

**2nd National
Online/CD-ROM
Users Group Meeting
July 15-16, 1993**

at

*Technology Bhawan, New Mehrauli Road
New Delhi - 110 016*

Objective

To provide forum for users to share experience, ideas and skills on various aspects of Online & CD-ROM technologies.

If you wish to

- participate
- make a presentation
- demonstrate your product

Contact

The Joint Adviser

National Information System for Science & Technology
Department of Scientific & Industrial Research
Technology Bhawan, New Mehrauli Road
New Delhi - 110 016

Tel : 651583 Fax : 6862418

niscant

A TO Z IN COMPUTERS

ZENITH COMPUTERS LIMITED

**TIES UP WITH
ACER INCORPORATED**

**INTRODUCING INTERNATIONALLY ACCLAIMED
HIGH PERFORMANCE COMPUTER SYSTEMS**

NOTE BOOK COMPUTERS
(Based on 386 SXL/486 Sx with MONO or COLOR VGAs)

CHIP UP RANGE
(ZENITH/ACER Range of IBM Compatible Systems)

PERSONAL ACTIVITY CENTER
(High Performance Multi Media - ACER PAC)

For Details Contact

Sandeep Chadha

ZENITH COMPUTERS LIMITED
35, PUSA ROAD, NEW DELHI 110 005

Tel : 5735138, 5720423, 5715250

NISSAT

NEWSLETTER

Vol. 12

No. 1 January-March 1993

Editorial Committee

Dr A. Lahiri
Jt. Adviser (NISSAT),
Department of Scientific & Industrial Research
New Delhi-110016.

(Smt) S. Ravindran
Dept. of Scientific & Industrial Research
New Delhi-110016.

Shri B.G. Sunder Singh
Dept. of Scientific & Industrial Research
New Delhi-110016.

Prof. R.G. Gupta
Dean, Computer Sciences Centre
JNU, New Delhi-110067.

Dr S. Mallick, Secretary
Society for Information Science
c/o PID
New Delhi-110012.

Shri H.C. Jain, Treasurer
Society for Information Science
c/o PID, New Delhi-110012.

Editor: Ram D. Taneja

Editorial Office: S-371, Greater Kailash-I,
New Delhi-110048.

© 1993 DSIR, New Delhi.

Published by the Society for Information Science on behalf of National Information System for Science & Technology (NISSAT), DSIR, Government of India, Technology Bhawan, New Delhi-110016.

NISSAT Newsletter, published quarterly, is the official organ of NISSAT, and is aimed at disseminating information concerning programmes, activities and achievements of NISSAT as also of the various centres functioning under it. Additionally, it attempts to project major developments in the field of information science at national and international levels.

Communications concerning the Newsletter may be addressed to Dr A. Lahiri, Jt. Adviser (NISSAT), Department of Scientific & Industrial Research, Government of India, Technology Bhawan, New Mehrauli Road, New Delhi-110016. Material published in the Newsletter can be reproduced with due acknowledgement to the source.

Established Institutions Watch Out!

Non-profit institutions in our country are known for their characteristic lethargy in mending their approach and actions, the more so, because the demand-supply factor did not usually influence the information market. Dominated by single sources of supply, the environment has remained by and large non-competitive. In a sellers' market where alternatives were either not available or were too expensive to adopt, the demand was also stressed. A switchover to market orientation is, therefore, difficult. The large and established operators often woke up to the realities of the world only to find that the market had already slipped out of their control. A few examples:

Until recently, document supply services were being managed by a few large institutions. The services were cheap but awkwardly slow and also uncertain. The users perforce had to look up to the expensive but sure-shot supply sources located outside the country. Given the new directive that the institutions are to generate revenue to offset a large part of the cost, the service prices were jacked up without commensurate tuning up of service functions. Scores of new supply sources have now come up, promoting competition. Moreover, many institutions which were running free feeder services to the large supply sources, started charging for their services. As a result, the old time suppliers lost the market in absolute terms as well as in terms of market share.

The story of medical information also follows the same course. Several institutions flushed with financial resources and facilities from the Government are providing free or low-fee services. It would be interesting to study as to how small private entrepreneurs could still make a living out of similar line of services.

End users' perception of the relative roles of NICNET, INDONET, INET (VIKRAM) and ERNET in computer communication and E-Mail would be even more interesting to relate, especially because all of them have now come out of their niche market.

