

Contents

Preface	I
Contents	II
GENERAL	
Gy. Komlóssy - Hungary and the European Union in the reflexion of the aluminium industry	1
N. Sillinger - Privatization of the Hungarian aluminium industry on new ways	11
GEOLOGY AND BAUXITE MINING	
A. Mindszenty - Karst bauxite geology - quo vadis?	13
M. Celik, F. Suner - Lateritic/bauxitic occurrences in karstic areas an example from Central Anatolia, Turkey	19
B. Varga, Z. Horváth - Development of a gibbsite-bearing lateritic profile (Jos Plateau, NE-Nigeria) as shown by micromorphological features and chemical composition.....	37
A. K. Nandi, K. V. Krishnan - Diaspore in some Indian lateritic bauxite	39
I. Bodrogi, A. Fogarasi, E. Jocha-Edelényi - Data to the stratigraphic position of the bauxites overlain by cretaceous at Weyerer Bögen (NCA, Austria)	49
A. K. Nandi - Position of India's Eastern Ghats bauxite in the world and its role in developing bauxite-alumina industry	57
Gy. Bárdossy, B. Jankovics, A. Pataki, J. Tiszay - Geochemical- geomathematical study of the Halimba bauxite deposit, Hungary	71
S. Diószegi - Application of geostatistical methods and orebody modeling for definition of the localized grade variations of bauxite, in exploration and mining practice	73
M. E. Lewis - The making of a bauxite mine	87

I. Takács - Quality-oriented production and sale in Hungary at the Bakony Bauxite Mines Ltd	93
ALUMINA	
J-P. Riffaud - Process control in the alumina industry.....	111
C. Misra, V. Soi - Precipitation system software - for improved alumina yield and quality	125
F. Sitkei, F. Szeifert - Modelling in technical development and process control in alumina production	135
G. Lukonics, Z. Kovács, J. Vitéz - Quality control and its outcomes at Ajka Aluminiumindustrial Co. Ltd.	145
Y. Uzkikh, K. Kosin - Quality control of commercial products at Nikolaev Alumina Plant.....	157
K. Thé - Contaminant control in the Bayer process	159
E. H. Steinlechner - Hyperbaric filtration of red mud economical and environmental aspects.....	167
H. Mahadevan, H. K. Chandwani, A. K. Nandi - Effective use of gibbsitic bauxite in improving process efficiencies of alumina plants of Central India	177
I. V. Paromova, A. G. Suss, A. A. Mayer - Development of the technology to produce alumina from bauxites, having higher content of magnesium, manganese and iron carbonates.....	179
V. I. Zubaryev, S. A. Melkumyan, B. N. Odoky, S. Yu. Tsekhoversky, V. V. Chernov, I. P. Dobeyko - Complex processing of poor quality low-ferruginous bauxite into aluminium hydroxide, synthetic zeolite and rare metals	185
A. G. Suss, L. S. Rydashevsky - Behaviour of bauxite titanium minerals in Bayer process and their influence on the incrustation of heating surfaces. methods of deposits prevention.....	193

V. Berkh, E. Krasnopol'sky, A. Kiselev, O. Chashin - Some features of automated processes control in alumina production from nepheline ore.....	203
G. V. Telyatnikov, T. N. Timofeeva - Study of chemical, physical and structural properties of metallurgical and nonmetallurgical grades of alumina produced in Russia.....	219
Ž. Živković, N. Šrbac, J. Šestak - Influence of fluorides on the calcination of aluminium hydroxide	227
ALUMINUM	
G. Mori, P. Paschen - Mass, metals and energy balance in aluminium extractive metallurgy	235
R. Lokshin, L. Novotolskaya, G. Plessner, A. Trushev, G. Shupiatsky - Module aluminium reduction control systems for Russian and CIS plants	249
A. K. Syrdal - The new Šrđerberg pot	257
V. Potočník, L. Tikász, A. Meghlaoui, R. T. Bui - Aluminium electrolysis cell simulators as assistance tools for cell operation and control	267
R. von Kaenel, J. P. Antille - Magnetohydrodynamic stability in alumina reduction cells.....	285
K. A. Paulsen, W. K. Rolland, T. B. Svendsen, M. Bugge - Factors explaining the improvements in performance in the Šrđerberg lines at Hydro Aluminium Karmřy	299
T. R. Ramachandran, J. Horváth - Plant measurements for energy saving of aluminum electrolysis	311
U. Mannweiler, R. C. Perruchoud - Test methods for the determination of carbonaceous materials for the aluminum industry	323
R. Engelsman, P. Sommer - High quality anode production with state of the art baking technology.....	345

E. Wuilloud, P. Pouly - On the efficiency of rotating impellers to remove impurities from aluminium melt.....	347
I. Sándor, I. Sándor - Application of computer aided manufacturing follower system (CAMFS) at the Kőbal's aluminium foil rolling line	355
QUALITY CONTROL AND MATERIAL SCIENCE	
A. Csordás-Pintér, L. Varga - Electron beam studies of some particulate materials in the aluminium industry.....	357
A. T. Privolnev, V. A. Gotlib, N. N. Komarov - Usage of laser granulometer "Microsizer 201a" of VA Instruments (Russia) for express-analyses of grain size distribution for aluminium industry products.....	367
G. A. Romanov, A. T. Privolnev - Metrological estimation of certification errors for standard specimens in aluminium industry	375
H. Antrekowitsch, P. Paschen, F. Brandl - Quality control and production of antimony modified AlSi7Mg.....	379
L. Gillemot, F. Gillemot, G. Úri, M. Horváth, E. Geröly - Developing of aluminium standards for impact bending (Charpy) tests	389
L. Gillemot, M. Horváth, E. Geröly, J. Szönyegi - Three and four points flexural tests of ceramic materials.....	391
ANNEX	
Opening speeches	401
SPONSORS	
Ajka Aluminiumindustrial Co. Ltd.	410
Bakony Bauxite Mines Ltd.	411
Inota Aluminium Co. Ltd.....	412
Hovis Ltd.	413
KÖBAL Kóbánya Light Metal Works Co. Ltd.....	414