

## Contents

	Page
Preface	I
Introduction to ICS-UNDO programmes (Stanislav Miertus)	III
1 Trends in catalysis for industrial applications (Ferruccio Trifiro, Fabrizio Cavani and Fabiana Gennari)	1
2 Selective oxidation of paraffins in the gas phase with heterogeneous catalysis (Ferruccio Trifiro, Fabrizio Cavani and Fabiana Gennari)	21
3 Catalytic oxidation with H <sub>2</sub> O <sub>2</sub> and alternative processes with molecular oxygen (Ferruccio Trifiro, Fabrizio Cavani and Fabiana Gennari)	75
4 Hydrogenation technologies to produce fine chemicals (József L. Margitfalvi)	105
Information sheets annex to chapter 4	131
5 Homogeneous and heterogeneous enantioselective catalysts for industrial applications: state of art and future outlook (Oreste Piccolo)	149
Information sheets annex to chapter 5	159
6 Acid catalysis (Eduardo Falabella Sousa-Aguiar)*	173
Information sheets annex to chapter 6	183
7 Carbonylation and amidation technologies: global state of the art (R. V. Chaudhari)	195
Information sheets annex to chapter 7	221

\*Co-authors: Eledir Sobrinho, Lindoval Fernandes, Marcelo Toremi and Pedro Arroyo