To make good budgetary deficit, the institutions have started tapping various possibilities of supplementing resources. One common way is to cost manpower for ongoing and future projects often at an exorbitant manmonth rate or manday rate on consultancy basis. While everybody would appreciate the exigencies of the situation, no one would like to compensate for the slackness pervading the established institutions today.

The moral of the story is loud and clear. The old sellers' market is gradually giving way to open and competitive real-world market environment. The established institutions, howsoever affluent they may be should now rethink on the roles they intend to play lest they should lose the race to their small but more dynamic partners.

— A. Lahiri

NISSAT

NEWSLETTER

Vol. 12

No. 1

January-March 1993

CONTENTS

Established Institutions Watch Out!	1
Bombay Library Network Commissioned	3
Budget Allocations for NISSAT Centres	5
APINESS Regional Advisory Group—New Delhi Meeting	6
Scientific Translation: Current Perceptions	9
Technical Communication: SIS Training Course Chandigarh	11
Information Seeking and Communication Behaviour of Indian Scientists—NISSAT Study	14
News and Events	19

Bombay Library Network Commissioned

The Bombay Library Network (BONET) was inaugurated by Shri N. Vittal, Secretary, Department of Electronics, Govt. of India at the National Centre for Software Technology, Bombay. (NCST) on 6 November 1992.

The Network sponsored by National Information System for Science and Technology (NISSAT), is the latest in the chain of projects like DELNET (Delhi libraries Network), CALIBNET (Calcutta Libraries Network) and PISNET (Pune Libraries Network).

The aim of BONET is to build a low cost library information system which can possibly be used as a model for future expansion of this service even outside Bombay.

BONET also benefits significantly from the experience gained, and facilities created, by the Education and Research Networking (ERNET) Project of the Department of Electronics, Govt. of India, assisted by the United Nations Development Programme. BONET is aimed at promoting cooperation between libraries in Bombay. The

focus is on inter-library activities, rather than on computerising individual libraries. However, participating libraries will, no doubt, computerise their own operations and are likely to share their experiences with each other. BONET will offer training related to library computerisation and networking, and speed up computerisation of Bombay libraries.

While inaugurating the Network Shri Vittal observed that networking should be taken as a mission and a network empire should be built.

In his introductory remarks, Dr. S. Ramani Director NCST said that the focus was on inter-library activities rather than on computerising individual libraries. BONET will however, offer training related to library Computerisation and networking. BONET will be using existing communication facilities effectively for linking the libraries. A library can reach BONET by dialling up into one of the phone numbers set apart for the purpose. Member libraries are urged to use existing leased lines or to acquire leased lines to fully benefit from on-line services, Dr. Ramani said.



Shri N. Vittal, Secretary, Department of Electronics at the Inaugural function of BONET. Seated at the dais are (from right) Dr. A Lahiri (NISSAT), Dr S. Ramakrishna (NIC), Dr P. Sadanandan and Dr S. Ramani (NCST).



A Section of the Audience

BONET is expected to become self sufficient for funding inter-library operations within a few years. Participating libraries will pay a subscription for this purpose. Grants from NISSAT, it is expected, will enable the project to start off and grow. The annual subscription fee payable by BONET members will depend upon member's staff size and the nature of activity. BONET membership provides for access to its centralised catalogues and for E-mail among BONET members. However, access to library related services outside Bombay in India and abroad would require use of ERNET. This would require additional payment of an amount equivalent to the BONET subscription.

Dr. A. Lahiri Jt. Advisor NISSAT, who spoke on the occasion, said that library networking would soon reach Pune, Madras and the north-east. He said that a NISSAT card would soon be launched and like other credit cards, this card would be a commercial proposition and enable its subscribers to borrow books from the national library network. Among others who spoke on the occasion were Dr. S. Ramakrishnan Director ERNET, Dr. Maya Avasia, Librarian TIFR and Dr. P. Sadanandan Associate Director NCST.

Inter-library Activities of Interest to BONET

The services offered through BONET include the following:

- Consultation on standards
- Organised training for selected staff of participating libraries
- On-line catalogue of periodicals for the region
- On-line catalogue of books for the region

- On-line catalogues of preprints/reprints
- Inter-library lending of books and periodicals
- Inter-library requests for photocopying
- Computer network support for book ordering
- Information retrieval services
- On-line document delivery of items (such as technical reports) made available by participating libraries in machine readable form
- On-line access to foreign databases, subject to the user's willingness to pay the costs incurred
- Email interface for inter-library queries, and
- Email facilities to order reprints from abroad, when necessary
- Dissemination of information, on new books etc, using Email, Bulletin boards, and SDI techniques
- Courier service for inter-library exchange of materials

Subscription

The annual subscription fee payable by BONET members will depend on the member's staff size and nature of activity.

