

—New Books—

PERMANENT MAGNETS IN AUTOMOBILES

Groham/Intertech Consulting, Portland, ME, USA, 1997, 465 pp

The report "Permanent magnets in automobiles – market forecasts, technical analysis and strategic outlook to 2005" addresses future automotive demand for Nd–Fe–B permanent magnets and how this demand will impact on the pricing and the availability of ferrite magnets. Further information can be obtained from the publisher on fax number 207–781–2150.

RARE–EARTH IRON PERMANENT MAGNETS

J.M.D. Coey (Editor)
Oxford University Press Inc., Cary, NC, USA, 1996, 522 pp, US\$135.00

The book covers, in eleven chapters, the state of current knowledge of permanent magnet materials that utilise iron as the major component. The chapters cover the basic concepts of magnetism, experimental methods used to determine the intrinsic magnetic properties, magnetic coercivity, theory of magnetic domains and applications of permanent magnets.

MINERAL PROCESSING TECHNOLOGY: AN INTRODUCTION TO THE PRACTICAL ASPECTS OF ORE TREATMENT AND MINERAL RECOVERY

B.A. Wills
Heinemann Publishers, Oxford, UK, 1997, £30.00

This is the sixth edition of the textbook for students and practicing engineers in mineral processing, metallurgy and mining. The book reviews standard ore–processing techniques and includes analysis of environmental problems facing the mining industry.

MAGNETIC CORE SELECTION FOR TRANSFORMERS AND INDUCTORS

W.T. McLyman
Marcel Dekker Inc., New York 1997, US\$99.75, 672 pp

This new edition compiles the specifications of over 12 000 industrially available

cores and brings them in line with standard units of measurement. The book contains the following chapters: Magnetic-core power-handling ability, Transformer output circuits, Transformer and inductor design examples, Magnetic-core material trade-off, Conversion data for magnet wire, cased toroids, Ferrite cores, Laminations. Caseless cores.

PERMANENT MAGNET MOTOR TECHNOLOGY

J.F. Gieras and M. Wing

Marcel Dekker Inc., New York 1996, US\$150.00, 472 pp

This reference book offers comprehensive coverage of all types of permanent magnet motors, presenting both applications and principles of optimisation and design. Chapters on permanent magnet materials and circuits and on Finite elements analysis are also included.

CHALLENGES IN PROCESS INTENSIFICATION

C.A. Pickles, P. Hancock and J.R. Wynnykyj (Editors)

Canadian Institute of Mining, Metallurgy and Petroleum, Montreal, Canada, 1996, 537 pp, \$145.00

Topics include: Fundamentals, Reactor analysis and modelling, energy-intensive reactors, Retro fitting of existing processes, Emerging technologies, Slag and salt processing, Hydrometallurgical processing.

WASTE PROCESSING & RECYCLING IN MINERAL PROCESSING II

S.R. Rao, L.M. Amaratunga, G.G. Richards and P.D. Kondos

Canadian Institute of Mining, Metallurgy and Petroleum, Montreal, Canada 1995, 569 pp, \$170.00

The volume covers all areas of mineral and metallurgical industries related to waste processing and recycling. The papers reflect the current activities based on the following techniques: pyrometallurgical, hydrometallurgical, physical, physico-chemical and biochemical. The topics of waste remediation and environmental aspects are also treated.

MAGNETIC FLUIDS

E. Blums, A. Cebers, M.M. Maiorov

Walter de Gruyter, Berlin, New York 1997, US\$280.00