

Table of Contents

Preface

Trends of Technological Developments in Alumina Production and Some Hungarian Results

K. Solymar 1

Reduction of Power Consumption in the Aluminium Electrolytic Pots Designed in the Forties

O.S. Chaudhry 17

Processing and Applications of Red Muds

P.M. Prasad, J.S. Kachhawaha, R.C. Gupta, T.R. Mankhand and J.M. Sharma 31

New Horizons in Aluminium Powder Metallurgy

A. Bose 53

Rapid Solidification and Metastable Equilibria in Light Metals

P.H. Shingu 77

High-Strength Aluminium Alloys through Rapid Solidification Processing

C. Suryanarayana, P. Ramachandrarao and T.R. Anantharaman 85

Some Less Understood Aspects of Strengthening in Aluminium Alloys

K.I. Vasu 109

Aluminium Alloy Conductors

R. Kumar 127

Aluminium Alloys as Plain Bearing Materials - An Overview

S.N. Tiwari, J.P. Pathak and S.L. Malhotra 139

Influence of Strontium on Solidification of Aluminium-Silicon Alloys

M.M. Haque and V. Kondic 159

Extractive Metallurgy of Titanium in India

C. Sridhar Rao and R.B. Subramanyam 171

Effect of Heat Treatment on Microstructure and Mechanical Properties of Titanium Alloy IMI685

V. Singh and C. Ramachandra 185

Environment/Mechanical Interaction Processes and Hydrogen Embrittlement of Titanium

P.K. Datta, K.N. Stafford and A.L. Dowson 203

Pilot Plant Experiments on an Improved Electrolytic Cell for Magnesium Metal Production

P.S. Desikan 217

The Development and Use of Magnesium Alloys in UK Magnox Reactors

J.E. Harris 225

Pilot Plant Production of Beryllium Metal and Copper-Beryllium Alloys

C.V. Sundaram, C.M. Paul, B.P. Sharma, J.S. Nair and S. Saha 251