Sustainable Chemistry Award, a EuCheMS initiative.

The 48 year-old chemist will be honoured at the 3rd EuCheMS Chemistry Congress in Nürnberg at the Opening Ceremony on 29 August.

Professor Dr Matthias Beller, Director of the Leibniz Institute for Catalysis in Rostock, Germany (LIKAT), is being recognised for his exceptional research in the field of homogeneous catalysis. His team at the Leibniz Institute for Catalysis is mainly investigating the environmentally sustainable conversion of small molecules into recyclable or reusable materials. An Evaluation Panel selected him as the winner of the 10,000€ Award out of the 21 nominations received.

LIKAT is the largest state research institute for applied catalysis in Europe. The Institute focuses on the transfer of fundamental research to practical applications. In the past decade alone, Matthias Beller and his team have developed three catalyst systems that are being applied in industry for producing chemicals on a large scale (tonnes). In addition, companies producing fine chemicals and catalysts are marketing catalysts developed at LIKAT.

Matthias Beller has also conducted fundamental research that has been taken over by some research groups throughout the world. "Catalysis: this is the science that tries to explain how chemical reactions can be accelerated and controlled," he said. "It is also one of the key technologies for creating a sustainable chemistry."

The focal points of his research are: palladium-catalyzed coupling reactions of aryl halogenides, enantioselective oxidation catalysis, catalytic applications in the field of active pharmaceutical ingredients as well as catalytic carbonylations. The various research projects concentrate on the development of catalytic oxidation reactions with oxygen or hydrogen peroxide as oxidant.

Within the scope of exploiting catalytic reactions for synthesizing new pharmaceutical ingredients, Matthias Beller's research group is intensively investigating, in particular, the regioselective addition of amines to double bonds and carbonylation reactions. In cooperation with pharmaceutical companies, the aim of the research here is the development of new analgesics, anti-Alzheimer active ingredients and kinase inhibitors. His research works have been published and highlighted in the journal "Science".

In total, Beller has published more than 420 papers and has filed over 90 patents.

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Notes for editors:

To raise the profile of sustainable chemistry and be a spur to innovation and competitiveness, EuCheMS has launched the European Sustainable Chemistry Award, with the encouragement of the European Environment Agency (EEA) and the support of SusChem (European Platform for Sustainable Chemistry) and CEFIC (European Chemical Industry Association).

The European Sustainable Chemistry Award is designed to

- recognise individuals or small research groups which make an outstanding contribution to sustainable development by applying green and sustainable chemistry.
- promote innovation in chemistry and chemicals that will deliver clear improvements in the sustainable production and use of chemicals and chemical products.
- demonstrate that chemistry and chemicals can play a central role in delivering society's needs, while minimizing and solving environmental problems.

Born in the Hessian town of Gudensberg, Beller studied chemistry at the University of Göttingen where he received his doctoral degree in 1989 in less than seven years of university study. After a postdoctoral fellowship at Massachusetts Institute of Technology in Cambridge, USA, he assumed a position as laboratory director and, later on, became the group and project director of ‘Metallo-organic Chemistry—Catalysis’ in the main laboratory of Hoechst AG in Frankfurt. In 1996, Beller received an associate professorship at the Technical University of Munich. Then, in 1998 Beller was named director of the Institute for Organic Catalysis Research e.V. (IfOK), in which this new position was linked with a full professorship in ‘Catalysis’ at Rostock University. Since 2005, he has been managing director at LIKAT which originated from the restructured IfOK.

EuCheMS (European Association for Chemical and Molecular Sciences) is a non-profit-making organisation, having 47 member societies which represent some 140,000 individual chemists in academia, industry and government in 34 countries across Europe. Its object is to promote co-operation in Europe between non-profit-making scientific and technical societies in the field of chemistry and molecular sciences. EuCheMS provides a powerful single voice for chemists and the chemical sciences in Europe through its activities and development of policy.