

EXPLORATION, MINING AND PROCESSING OF BEACH PLACERS IN INDIA

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This volume contains 12 papers, out of 21 abstracts of papers, received for the National Conference on 'Exploration, Processing and Mining of Beach Placer in India', held during Jan. 24-25, 2002 at Tuticorin. When the mineral industry based on placer minerals like ilmenite, rutile, garnet, sillimanite etc., is becoming increasingly important in earning substantial foreign exchange and providing local employment, with participation of both public and private sectors, conferences like the present one are welcome for exchange of information and improving the present methods in the three major activities of the industry, viz., exploration, mining and processing.

The 12 papers in this volume, together with their respective major aspects dealt with, are as follows: (i) Beach placer mining and related issues, by G. V. Rajamanickam (Tamil University, Thanjavur), with little on mining and mostly on the second aspect, including an unwarranted criticism on the licensing institutions like the Geological Survey of India (GSI) and Atomic Minerals Directorate; (ii) Status of placer exploration in India by A.R. Gujar (NIO, Goa) is a review on occurrence and resource development, with observations and suggestions; (iii) Marine mineral perspective beyond 2000 AD by B. Nagendernath (NIO, Goa), covers aspects like formation, potential sites, size-grade, perspective and constraints on 4 types of non-living marine resources (unrelated to beach placers) viz., Mn nodules, Co-rich Fe-Mn crusts, polymetallic sulphides-hydrothermal minerals, and methane hydrates; (iv) Saga of Teris, Southern Tamil Nadu by K.P. Thirvikramji and Sabu Joseph (Univ. of Kerala), deals with geomorphic, climatic, textural; mineralogical and genetic aspects; (v) Exploration for mineral resources around Indian coasts by T.K. Mallik (GSI, Kolkata) is an overview on mineral, biogenous, chemogenous and other deposits of sea, and not necessarily of beach placers; (vi) Existence of buried placers, its provenance and economic viability in and around Mahabalipuram, Tamil Nadu by P.V. Mohan and G. Victor Rajamanickam (Tamil Univ., Thanjavur), deals with drilling of 4 cores from a maximum depth of 1m in about 4 km stretch of beach ridge, estimation of heavy minerals in 3 size-ranges of 1.5, 2.25 and 3.5 phi and estimation of probable reserves of ilmenite, magnetite and garnet, respectively, as - 1.4, 1.3 and 0.4 lakh metric tonnes; (vii) Ilmenite-value addition and their demand in global market by P. Ganapathi (Kilburn Chemicals, Ltd,

Thoothkudi), gives procedure of manufacture of TiO_2 from Fe-Ti oxides by sulphate and chloride routes, its properties, applications and market figures of production and demand; (viii) A survey of benthic fauna along the southeast coast of India by A. Devadas et al. (V.O. Chidambaram College, Tuticorin) presents a listing of study areas and results on physicochemical parameters in them; (ix) Seasonal variation in beach profile and heavy mineral concentration along the coast between Kallar and Vembar, Tamil Nadu by N. Chandrasekhar et al. (V.O.C. College, Tuticorin and Tamil Univ., Thanjavur), gives field and lab. data; (x) The necessity on ecological study of black sand shores between Vembar and Tuticorin by M. Glory et al. (Tuticorin) gives briefly about the marshy plants and common species on black and white sand beaches; (xi) The global perspective for zircon market in the 21st Century by N. Chandrasekhar et al. deals with a brief scenario on consumption, supply and demand; and (xii) Beach placer deposits of southern Tamil Nadu and Kerala - Their probable source rocks by A.S. Janardhan et al. (Univ. of Mysore and V.O.C. College, Tuticorin) deals with the geology, geomorphology and mineralogy of rock-types in the area.

An edited volume dealing with papers presented at a National Seminar on a focused and timely topic like the present one is expected to be a systematic coverage under appropriate thematic sections, in tune with the title, and with more or less uniform style and error-free presentation. Unfortunately, this is not the case with the present volume as the editorial job was not done properly. This is exemplified by (a) lack of proper classification and grouping of papers under the three major themes of the conference; (b) non-uniformity in style of papers; (c) numerous errors, at many places, in grammar, spelling, usage of capital/small letters and punctuation, besides some even in titles of a few papers; (d) poor quality of reproduction of some figures with too small font size of letters to read; and (e) inappropriate selection of a few papers that are outside the scope of the conference on beach placers. A proper scrutiny of the manuscripts of papers before printing could have taken care of these avoidable aspects and would have greatly enhanced the value of this edited volume that is of interest to students, researchers and industry working on mineral sands.

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