DESCRIPTION

Introduces major catalytic processes including products from the petroleum, chemical, environmental and alternative energy industries

• Provides an easy to read description of the fundamentals of catalysis and some of the major catalytic industrial processes used today

• Offers a rationale for process designs based on kinetics and thermodynamics

• Alternative energy topics include the hydrogen economy, fuels cells, bio catalytic (enzymes) production of ethanol fuel from corn and biodiesel from vegetable oils

• Problem sets of included with answers available to faculty who use the book

Review:
"In less than 300 pages, it serves as an excellent introduction to these subjects whether for advanced students or those seeking to learn more about these subjects on their own time...Particularly useful are the succinct summaries throughout the book...excellent detail in the table of contents, a detailed index, key references at the end of each chapter, and challenging classroom questions..." (GlobalCatalysis.com, May 2016)
**ABOUT THE AUTHOR**

Robert J. Farrauto, PHD, is Professor of Practice in the Earth and Environmental Engineering Department at Columbia University in the City of New York. He retired from BASF (formerly Engelhard) as a Research Vice President after 37 years of service. He has over 40 years industrial experience in catalysis and has commercialized a number of technologies in the environmental, chemical and alternative energy fields. He holds 58 US patents and over 115 peer-reviewed journal publications. He teaches graduate and undergraduate courses focusing on catalysis. He is a co-author of *Fundamentals of Industrial Catalytic Processes*, 2nd Edition and *Catalytic Air Pollution Control: Commercial Technology*, 3rd Edition.

Lucas Dorazio, PhD is a Research Chemical Engineer at BASF Corporation, Iselin, NJ where he is engaged in reforming and environmental technology. He is also Adjunct assistant professor at New Jersey Institute of Technology where he teaches environmental and industrial catalysis.

Calvin H. Bartholomew, PhD is Emeritus Professor at Brigham Young University. He continues to conduct catalysis research, is active in consulting and does specialized teaching for AICHE short courses in catalysis. He has been principal investigator or co-investigator on over 60 grants and contracts and has supervised more than 175 research students. He is the author or co-author of 5 books and 120 peer-reviewed papers and reviews with emphasis on catalysis.

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