Subscription in Rs per year

Staff Size	Not-for-profit Organisations	Others
Less than 200	5,000	7,500
200-500	10,000	15,000
500-1000	15,000	22,500
Above 1000, and for all libraries using a leased line connection to the system Book	30,000	45,000
Sellers (using only limited net-work facilities)	—	4,000

Members who pay an annual subscription before Sept 1993 will get an added advantage. This payment will cover the entire period from the date of joining till Sept 30, 1994.

There is no admission fee at present. Prospective members may kindly note that the annual subscription rates are likely to increase in future, as the network attempts to approach financial self-sufficiency.

GO DIRECT TO THE SPECIALIST

abi

- Serving the needs of *special libraries* and *information professionals* for over 15 years.
- *First Indian supplier to introduce CD-ROM services* more than five years ago—experience unrivalled by any other Indian source.
- Specialising in CD-ROMs featuring **Scientific, Technical, Business, Educational and General Reference** information.
- Official agent for all major CD-ROM publishers in the world.
- Full range of **CD-ROM Drives, Multi Drives, CD-ROM Workstations, Portable CD-ROM Workstations, CD-ROM Networking Solutions, WRITE-ONCE OPTICAL Drives (WORM), ERASABLE OPTICAL (RE-WRITEABLE) Drives** from leading manufacturers.
- ABI's service is based on the three pillars of **SERVICE, SUPPORT & ADVICE/CONSULTATION**

SPECIAL OFFERS:

In our modest endeavour to promote the use of CD-ROM technology we make the following special offers:

1. FREE MATSHUSHITA-KOTO-BUKE (PANASONIC) CD ROM SCSI INTERNAL DRIVE TO THE SUBSCRIBERS OF **MEDLINE (1966 to current year) ON CD-ROM**. Subscriber will have permanent ownership of the CD-ROM Drive with no obligation to renew the subscription in 1994. RUSH YOUR ORDER AS OFFER IS VALID TILL **31st July, 1993**.
2. **CD-ROM Drives of leading manufacturers are available at concessional prices** as a package with subscription to CD-ROM database(s). Please inform us title(s) of CD-ROM database(s) required by you. We shall inform you the concessional price of the CD-ROM Drive to be supplied by us.
3. FREE MATSHUSHITA-KOTO BUKE(PANASONIC) CD-ROM SCSI Internal Drive (present market price over Rs.45,000/-) plus one year limited warranty, **for every order of the value of US\$ 12000** for purchase of CD-ROM Databases. **Offer valid till 31st August, 1993.**

ABI BOOKS (P) LIMITED

404 SKIPPER CORNER, 88 NEHRU PLACE,
NEW DELHI - 110 019, INDIA.
PH: 6432653, 6461682.
REGD. OFF.: VAIKUNTH, 82-83 NEHRU PLACE,
NEW DELHI - 110 019, INDIA
TELEX: 031-66608, FAX: 91-11-6448917/6447347

Please send me a
Free copy of a latest Microinfo CD-ROM Newsletter
List of CD-ROM titles available on following subjects.

i. 1.....2.....3.....
ii. 1.....2.....3.....
Name,
Address,
Phone / Fax

ABI Books Pvt. Ltd.
404 Skipper Corner, 88 Nehru Place,
New Delhi - 110 019

Budget Allocations for NISSAT Centres

Centre		92-93 Rs (lakhs)	93-94 Rs (lakhs)
NICMAP	Rev. Exp	1.31	1.05
	Matching Grant	4.36	
	Projected Revenue	(4.76)	(5.23)
NICFOS	Rev. Exp	1.39	1.11
	Matching Grant	2.44	
	Projected Revenue	(2.95)	(3.25)
NICLAI	Rev. Exp	1.02	0.80
	Matching Grant	1.29	
	Projected Revenue	(0.018)	(0.198)
NICDAP	Rev. Exp	4.16	3.33
	Matching Grant	1.14	
	Projected Revenue	(0.94)	(1.04)
NICTAS	Rev. Exp	3.45	2.76
	Matching Grant	3.62	
	Projected Revenue	(2.12)	(2.33)
NICHEM	Rev. Exp	2.21	1.77
	Matching Grant	5.41	
	Projected Revenue	(1.95)	(2.41)

