DESCRIPTION

Catalysis has revolutionized the chemical industry as catalysts are used in the production of most chemicals, resulting in a multi-billion euro business. This advanced textbook is a must-have for all Master and PhD students in the field as it adopts a unique interdisciplinary approach to the topic of catalysis. It presents a collection of chapters that explain the fundamentals of catalysis as the area has developed over the past decades and introduces new catalytic systems that are of becoming of increasing current importance.

It covers all the essential principles, ranging from catalytic processes at the molecular level to catalytic reactor design and includes several case studies illustrating the importance of catalysts in the chemical industry.

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Matthias Beller obtained his PhD at the University of Gottingen, Germany and completed a postdoctoral fellowship at the Massachusetts Institute of Technology in Cambridge, USA. Since 1998, he has been head of the Leibniz Institute for Organic Catalysis at University of
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