

Canadian Mapping System is well presented (pp.20-28). There are quite a few papers on techniques and instrumentation that can be fruitfully used in the study of the ocean bottom. A few papers deal with placer deposits (pp. 71, 77). A new Deep Sea Rock Drill, recently devised is illustrated and its use explained (pp. 144-145) for sampling of underwater sediments and rocks. Whereas it cannot be said that all the studies made have economic potential, the maps can be used with profit in the following investigations:

- (i) Mineral exploration and development
- (ii) Deployment of research instrumentation on or near the sea floor, including submersible operation
- (iii) Fishing operation using deep trawl or bottom fishing gear
- (iv) Subsea pipelines or cable routing
- (v) Geological hazard assessment
- (vi) Surveys of ocean waste-disposal sites
- (vi) Fish habitat research

India is already involved in some of these fields of activity and a perusal of the experiences of studies made in USA is bound to be helpful in our present and future investigations. One of the laudable efforts made by NOAA is involving many private and other public organisations in its program and study, resulting in the accumulation of vast amount of data. India would do well to emulate these efforts to the extent possible.

R.V.

WORKSHOP ON CD-ROM TECHNOLOGY

Right information at the right time is vital in all walks of life to arrive at definite conclusion and in decision making. For this, information gathering, storing and accessing are necessary.

A 3 day workshop was held on CD-ROM technology at Information Centre for Aerospace Science and Technology (ICAST), National Aerospace Laboratory (NAL), Bangalore from 16th to 18th November 1993 organised by National Information Centre for Compact Discs (NICDROM) of NAL, Bangalore in collaboration with the National Information System for Science & Technology (NISSAT/DISIR), New Delhi. As a part of NICDROM activity in propagating CD Technology by way of arranging Workshops/Training and helping in CD system establishment, attending enquiry services, this workshop was organised. Bringing a bimonthly publication called C-D Focus is also one of the activities of this centre.

Delegates from all over the country representing different S&T organisations, libraries, Universities etc participated. A series of lectures coupled with demonstrations were given. In the inaugural address the capabilities and the advantages of CD-ROM database over online databases were highlighted. CD-ROM - Compact Disc Read Only Memory is a tremendous information

storage media which has great impact on information technology. It is an optical disc of 120 mm diameter and 1.2 mm thickness made of a tough plastic substance called polycarbonate. It has a storage capacity of more than 600 MB of information which is equivalent to the entire text of 20 volumes of an encyclopedia and 3,00,000 pages of A4 size text. It is a prerecorded disc allowing the user for reading only. CD-ROM can be accessed randomly and it has a transparent layer preventing dust reaching the data area. It is virus-free. Since its first production in 1985, more than 4600 CD-ROM databases including multimedia are available commercially. CD-ROM is not restricted to the applications in library and information services only but has an important role in business, education, medicines, law, geography etc. Multi-media CDs with text, audio, graphics and animation are likely to bring a revolution in education and entertainment area. It is emerging as a better alternative to online information retrieval since it is not telecom dependent particularly in developing countries where telecom facilities are yet to attain perfection. It has a low cost medium for publishing and physical distribution of large volume data.

In the keynote address it was stressed that compressing information through language, mathematical symbol etc. and providing them in the shortest time with low cost was necessary. Volume of information itself is a barrier and for that proper information management is required and proper information should reach without distortion to end-user of all categories including farmers, social scientists, researchers etc.

A number of topics were touched upon C-D ROM Technology, establishing CD system, CD-ROM world scenario and Indian experience, sources of literature on DC-ROM, hardware and software issues, retrieval engines, library applications, CD publishing, Networking, specialised databases created for specific purpose ex. military specification and standards etc. Multimedia demonstration combining text, graphics, motion sequences and audio by Namtech System Pvt. Ltd, Bangalore was the main attraction. Tips for database searching were also given to the participants and they were allowed to search various CD-ROM databases. Organisers, particularly Mr. I.R.N.Goudar and Mr. H.S.S.Murthy deserve to be congratulated for the excellent arrangements of lectures and demonstrations. Participants were largely benefited by this workshop. Some important articles on CD-ROM appeared in international journals, a directory of CD-ROM agencies/suppliers in India and a dictionary of technical terms used in this technology were compiled and distributed in the form of a book and it forms a very useful reference.

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