

New Books

HANDBOOK OF MAGNETIC MATERIALS

Edited by K.H.J. Buschow

Designed and written as a textbook as well as a reference manual. Six chapters are written by leading authorities in the field and combine state-of-the art research results with extensive compilation of archival knowledge.

North Holland (Elsevier Science Publishers), Amsterdam 1991, 654 pp, US\$163.50.

MAGNETISM IN THE NINETIES

Edited by A.J. Freeman and K.A. Gschneidner, Jr.

The handbook provides a historical perspective of the developments that have taken place since 1975 and identifies a perspective for developments anticipated in the 1990's. The papers included in the book cover such aspects of magnetism as permanent magnets and high- T_c superconductors.

North Holland (Elsevier Science Publishers), Amsterdam 1991, 582 pp, US\$87.00

R.S. WADAS: BIOMAGNETISM

This book is a revised and enlarged translation from the Polish edition published in 1978. It is addressed to all those who are interested in the physics of magnetic phenomena in biology and claims to be the first book on magnetism available in English. It covers the fundamentals of magnetic phenomena together with magnetic molecular complexes, diamagnetic, paramagnetic and ferromagnetic biological molecules, magneto-optical phenomena and the effects of magnetic fields on living organisms.

Ellis Horwood 1991, 170 pp, US\$68.00

V.A. GRAMM, K.V. NIKOLAENKO AND A.G. FEDOTOV: OPERATION AND MAINTENANCE OF MAGNETIC SEPARATORS

This handbook provides information on the generation of the magnetic field and its measurement, on principles of magnetic separation and on the design of magnetic separators and their commissioning. The maintenance of magnetic separators, troubleshooting and basic safety rules are also covered.

Nedra, Moscow 1990, Rbl. 0.50

STORAGE AND UTILIZATION OF TAILINGS FROM THE PROCESSING OF ORES OF FERROUS METALS

Edited by V.A. Arsent'ev et al.

This handbook comprising 18 papers proposes a complex solution to the problem of complete exploitation of ores of ferrous metals and of the storage of the tailings. Treatment of slimes of iron and manganese ores is discussed in several contributions.

Nedra, Moscow 1991, 110 pp, Rbl. 1.60

COLLOID CHEMISTRY IN MINERAL PROCESSING

Edited by J.S. Laskowski and J. Ralston

The book is divided into two sections, on 'Fundamentals' and 'Applications', containing 13 chapters embracing the following themes: minerals and surfaces, adsorption, interparticle forces, dispersions stability and dispersing agents, static and dynamic contact angles, influence of particle size and contact angle in flotation, introduction to physico-chemical methods of separation, selective coagulation of colloidal mineral particles, flocculation, shear flocculation, coating and carrier methods for enhancing magnetic and flotation separation, oil-assisted fine-particle processing and fundamental aspects of micro-bubble flotation.

Elsevier, Amsterdam 1992, 428 pp. Dfl. 260.00

MIXING IN COAGULATION AND FLOCCULATION

Ed.: A. Amirtharajah, M.M. Clark and R.R. Trustell.

Amer. Water Works Assoc. (Denver), 1991, 426 pp, US\$86.50.

SLURRY HANDLING, DESIGN OF SOLID-LIQUID SYSTEMS

Ed. N.P. Brown and N.I. Heywood.

This book covers all aspects of slurry handling with chapters written by experienced practitioners. Analysis of flow behaviour in pipes and flumes is given and experimental techniques are covered.

Elsevier Science Publishers, Amsterdam 1992, 668 pp., US\$187.00.

PHYSICAL PROPERTIES OF HIGH-TEMPERATURE SUPERCONDUCTORS

Ed. D.M. Ginsberg

World Scientific Publ. Co. Ltd. (Singapore), 1992, 630 pp., US\$86.00

ADVANCED MATERIALS IN JAPAN

Source Book 1992

This publication covers, in detail, major developments in the following areas: metals and alloys, ceramics, composites, electronic and optoelectronic materials,

magnetic materials, textiles and medical materials. Each section of the book also includes business and market information and details of relevant commercial organizations.

Elsevier Advanced Technology, Oxford 1992, 475 pp, US\$390.

HIGH-TEMPERATURE SUPERCONDUCTIVITY: AN INTRODUCTION

This book is intended not only as an introduction for undergraduate students but also as a review of high-temperature superconductivity from its discovery five years ago up to 1991. It catalogues often conflicting experimental and theoretical results and provides valuable summary sections.

Academic Press, 1992, 199 pp., US\$19.95

T. ALLEN: PARTICLE SIZE MEASUREMENT

This book discusses a wide range of measurement techniques, sampling and surface area determination. The latest instrumentation is reviewed and manufacturers and suppliers of commercially available equipment are listed.

Chapman and Hall, 1990, 832 pp., £69.00

H. RUMPF: PARTICLE TECHNOLOGY

In this work the physical and theoretical principles of preparation, separation, mixing, agglomeration, crushing, storing and conveying of particulate matter and bulk solids are reviewed. The design and operation of numerous devices used to manipulate solid matter ranging from large lumps down to fine particles is also discussed.

Chapman and Hall, 1990, 212 pp., £29.95

O. MOLERUS: PRINCIPLES OF FLOWS IN DISPERSE SYSTEMS

The author provides a comprehensive coverage of principles governing phenomena in solid-loaded flows. Derivations of different design criteria required in different flow regimes are also given.

Chapman and Hall, 1992, 350 pp., £50.00