

Contents

| | |
|---|-----|
| Preface | I |
| Contents | III |
| GENERAL | |
| G. Callaioli - Situation and perspectives of the aluminium industry in the 90's | 1 |
| E. Ernst - Hungarian aluminium industry - A view of the present situation and possibilities for the future..... | 23 |
| R. J. McCulloch - From centrally planned to free market _ What can alumina refineries expect? | 25 |
| T. R. Ramachandran - Jawaharlal Nehru Aluminium Research Development And Design Centre in the service of Indian aluminium industries | 33 |
| ALUMINA | |
| P. Paschen - The life and patents of Karl Josef Bayer - His life and the history of the Bayer Medal..... | 43 |
| G. Winkhaus - One hundred years of bauxite digestion - History and development trends of the Bayer process..... | 47 |
| W. Arnswald, H. G. Kaltenberg - Development and future trends of the tube digestion process | 53 |
| F. Sitkei, A. Suri, E. Singhoffer, K. Solymár, J. Steiner - Reconstruction of autoclave lines by means of tube digester elements - Plant experiences..... | 63 |
| B. Cristol - From gibbsitic to diasporic bauxites: the different technological ways used by Pechiney | 75 |
| J-L. Théron - Latest plant experiences in the application of the Alusuisse precipitation process | 95 |
| H. W. Schmidt, W. Stockhausen - Latest development of large-scale cfb calciners for the alumina industry | 109 |
| D. G. Wood, T. K. Smith - ALUMINA quality trends - Meeting the demands of a new century..... | 131 |
| Gy. Bánvölgyi - Reactions of gibbsite and kaolinite in the Bayer liquor: a comprehensive kinetic model | 155 |

| | |
|--|-----|
| G. Baksa, I. Horváth, F. Sitkei, I. Somogyi, F. Valló - Development of the bauxite processing in the Ajka Alumina Plant..... | 173 |
| Z. Balogh, G. Grélinger, F. Sitkei, F. Valló - Development of alumina and silica based products in the Ajka Alumina Plant..... | 189 |
| K. Solymár, F. Sitkei, F. Valló, J. Zöldi - Application of lime chemistry at the processing of low grade bauxites..... | 203 |
| K. The - Control and disposal of organics from Bayer process..... | 213 |
| N. N. Tikhonov, S. Ya. Dantsig - Complex processing of nephelineraw materials. principle -data on process and. estimation of-the nepheline ores quality..... | 221 |
| E. A. Abdel-Aal, I. A. Ibrahim, A. S. Shabaan, A. K. Ismail - Alumina production from Egyptian non-bauxitic aluminium ores | 227 |
| R. D. Kanev, A. Andonov, K. Vafiady - New method for special aluminas production..... | 241 |
| ALUMINIUM | |
| N. E. Richards - Improving current energy efficiencies in reduction cells..... | 249 |
| K. A. Paulsen, I. Skogland, M. Skogland, B. Lillebuen, P. Stokka - Modernisation and further development possibilities of vs Söderberg technology | 269 |
| T. Utigård - Interfacial tension in the cryolite-aluminium system | 283 |
| B. Lillebuen, K. Hamberg, J. A.Larsen, O. M. Bakkerud - Alumina quality for modern smelters..... | 297 |
| S. Wilkening Raw materials and equipment in the production of prebaked anode blocks..... | 313 |
| G. Szalay, Gy. Baksa, R. Törvényi, E. Árkovits - New developments in Hungalu Ajka Aluminium Casting Plant | 329 |
| P. O. Aronson - Recycling of aluminium in Europe - Recycling of used beverage cans in Sweden | 337 |
| MATERIAL SCIENCE | |
| J. Sasvári - Precision of test methods - Determination of repeatability and reproducibility by inter-laboratory tests (IBM PC software of ISO 5725)..... | 347 |
| J. Sasvári; J. Zöldi; K. Papp; Gy. Horváth - Limitation of qualitative and quantitative X-ray phase analysis on red mud..... | 353 |
| F. Szűcs, F. Valló, Z. Balogh - The impurities of crystalline aluminium hydroxide..... | 365 |

| | |
|---|-----|
| ANNEX | |
| Opening Ceremony of the 7TH Congress of ICSOBA..... | 373 |
| Greeting Addresses..... | 373 |
| Donation of the Commemorative Medal of ICSOBA to dr. Giuseppe Callaioli..... | 376 |
| 7TH General Assembly of ICSOBA..... | 379 |
| Addresses..... | 379 |
| General Secretary's report on the activity of the ICSOBA in the period 1988-1992..... | 382 |
| International activity report..... | 385 |
| Awarding..... | 389 |
| Election of the new Presidency of the ICSOBA..... | 390 |
| Inaugural address of the new President..... | 393 |
| Hungarian Mining And Metallurgical Society (OMBKE): 100 years old..... | 395 |
| Prof. Dr. Olga Lahodny-Šarc Secretary General of ICSOBA has been awarded by the Honorary Membership of OMBKE..... | 398 |
| Biography of dr. Olga Lahodny-Šarc..... | 398 |
| Greeting Address at OMBKE 100th Centenary on behalf of ICSOBA..... | 400 |
| Greeting address on the occasion of the 100th anniversary of OMBKE from dr. Nolan Richards for TMS-AIME..... | 401 |
| Barony Bauxite Mines Ltd..... | 405 |
| Ajka Aluminium industrial Co. Ltd..... | 407 |
| Inota Aluminium Co. Ltd..... | 408 |
| KÖBAL Kőbánya Light Metal Works Co. Ltd..... | 409 |
| ALUTERV-FKI Ltd. HUNGALU Engineering And Development Centre Ltd..... | 410 |
| In memoriam Bálint Bányai..... | 411 |