Recent Books of Geology – October - November 2001

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Geological Data Analysis Statistical Methods edited by H.S. Pandalai and P.K. Saraswati Series : (Recent Researches in Geology - Volume-18)

Pub :Hindustan Publishing, New Delhi Year : 2000 Bib : xvi, 220 p., tables, figs., ISBN : 8170750415 Price : US\$ 30.00

Contents: Preface. 1. Synopsis of newer multivariate methods in geology/Richard A. Reyment. 2. Application of statistical techniques in environmental geochemistry/D.S. Ratha. 3. Morphometrics of some lepidocycline foraminifera: applications in taxonomy and biostratigraphy/Pratul Kumar Saraswati and Arun Kumar. 4. Seriation of an original data matrix as applied to biostratigraphy/James C. Brower. 5. Milankovitch cycles and sequence boundaries/W. Schwarzacher. 6. Mineral assessment and target delineation: intrinsic sample concepts, methods and case studies/De Verle P. Harris. 7. Recoverable reserves and their economic significance/P.A. Dowd. 8. Introduction to the modelling of the support effect/Christian Lajaunie. 9. Models and techniques in recovery estimation/A. Subramanyam and H.S. Pandalai. 10. Geostatistical techniques applied to groundwater hydrology/Shakeel Ahmed and Vanita Agnihotri. 11. Time (spatial) domain stochastic modelling of geochemical assays of iron ores: a case study from Northern Goa, India/P.S. Raikar

Memoirs Geological Survey of India,

Volume CIII : Geology and Geochemistry of the Sukinda Ultramafic Field, Cuttack District, Orissa Author : P.K. Banerjee. Reprint.

Pub : Geological Survey of India, Kolkata Year : 2001, Bib : 171 p. Price : US\$ 12.00

Contents: 1. Introduction. 2. Regional stratigraphy and structure. 3. Petrography of ultramafic silicate rocks and their hydrothermal derivatives : i). Petrology of the first phase ultramafites. ii). Petrology of the second phase ultramafites—the orthopyrpxenite suite. 4. Chromite deposits of Sukinda. 5. Structure of the Sukinda field. 6. Exploration geochemistry : i). Primary dispersion. ii). Secondary dispersion. 7. Origin of the Sukinda ultramafic complex. 8. Summary and conclusions. References. Locality index

Mineral Atlas of India

"Publication of a mineral Atlas of India depicting mineral resources and geological set up has been a long felt need. In the present edition of the Atlas, on scale 1:2 million, attempts have been made to project not only the distribution of the mineral deposits, but also their potentialities. Compilation of this Atlas is aimed to cater to the needs of the mineral industry and the geoscience community in general. In view of the recent liberalization of the mineral policy, it is expected that this publication will be of help to the perspective investors to get an overview of the country's mineral potential.

"The Atlas has been prepared on the format of the mineral distribution Atlas of ESCAP region and marginally modified to suit Indian standards and needs. The map data are presented in an Atlas form with each map in 60 X 40 format for better presentation and readability. A total of 24 maps cover the entire country. Each map consists of two to four sheets depending upon the number of mineral commodity groups present in that area. In total there are 77 map sheets including the index map.

"A generalized geological base, prepared in accordance with the geological map of India on scale 1:2 million (Seventh edition, published by GSI in 1998), is presented. However, Archaean and Proterozoic rocks are shown in more details, as most of the metalliferous deposits are associated with this era. Phanerozoic rocks, on the other hand, have been broadly subdivided into Palaeozoic, Mesozoic and Cainzoic. Chronostratigraphy has been shown in standard alphanumerics and also differentiated by colours.

"The mineral data are collected and collated from various publications and unpublished reports and maps. The database of different mineral commodities ranges from 1980 to 1994. The mineral commodities are subdivided into Metallic, Non-metallic minerals and Mineral fuel. Oil and natural gas, however, have not been included.

"In this Atlas the minerals are grouped into nine categories mainly on end use basis namely (1) Iron and Ferro-alloy metal, (2) Base metal, (3) Light metal, (4) Precious metal, (5) Chemical and fertiliser mineral, (6) Ceramic and refactory mineral, (7) Precious stone, (8) Other industrial mineral, (9) Mineral fuel (Coal and lignite). All the mineral depsits are numbered, whereas the occurrences are not, except for the strategic minerals. A list showing the deposit name, location, lithology and age of host rocks etc., has been appended to the Atlas (Part III)".

Pub : Geological Survey of India, Kolkata Year : 2001 Bib : 44 maps, 64 pages in 3 parts 18" x 22" colour maps ISSN : 0254-0436. Price : US\$ 225.00

Memoirs of the Geological Survey of India, Volume XLV, Part I. The Geology of North-Eastern Rajputana and Adjacent Districts. Part II. The Gwalior and Vindhyan Systems in South Eastern Rajputana

Author : A.M. Heron.

Reprint.