Attention

INDUSTRIAL HOUSES, RESEARCH ORGANISATIONS, BOOKSELLERS

Latest Books/Market Research Reports Available on following subjects :

- * **PAPER INDUSTRY IN INDIA, Retrospect and Prospects (1992) Rs. 250**
Early Developments-World Trends-Present Status-Paper Industry Through Plan Era-Directions of Future-Development-Pollution Control and Recovery of chemicals-Newsprint-Special paper (72 varieties).
- * **ENVIRONMENT, DEVELOPMENT AND POVERTY (1992) Rs. 200/-**
Environmentally Sustainable Development-Poverty, Development and Collective Survival-Role of NDDs-Self Growth and Poverty Alleviation-Changing Family, Kinship Support System and Socio-Development Policies-Dynamics of Institutional Intervention in Rural Development-National Food Security, etc.
- * **OILSEEDS IN INDIA - Status & Prospects (1992) Rs. 500/-**
International Perspectives-India's position in the World Production and Productivity-Consumption-Demand Projections 2001-Demand Supply Gap-Imports and Exports-onstraints in Exports. Prices andMarket-Factors affecting prices-Marketing-Technologies & Impact-Strategies and Policies.
- * **MAJOR OILS & OILSEEDS IN INDIA - Status & Prospects (1993) Rs. 500/-**
Groundnut-Rapeseed/Mustard-Sunflower-Soyabean-Sesamum-International Comparison-Production-Area-Yield-Performance of Oilseed Cultivation in India-Future Prospects-Research and Development.
- * **STEEL INDUSTRY IN INDIA - Status & Prospectives : 2006-07 Rs. 500/-**
Development of Steel Industry-Public Outlays-investments-International Perspective-Apparent consumption-Present status-Liberalisation and consumption-Sources of Steel-Material Balance 2006-07-Steel in Secondary Sector-Emerging Technologies-Demand & investment Perspectives-Demand of Finished Steel upto 2006-07-Investment Scenario upto 2006-07.
- * **ALUMINIUM INDUSTRY IN INDIA - Perspective to 2005 Rs. 500/-**
Aluminium and its Ores-World Reserves-Production & Consumption-Production capacity and Utilisation-Demand Perspective & Availability upto 2005-Aluminium Consumption by usages-Empirical Models & Forecast-Competitiveness of Indian Industry-measuring competitiveness-Export Possibilities-Constraints & suggestions.

For further details, Contact

Manager, Publication Division
Institute of Economic & Market Research
16, Daksheshwar, 10-Hailey Road
New Delhi - 110 001
Tel : 3326955, 3329216
Fax : (91) (11) 3329216

Books/Reports may be obtained, postage free, by sending Bank draft in favour of Institute of Economic and Market Research for the amount indicated against each Book/Report.

APINESS Regional Advisory Group — New Delhi Meeting

The Third Meeting of the Regional Advisory Group of the Asia Pacific Information Network in Social Sciences (APINESS/RAG-III), was hosted by the Indian Council of Social Science Research (ICSSR), on behalf of UNESCO Regional Unit for Social and Human Sciences in Asia and the Pacific (RUSHSAP), at New Delhi during 25-27 August 1992.

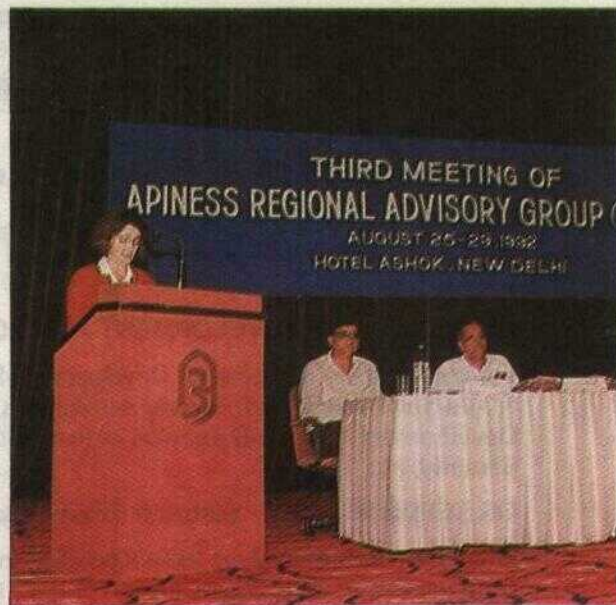
13 representatives of the APINESS National Contact Points attended the meeting. These were: Australia, Bangladesh, People's Republic of China, India, Malaysia, New Zealand, Papua New Guinea, The Philippines, Republic of Korea, Sri Lanka, Thailand, Vietnam, Western Samoa. Representatives of NCP's from Indonesia and DPR of Korea could not participate.

