Book Reviews

GEOLOGY OF TIN DEPOSITS IN ASIA AND THE PACIFIC. C. S. Hutchison (Editor), Springer Verlag, (1988), pp. 718, Figs. 404. Price: DM 248.

This comprehensive volume includes selected papers from the International Symposium on the Geology of Tin Deposits held at Nanning, China in October 1984. The highlight of this book is the extensive coverage (300 pp.) given to the little known Chinese deposits, particularly the major tin-polymetallic sulphide deposits of Dachang and Geiju. The Southeast Asian tin belt which accounts for more than half of world tin production, also finds adequate coverage (180 pp.). The volume contains 50 well-illustrated papers including five on general topics, 28 on China, 9 on the rest of Asia, 2 on Australia, 1 on Europe, 2 on Canada and 3 on South America.

The introductory article by K. F. G. Hosking provides an overview of salient features and a morphogenetic classification of the world tin deposits. He classifies the deposits into thirteen groups such as placers, skarns, pegmatites, greisen, sulphide lodes, sedimentary and metasomatic deposits. Guo Wenkui touches upon tin metallogeny and indicates that Mesozoic and Cenozoic are the major metallogenetic epochs for tin. P. J. Pollard *et al.* examine the genesis of greisen-type tin systems. W. D. Menzie *et al.* propose grade/tonnage models for primary tin deposits which help in mineral exploration strategy and provide a basis for quantifying undiscovered resources. C. Premoli suggests exploration strategy for large, low grade, primary tin deposits which assume great relevance in the context of steadily depleting alluvial deposits. C. S. Hutchison deliberates on the metallogenic provinces of Southeast Asia and China in the context of Gondwanaland break-up. The foremost metallogenetic event is the Malayan-type collision between two continental blocks resulting in crustal thickening and generation of S-type garnite batholiths. Another favourable setting is the pre-rift thermal reworking of continental crust to produce anorogenic granitic complexes. E. J. Cobbing dwells on the interesting contrast between the basemetal-bearing Andean batholith and the tin-bearing granites of Southeast Asia. The tin potential of the Himalaya will have to be evaluated in this context.

Chen Xin and Wang Zhitai deal with the distribution and metallogenesis of the tin deposits of China. Geological features, geochemical and geophysical exploration methods, mineralogy and petrology, tectonic setting and genesis of a variety of deposits from granitic, sedimentary and volcanic environments in China are dealt with in 26 papers. Geochemical and geophysical prospecting and classification of granites from Indonesia, geology of tin deposits and mineralogy of tin ores from Thailand and geology of tin occurrence in Nepal Himalaya are described in 8 papers. Surprisingly there is only one paper on Malayan tin deposits and that too is on primary tin. It is sad to note that the only new tin prospect of India from the Bastar district of Madhya Pradesh does not find a place or even a mention in this regional synthesis.

The geology of the tin deposits of Bolivia and Brazil, the tin potential of Hercynian granites of Iberia, the economic geology of Western Tasmanian tin province, regional geochemical surveys in Canadian Cordillera and the tin skarns of Yukon Territory described in the remaining 7 papers complete the global survey of tin deposits.

The valuable efforts of the editor C. S. Hutchison and the dedicated support of Zhang Zhongmin in assembling such an immense wealth of data deserve all praise. This volume represents a great milestone in the economic geology of tin.

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