ISOTOPIC AGE MAP OF PENINSULAR INDIA. Geological Survey of India. Scale 1:5,000,000, with an explanatory brochure, 1989. 83 pp.

This is the first thematic map to be produced in India on the fairly large scale of 1:5 million on the important theme of isotopic ages. The isotopic ages available for a vast subcontinent like India, unfortunately, are very few, are of variable quality and are mostly obtained through collaborative efforts involving several foreign laboratories. A synthesis of these data was long overdue. Such a synthesis provides the first basis to understand the Indian Shield in terms of its several age provinces.

This map, apparently, has had a long odyssey from the early drafting stage to its present form. It was compiled initially twenty years ago and a draft copy printed in 1978. It was updated in 1983. Unfortunately, it has taken seven long years from the drawing board to its ultimate release in 1990. Such a long gestation has robbed the map of its freshness and its usefulness. It has also become out of date.

The scheme of depicting age data with an interpretative bias (such as age of crystallisation, metamorphism) has the inherent problems of constantly changing views with the advent of more precise dating methods. The Rb-Sr age which was originally thought to represent igneous episodes even in highly metamorphosed igneous rocks, has now come to denote the peak of metamorphism in many terrains. If the method were given primacy in the map instead of interpretation, it would have been more realistic. This would have obviated the need for listing Rb-Sr model ages under separate headings. The colour scheme of the map could have been made more attractive. Representing greenstone belts/schist belts and granulite belts under the same colour as a single box in the legend, takes away much of the needed clarity in the understanding of regional tectonic framework. Dharwar Group does not find a place in the legend of the Archaean schist belts in the age group 3000-2600 m.y. surely deserved to be distinguished by a separate colour in the map.

The explanatory brochure accompanying the map has two parts, with Part-I giving the details of the map, and Part-II reviewing the geochronological information available till the date of finalisation in 1983. The revised ages involving the new constants are not given, either in the map or in the brochure. The level of confidence of age data mentions only about the broad aspects of dating methods without assessing the value of superior dates from the not-so-good ones.

U-Pb dating of zircons is now the most sought-after method, because of the high precision and accuracy. Such data are becoming available in India only in a few rare areas. Attributing a high degree of reliance to the U-Pb dates on single crystal zircons obtained from two decades old literature does not amount to a critical evaluation of the database, which was expected from a specialised compilation like this map. There are many omissions in the list of references.

Notwithstanding these shortcomings, this map, marking the first attempt at synthesizing the available geochronological information is to be welcomed.

The price of the map is not indicated, but we do trust it will be easily available for study by all students of Indian geology. We have no doubt that as expressed by the Director-General, in his foreword, it will act as a catalyst for further refinement of the geology, tectonics and metallogenic development of the Indian continent.
BOOK REVIEWS

We do earnestly hope that the next edition will not only be more up-to-date, but also contain a more critical appraisal of available age data. The importance of such an appraisal cannot be over-emphasized in the context of the age data being used indiscriminately for various kinds of interpretations without a critical evaluation.

A word of praise is due to Dr. M. N. Balasubrahmanyan for his initiative and sustained interest in bringing out this publication.

B. P. RADHAKRISHNA


Any attempt at information gathering and making it available to research workers is to be welcomed. We wish to commend the special efforts put in by D. Chandra and M. P. Singh in putting together references to literature on petrology of Indian coals. The period covered is from 1932 to 1988. Entries are arranged alphabetically making the search easier. A subject index is provided.

B. P. RADHAKRISHNA

ANNOUNCEMENTS

BRAZIL GOLD '91 and associated field trips will be held in Brazil, May 7-22, 1991. Previous meetings of Gold '82, 84, 86 and 88 were held in Zimbabwe, South Africa, Canada and Australia, respectively. Brazil Gold '91 will be a forum to present and discuss matters and new developments related to the multiple aspects of geology, exploration and genesis of gold ores. Anyone interested is invited to attend and participate in the conference. The Second Circular, containing norms for Extended Abstracts and Registration Forms for the conference, hotel and field trips has been issued. It provides new information and approximate costs.

Detailed information will be provided in the Third Circular, which will only be sent to those who contact the Organizing Committee by February 15, 1991. The deadline for receipt of 500-word abstracts is July 31, 1990, and of Extended Abstracts is December 15, 1990.

Please contact: V. K. Nayak, Indian School of Mines, Dhanbad, Telex: 0629, 214 and obtain further details.

INSA MEDAL for Young Scientists 1991, Invitation for Nominations. INSA Medal for Young Scientists instituted in 1974 by the Indian National Science Academy, awarded annually, are intended to honour talented young Indian scientists in recognition of their outstanding contribution in any branch of science or technology coming within the purview of the Academy. The work done in India by the nominees will be taken into consideration for the award. The age of the nominees should be below 32 years on 31 December preceding the year of the award. Only those born on or after 1 January 1959 are eligible for consideration in 1991.

Fellows may send their nominations so as to reach us by 30th September 1990. The Council will meet and make its recommendations to INSA after a review of all the nominations received.

Nomination proforma can be obtained from the Indian National Science Academy, Bahadur Shah Zafar Marg, New Delhi 110 002, by sending a self addressed envelope.