In addition, observers from UNESCO/RUSHSAP, the Asian Association of Social Science Research Councils (AASSREC), the Asian Mass Communication Research and Information Centre (AMIC), Singapore, the Women's Information Network in Asia-Pacific (WINAP) and National Information System in Science and Technology (NISSAT), New Delhi, attended the meeting.

UNESCO was represented by Dr. (Mrs.) Francine Fournier, Assistant Director General for Social and Human Sciences, Professor Yogesh Atal, Regional Adviser for Social Sciences in Asia and the Pacific, and Ms. Florence Delimon, Programme Specialist at UNESCO's Principal Regional Office in Bangkok.

The objectives of the meeting were to:

- (i) review the activities of APINESS both at the national and regional level;
- (ii) discuss the ways and means to strengthen and promote APINESS nationally as well as regionally;
- (iii) consider and discuss the special requests submitted by countries in the region



Dr Francine Fournier ADG for Social and Human Sciences, making a statement on behalf of UNESCO at the Inaugural Session

(Cambodia, Laos, People's Republic of China); and (iv) consider the future programme of APINESS and to give suggestions for UNESCO's future programme and activities in the field of information as documentation services and networking, including the New Mobilizing Project on "Youth Shaping The Future".

The RAG-III meeting opened with the welcome speech by Professor D.N. Dhanagare, Member-Secretary of the Indian Council of Social Science Research. He thanked UNESCO and the Indian National Commission for Cooperation with UNESCO for giving ICSSR the opportunity to host this meeting.

Thereafter, UNESCO's statement was presented by Madam Francine Fournier, Assistant Director General for Social and Human Sciences. She conveyed greetings and best wishes of Unesco's Director General and thanked ICSSR for hosting the Meeting. She reiterated Unesco's interest in APINESS activities and emphasized the need for mechanisms at the regional and

international levels to network the various centres engaged in the organization of information and documentation so that knowledge can be shared and researchers helped in their search for relevant information. Dr. Fournier drew attention to the problems of establishing interactive linkages across countries, of helping the less developed member-countries in development of their social sciences and libraries, of making available existing but inaccessible knowledge to the interested parties, and of preventing the destruction of invaluable material through improvement in conservation and storage.

Mrs. Fournier applauded India's active involvement in UNESCO's programme for the promotion of Social Sciences, particularly the leading role India had played in the founding of Association of Asian Social Science Research Councils (AASSREC), and in the activities of APINESS.

Mr. S.V. Giri, Secretary, Department of Education, Government of India, and Secretary-General of the Indian National Commission for Cooperation with UNESCO, delivering the inaugural address underlined the importance of APINESS by saying that the development of the capacities in information handling and dissemination would help a country in knowledge advancement, understanding, decision making and technology transfer. He emphasized the need to break "information isolation" between neighbouring countries.

The Session concluded with a vote of thanks by Dr. K.G. Tyagi, Director, NASSDOC-ICSSR.

After the Opening Session, Mrs. Norpishah Mohd. Noor (Malaysia), Dr. K.G. Tyagi (India) and Ms. A. Gorospe (Philippines) were elected Chairperson, Vice Chairperson and Rapporteur respectively.

During the course of the three days meeting, NCPs' representatives presented reports detailing major events in the field of social sciences information and library and documentation services, at national and regional level, including agenda for future activities in their respective country. The representatives from AMIC, Singapore and WINAP, Bangkok described

activities of their respective institution. The other issues that came under discussion were—*APINESS Newsletter*; INFOYOUTH (UNESCO initiated proposal on creation of an International Clearing House of Information on Youth); support for Cambodia, Laos and China for strengthening library and documentation services; ICSSR project on Central Indexing and Abstracting Services on Asia-Pacific Region; and other proposals for future activities.

The major issues and solutions emerged at the Meeting were:

- *Setting up of National Advisory Group (NAG)*: It was pointed out that if some member countries already have groups whose functions and missions coincide with that defined for APINESS NAGs, these should be accepted as Advisory Groups for APINESS activities even without being formally addressed so.
- *User Problems*: User's education programmes be introduced keeping in view the distinction between non social scientists (e.g. policy makers, the general public, etc.) and social scientists, as the needs of the two groups were different in important respects.
- *Funding Problems*: Funding constraints may be overcome with adopting coordinated approach in the acquisition of the library materials and also greater resort to mutual resource sharing. The international and regional funding agencies may be approached for financial assistance for specific projects.
- *Problems of Communication*: Greater communication between libraries at national level and among APINESS member countries at regional level was stressed upon.

