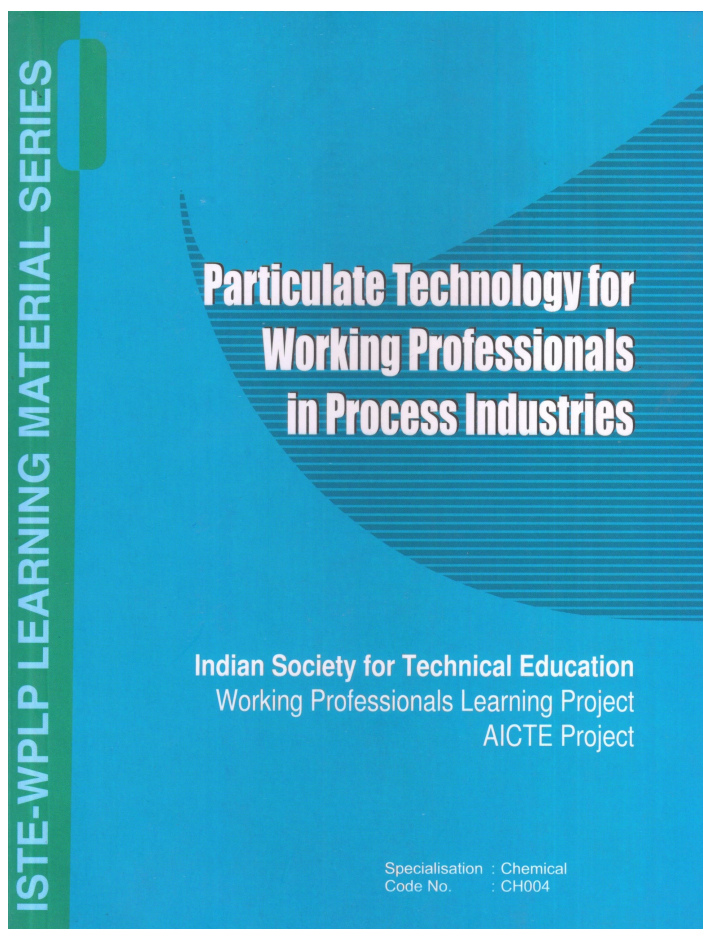




Particulate Technology for Working Professionals in Process Industries

Author :	D. V. Ramana Rao
ISBN 13 :	978-93-55386-75-5
ISBN 10 :	93-55386-75-3
E-ISBN 13 :	978-93-55386-75-5
Edition :	1
Pages :	212
Type of book :	Paperback
Weight (g) :	450.00
Year :	2013
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 298.00
Categories :	Chemical Engineering, ISTE Series
SKU :	1725598911
Condition Type :	New
Country Origin :	India

Product Description

Particulate Technology, a study of particulate materials, their properties and behavior in processes, is of increasing importance in process industries. Particulates are frequently encountered in modern technology that it is difficult to name an area of industrial activity where such materials do not play a significant part. The term "particulates" is used to include small pieces of solid material ordinarily called "particles", small masses of liquids usually termed "drop" and isolated quantities of gas surrounded by a continuous phase normally termed "bubbles". Research in the field of particulates is being carried out in several disciplines-Chemical, mechanical, mining and metallurgical engineering, food and pharmaceutical technology, agriculture, medicine, air pollution etc. There is much in common between these various disciplines in regard to particulate problems. In recent years, however, there is growing awareness in all the process industries and among research, design and development workers in chemical engineering, and other process industries, as our present knowledge of particulate systems is extremely meager and several workers have taken keen interest in the problems of Particulate Technology.

TABLE OF CONTENTS

FOREWORD

PREFACE

Chapter 1: Size Reduction Operation.

Chapter 2: Size Enlargement.

Chapter 3: Particle Characterization.

Chapter 4: Separation of Solids and Enrichment.

Chapter 5: Mixing and Homogenization.

Chapter 6: Bulk Material Handling and Storage.

Chapter 7: Drying Operation.

Chapter 8: Principles of Fluidization and Applications.

Chapter 9: Rheology of Non-Newtonian Solid-in-liquid Systems.

Chapter 10: Case Studies.

Case Study -1

Case Study -2

Case Study -3



Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: + 91-99109 09320

Authors

Dr. D. V. Ramana Rao received his B.Sc. (Hons.) and M.Sc. in Chemical Technology from Andhra University and Ph.D. in Chemical Engineering from Indian Institute of Technology, Madras in 1970. He worked as a Research Associate, as part of post doctoral work at DECHEMA-Institute, Frankfurt, Germany in the field of corrosion for two years. Before joining Ph.D. , he worked in Andhra University, I.I.T. , Kanpur, and in the Chemical Engineering Department of National Sugar Institute as a lecturer. After returning from Germany, he joined as a Scientist at senior level in National Council for Cement and Building Materials (NCB), [formerly known as Cement Research Institute of India], New Delhi and retired as Joint Director, after working for 26 years. After retiring from NCB, he worked as Professor & Head of Chemical Engineering Department of BVRIT, Hyderabad and IS Sadan College of Engg. and Technology, Hyderabad (present Boji Reddy College of Engineering) nearly for 2 years. At present he is the Managing partner fo Institute of Particulate Technology International (IPTI) from June 2004, which carries sponsored research work, training programmes for working personnel in Industry and Consultancy. He has authored 21 research papers, published in international, national journals and international seminars. He has to his credit 2 patents. He has prepared 15 and technical reports of R&D work and coordinated more than 30 training programmes and 4 workshops to working personnel in cement manufacturing industries. At present as a managing partner of IPTI, he has carried out 7 sponsored projects and two training programmes to working personnel in cement and pharmaceutical Industry.

N. C. L. N. CHARYULU obtaining B. Tech. (Chem. Engg.) from Andhra University in 1963, M. Tech. (Chem. Engg.) with specialization in Chemical Plant Design, from I.I.T., Kharagpur, in 1967 (Technical Teacher Trainee) and Ph.D. (Chem. Engg.) from I.I.Sc., in 1977. Joined Karnataka Regional Engineering College, KREC Surathkal (presently renamed as National Institute of Technology Surathkal) as lecturer in 1967. Served in different caplacities as Asst. Prof. Professor, Head of Chemical Engineering Department and Dean Students Affairs. Taken voluntary retirement in March, 2001 and joined Chaitanya Bharati Institute of Technology (CBIT). Served as Prof. and Head Chem. Engg. Dept. CBIT till May, 2010. Total teaching experience of 46 Y (1964-2010). He was awarded National Biotechnology Associate for One Year (1988-1989) during which he was a visiting professor at Fermentation Technology and Bioengineering C.F.T.R.I., Mysore, in the Biotechnology associate ship programme. May-Nov 1990, he spent 3 months at NCSU, Raleigh, N.C., USA, another 3 moths at U.M.C., U.S.A. and Indian Secondment Visiting Professorship for one semester 1996-97 at School of Environment Resource Development, Asian Institute of Technology, Bangkok, Thailand. He has Coordinated two I.S.T.E. sponsored Winter/Summer School a) Fludization Engineering 1980;b) Bioconversion process optimization computer modeling -1989 and two refresher courses to working professionals a) Application of Chem. Eng. principle to Urea plant operator of MCF, Panambur, 1993 and b) Unit operations for design, production and maintenance personnel in cement and mineral based industries, October 20-25,2008.He guided four theses for Ph.D. a) Biosynthesis for Cellulase enzyme and Modeling, 1994. b(Bioremediation of industrial and domestic effluents by microorganisms1990c) Studies on biodegradation of high BOD effluent by anaerobic



Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: + +91-99109 09320