Pub : Geological Survey of India, Kolkata Year: 2001 Bib : viii, 189p map plates Price : US\$ 25.00

Contents: Part I. The Geology of North-Eastern Rajputana and Adjacent Districts: I. Introduction: 1. Previous observers. 2. Thermal springs. 3. Physical features. II. Geological formations. III. Pre-Delhi rocks (Aravalli system). IV. Raialo limestone and quartzite. V. Alwar series: 1. General description. 2. Detailed description. VI. Kushalgarh limestone. VII. The hornstone breccia: 1. General description. 2. Exposures in detail. 3. Origin of the hornstone breccia. VIII. Ajabgarh series: 1. General description. IX. Igneous rocks intrusive in the Delhi system: 1. Amphibolites. 2. Granites. 3. Pegmatites. X. Posttertiary formations: 1. Characteristic flora. XI. Nomenclature and correlation. XII. Economic geology: 1. Iron. 2. Manganese. 3. Gold. 4. Nickel. 5. Copper. 6. Lead and silver. 7. Graphite. 8. Asbestos. 9. Rutile. 10. Kaolin and mica. 11. Rock-crystal. 12. Steatite. 13. Marble. 14. Building stone. 15. Slate. 16. Bitumen. 17. Salt. Locality index. Subject index. Plates and sections. Geological map.

Part II. The Gwalior and Vindhyan Systems in South Eastern Rajputana: I. Introduction: 1. Area. 2. Previous observers. 3. Field work. 4. Faults. 5. Topography. 6. Formations present. II. Aravalli system. III. Gwalior system: 1. Ranthambhor division. 2. Bhagwantgarh outcrops. 3. Chout ka Barwara bed. 4. Exposures between the faults. 5. Malarna hills. 6. Hindaun hills. 7. Correlation. IV. Lower Vindhyans: 1. Breccia (Tirohan). 2. Limestone (Tirohan). 3. Conglomerates and quartzites. 4. Origin of breccia. V. Upper Vindhyans: 1. Disposition. 2. Kaimur sandstone. 3. Panna shales. 4. Lower Rewa sandstone. 5. Jhiri shales. 6. Upper Rewa sandstone. 7. Ganurgarh shales. 8. Bhander limestone. 9. Lower Bhander sandstone. 10. Sirbu shales. 11. Upper Bhander sandstone. VI. Recent and subrecent deposits: 1. Soil. 2. Vegetation. 3. Alluvium and concretions. VII. Faulting of the area: 1. South-eastern fault. 2. North-western fault. 3. Minor faults. VIII. Local induration in folded strata: 1. Gwaliors. 2. Upper Bhanders. 3. Rewas and Kaimur. References to registered specimens. Locality index. Index

Memoirs of the Geological Survey of India, Vol. LIX : The Lower Gondwana Coalfields of India

Author : Cyril S. Fox

REPRINT

Pub : Geological Survey of India, Kolkata Year : 2001 Bib : xvii, 386 p., photos, Price : US\$ 8.00

Contents: Preface. 1. Introduction. 2. Geology. 3. Distribution of lower Gondwana coalfields. 4. Coalfields of the Indian borderland and Eastern Himalaya in Assam and Bengal. 5. Coalfields of Bihar. 6. Coalfields of Bihar (contd.) : Damodar valley coalfields. 7. Coalfields of Bihar (contd.) : Damodar valley coalfields—contd. 8. Coalfields of Bihar (contd.) : Damodar valley coalfields—contd. 9. Coalfields of Bihar (contd.) : coalfields of Palamau. 10. Coalfields of Orissa. 11. Son valley coalfields. 12. Coalfields of the central provinces : Chhattisgarh coalfields. 13. Coalfields of the central provinces (contd.) : Satpura Gondwana basin and coalfields. 15. Coalfields of the central provinces (contd.) : Satpura Gondwana basin and coalfields. 16. Coalfields of the central provinces (contd.) : Wardha valley coalfields. 17. Pranhita-Godavari valley coalfields of Hyderabad state and Madras.

18. Summary of coal reserves (Lower Gondwana). 19. Statistical information : the production of coal in India. General index. Geographical index Theory of plates Author : K. Chandrashekhara Pub: University Press, Hyderabad (Dist. By: Orient Longman Year : 2001 ISBN: 8173712530 xi, 410pp, 26cm, Includes Bib. ref. and index. Price : US\$ 13.50 _____ Geology of Tamil Nadu and Pondicherry Author : K.S. Subramanian and T.A. Selvan Pub : Geological Society of India, Bangalore Year : 2001 Bib : 192pp Price : US\$ 15.00 _____ Title : Computer applications in mineral industry: Third Indian Conference on Computer Applications in Mineral Industry (ICCAMI-2001), 17-18 march 2001, New Delhi Editors : C. Bandyopadhyay, P.R. Sheorey Pub: Oxford & IBH Pub. Co., New Delhi Year :2001 ISBN:8120414810 vii, 332pp., ill., 25cm, Includes bib. ref. Price : US\$ 29.50 Seismotectonic Atlas of India and its environs (in 42 sheets; Scale 1:1 million) Pub : Geological Survey of India, Kolkata Year : 2000 Price : US\$ 130.00