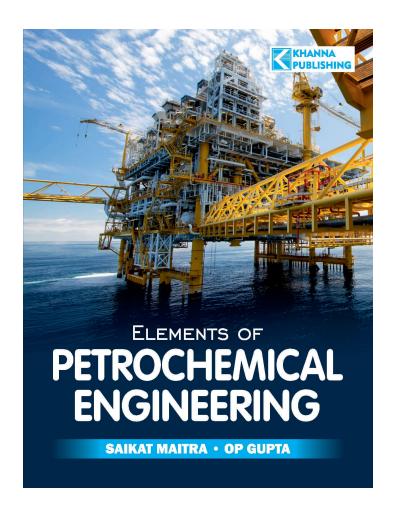
KHANNABOOKS.COM



Elements of Petrochemical Engineering

Author: O.P. Gupta

ISBN 13: 978-93-86173-36-2

ISBN 10: 93-86173-36-0

E-ISBN 13: 978-93-86173-36-2

Edition: First

Pages: 424

Type of book : Paperback

Weight (g): 640.00

Year: 2020

Language: English

Publisher: Khanna Publishing House

M.R.P: Rs 425.00

Categories : Chemical Engineering

Condition Type: New

Country Origin: India

Product Description

Elements of Petrochemical Engineering book is meant for the students, teachers and practicing Engineers. This book contains the manufacture, properties and applications of important petrochemicals. Important information's about feedstocks and applications of petrochemical derived products, status of Indian Petrochemical Industry and environment standards for the petrochemical plant are given in the appendices. It also contains short questions and answers and multiple choice questions and answers drawn from examination papers of various engineering colleges for the benefits of the students. The book is targeted to benefit the following: Diploma in Engineering Students, Degree in Engineering Students, AMIE AMIIM, AMIICHE students, Faculty members and teaching staff, Practicing Engineers/Professionals. Latest and updated information/ data/statistics pertaining to the subject matter has been included in the edition for the benefit of the readers.



KHANNABOOKS.COM

Table of Contents

Chapter 1: Introduction to Petrochemicals. Chapter 2: Production of Methanol (Methyl Alcohol). Chapter 3: Production of Formaldehyde from Methanol (Methyl Alcohol). Chapter 4: Production of Chloromethanes by Direct Chlorination of Methane (CH_A). Chapter 5: Manufacture of Trichloroethylene ($C1HC = CCl_2$). Chapter 6: Manufacture of Perechloroethylene ($\text{Cl}_2\text{Cl} = \text{CCl}_2$). **Chapter 7:** Production of Ethylene ($\text{CH}_2 = \text{Ch}_2$). **Chapter 8:** Manufacture of Ethylene Dichloride (EDC) and Vinyl Chloride Monomer (VCM). Chapter 9: Production of Ethylene Oxide (EO). Chapter 10: Manufacture of Ethanolamines. Chapter 11: Manufacture of Propylene (C₃H₆). Chapter 12: Production of Isopropanol (Iso-Propyl Alcohol) from Propylene. Chapter 13: Manufacture of Acetone by Dehydrogenation of Iso-Propanol. **Chapter 14:** Manufacture of Cumene (Isopropyl Benzene from Propylene). **Chapter 15:** Production from Acrylonitrile from Propylene. **Chapter 16:** Production of Isoprene from Propylene. Chapter 17: Manufacture of Epichlorohydrin and Proplene Oxide. Chapter 18: Production of Aldehydes, Alcohols, Carboxylic Acid by Oxy-Processing of Olefins. Chapter 19: Manufacture of Butadeine (C_aH_6). Chapter 20: Important Aromatic Compounds-Benzene, Tolune & Xylene (BTX). Chapter 21: Production of Benzene and Toluene. Chapter 22: Production of Benzene by Hydrodealkylation of Tolune. Chapter 23: Manufacture of Xylene. Chapter 24: Manufacture of Phenol from Cumene. Chapter 25: Manufacture of Phenol from Toluene Oxidation Chapter 26: Manufacture of Phenol from Hydrochlorination of Benzene. Chapter 27: Manufacture of Phenol from Chlorobenzene. Chapter 28: production of Styrene from Benzene. Chapter 29: Production of Phthalmic Anhydride from Napthalene or O-Xylene. Chapter 30: Production of Maleic Anhydride (C₁H₂O₃) from Benzene. Chapter 31: Production of Terephthalic Acid (TPA) & Dimethyl Terephthalate (DMT). Chapter 32: Production of Toulene Di-Isocyanate (TDI). Chapter 33: Fundamentals of Polymerisation Technology. Chapter 34: Polymer Processing Technologies. Appendix A: Petrochemicals Feedstocks, Products & Applications. Appendix B: Uses of Petrochemicals in Various Sectors. Appendix C: All About Indian Petrochemical Industry. Appendix D: Indian National Emission Standards for Petrochemical Plants. Appendix E: Glossary of Terms Related to Petrochemical Engineering. Appendix F: Bibliography/References/Further Reading. Appendix G: Objective Type Questions and Answers. Appendix H: Short Ouestions and Answers.



KHANNABOOKS.COM

Authors

Om Prakash Gupta is basically being a chemical engineer, he has a practicing experience of efficient Energy management and HR functions in steel Industry for more than three decades. privileged to be the youngest writer of technical books in the country (for he had written his first book at the age of 24 years while doing M. Tech. at I.I.T Kanpur in 1979), he has authored many frontline books for engineering students. besides, being the regular faculty member in technical courses for Management Trainees (Technical), he has also visited England and France on a study tour sponsored by United Nations Development Program (UNDP) to study the scope of energy conservation in steel plants in 1987. Prof. Saikat Maitra is presently working as the Vice Chancellor of Maulana Abul Kalam Azad University of Technology, West Bengal (formerly West Bengal University of Technology). He did his B.Sc. (Honors in Chemistry) from the Presidency Colleges, Kolkata, B. Tech, M. Tech and Ph. D in Chemical Technology from the University of Calcutta. He is a Chartered Chemical Engineer and Fellow of Institute of Engineers (India). Prof. Maitra earlier worked as Professor and Principal-in-Charge at Government College of Engineering; Ceramic Technology, Associate Professor at University Technology Petronas, Malasiya and as Scientist at Central Fuel Research Institute, Dhanbad. He has worked in industries too. Prof. Maitra published 150 research papers in different national & international journals, presented 60 papers in different conferences, filed two patents, authored three books and three book chapters. He has guided twelve Ph. D students, completed several funded research projects, organized several training program and workshops. He visited many countries like US, Australia, Italy, Malasiya, Singapore, Thailand, Bangladesh, Bahrain etc for delivering lecturers.

