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Jochen Block Award 2025 for Dr. Thomas Seidensticker, TU Dortmund University / Germany

The Jochen Block Award 2025 of the German Catalysis Society goes to Dr. Thomas Seidensticker, TU Dortmund University. This is in recognition of his outstanding work on the development of selective chemo-catalytic processes for the use of renewable raw materials. The Jochen Block Award is endowed with 3,000 euros and honors outstanding achievements by young scientists. It will be presented at Jahrestreffen Deutscher Katalytiker https://dechema.de/en/katalytiker2025.html, the Annual Meeting of German Catalysts, March 12-14, 2025, in Weimar.

In his research at the Laboratory of Industrial Chemistry at TU Dortmund University, Thomas Seidensticker is working on how platform chemicals can be produced from vegetable oils using homogeneous catalysis. His research focuses primarily on technical feasibility. On the one hand, continuous processes in miniplants with integrated catalyst recycling are being developed and, on the other hand, the conversion of polyunsaturated fatty acids into monounsaturated compounds using innovative catalyst systems is examined, which will significantly advance the use of vegetable oils as renewable raw materials.

Thomas Seidensticker analyzed how the presence of polyunsaturated compounds affects the activities and selectivities of homogeneous catalytic functionalization reactions, which mechanisms cause these effects, and which systems exist for selective partial hydrogenation. As a result of this research, Thomas Seidensticker and his team developed a completely new technology for selective partial hydrogenation, filed a patent application for it and are now bringing it to market with the founding of “simplyfined”. The aim of this start-up is to make the chemical industry more sustainable.

Thomas Seidensticker, born in 1987, studied chemistry at TU Dortmund University and received his PhD in 2016. Since 2020, he has been the group leader of the independent junior research group “Renewlysis”, funded by the “Bundesministerium für Ernährung und Landwirtschaft”. Thomas Seidensticker has received numerous awards for his outstanding achievements, including the DECHEMA-Hochschullehrer-Nachwuchspreis für Technische Chemie in 2022. Thomas Seidensticker is on the board of abiosus e.V., a non-profit association for the promotion of research on renewable raw materials, is the initiator of the Westdeutschen Katalyse Lehrverbundes (WDKL) and a freelance contributor to “Die Physikanten”.

Jochen Block Award
The German Catalysis Society awards a prize to promote young scientists in the field of catalysis. The prize is awarded for research work and developments by young scientists. Special consideration is given to the work of younger professionals at an early stage of their career who, for example, do not yet hold a permanent professorship or a corresponding position in industry or research institutions. Important criteria for the assessment are independence, originality as well as scientific and technical progress.

German Catalysis Society
The German Catalysis Society (GeCatS) is the platform for the entire German catalysis community in the field of research and application. Currently it has about 1000 members from industry and academia. GeCatS promotes the scientific and technical dialogue between industry, universities, non-university research institutes and research policy institutions and represents the interests of the catalysis community on a national and international level. The German Catalysis Society is supported by DECHEMA, VDI-GVC, GDCh, DGMK und DBG.

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