

## **INDUSTRIAL MINERALS IN BRAZIL: PRESENT SITUATION, CHALLENGES AND OPPORTUNITIES**

1MARSIS CABRAL JUNIOR, 2JOSE MARIO COELHO, 1JOSÉ FRANCISCO M. MOTTA, 3 MARCOS DONADELLO MOREIRA 1Institute for Technological Research of the State of São Paulo - IPT Cidade Universitária 05508-901 São Paulo-SP - email marsis@ipt.br 2CPRM - Brazilian Geological Survey Av.Pasteur, 404 - Rio de Janeiro - RJ, Brazil 3CBPM 4a Avenida, 460 - CAB Salvador - BA

Brazil, with its territorial extension of 8.5 million Km<sup>2</sup>, due to its diversity of geological environments, has a great potential for the industrial minerals. This geological favourability is at present translated into the production of about 50 varieties of industrial minerals. Official figures indicate that the values of the annual production is over US\$ 3.6 billion, with a ROM of 390m tpa, what corresponds to 29% of the total Brazilian mineral production (US\$ 14.3billion). Around 75% of the Brazilian industrial mineral total value refers to five groups, used mainly in the civil construction and in the agriculture: aggregates (US\$ 1.412m), limestone (US\$ 625m), clays (US\$ 292m) and phosphate (US\$ 186m), dimension stones (US\$ 150m). Another 25% of the production are distributed through 45 kinds of mineral goods, which are consumed by a wide series of economic segments, chiefly the sectors: ceramics, glasses, agriculture, metallurgy, foundry, paper/cellulose and chemistry. With such a diversified profile in production scale and technology, the Brazilian industry of industrial minerals (both extractive and transformation), is facing important challenges, after a bigger insertion in the competitive globalized market, concerning above all in the need to improve the raw materials supplies, in terms of variety and quality of the mineral substances offered to the market. Within this context of a high geological potential, great expanding domestic consumption market, and a mineral industry with segments presenting technological gaps, this work intends to translate the main technical, economic and management challenges of the sector, into opportunities to its development, from the mineral exploration up to the industrial application.