The agenda for the future included the following issues:

- Strengthening of APINESS infrastructure.
- Creating computerised databases and networks.

- Organising training programmes/workshops/seminars on library preservation and management, CD-ROM technology, computer application, social science information, and the like.
- Promoting exchange programmes and document delivery services.
- Compilation of secondary reference sources such as union catalogues, directories of research projects, indexing and abstracting journals, etc.
- Study visits and attachments.

The last session of the meeting was held on 27 August, followed by *Regional Training Seminar* on CDS/ISIS and Computer Application. The resource faculty for the training programme was

provided by National Information System in Science and Technology (NISSAT); Defence Scientific Information and Documentation Centre (DESIDOC) and National Institute of Science, Technology and Development Studies (NISTADS).

The meeting and training seminar concluded on 29 August, 1992 with the valedictory address by Professor D.N. Dhanagare. He complimented participants for maintaining high standard of discussion and coming out with fruitful suggestions and recommendations. He felt that these would go a long way in strengthening and developing APINESS activities, institutional networking and resource sharing. The Chairperson Mrs. Norpishah Mohd. Noor on behalf of participants thanked the ICSSR for excellent arrangements made for the twin programmes of the RAG-III Meeting and the Training Seminar.

Information Society

According to some observers, a post-modern society is in a sense an 'information society'. However, in this context to describe Indian society as 'post-modern' or even as 'modern-society' would raise a hornet's nest. 47.89% illiterates in India's 840 million population (1991 census) act as a powerful constraint on her becoming an information society. Although illiterates cannot read, they can see and hear. This needs a major shift in the nature of our sharing within the APINESS network from use and exchange of the print-media to audio-visual media. This shift constitutes to be the greatest challenge before human and social scientists who will have to reorient their tools of research and methods of communication if their craft is to have any relevance and purpose in the eyes of the masses. As a pre-requisite, therefore, they will have to redefine the nature and scope of their information networking and sharing in the years to come—*From Welcome Speech of Prof. D.N. Dhanagare.*



TIFAC

..... the technology edge

LATEST DOCUMENTS ON EMERGING TECHNOLOGIES & BUSINESS OPPORTUNITIES

Technology Information, Forecasting and Assessment Council (TIFAC), an autonomous organisation under the aegis of Department of Science & Technology (DST) has been set up with the objectives: (i) Undertake technology assessment & forecasting studies in key areas of national economy (ii) Technology watch on global trends and formulation of preferred options for India (iii) Establish a nationally accessible technology information system.

In pursuit of such objectives, TIFAC has brought out documents in a number of areas with the help of experts. These reports have survey of the world trends and reflect realistic technology forecasting, assessment and market estimates tailored for Indian needs and are considered an additional ARMOUR in a competitive business world now being speedily exposed to global competition.

With a view to promoting technologies in India the documents are available on a nominal payment in Rupees as indicated below after each report within brackets (inclusive of postage). For orders above Rs.3000/- at a time, draft should be made after 10% reduction in total prices as discount. Please send a Demand Draft in favour of TIFAC payable at New Delhi to Manager, TIFAC, Technology Bhawan, New Mehrauli Road, New Delhi 110 016.

TECHNO MARKET SURVEY REPORTS

(I) Moisture reduction technologies for freshly harvested cereals (500) (II) Irreversible temperature sensitive paints and labels for pharmaceutical industry (450) (III) Energy bio-mass production/utilisation (400) (IV) Packaging technologies (450) (V) Industrial raw water treatment (350) (VI) Industrial waste water treatment (650) (VII) Water treatment technologies (1850) (VIII) Indian foundry industry (Focus on small scale sector) (1800) (IX) Cryogenic technologies with special reference to food/fish/drug and milk storage (1750) (X) Technologies for disposal of thermal power station fly ash (700) (XI) Low cost housing: A case for slums (650) (XII) Packaging technologies (HDPE bags vs. Jute bags) (400) (XIII) Post Harvest Technology : Silk reeling (400) (XIV) Technology in Indian sugar industry (500) (XV) Automated machinery & production system: CNC machines (600) (XVI) Food processing technologies (350) (XVII) Magnetic for electronics (750) (XVIII) Automated machinery & production system (Indian automobile and Tractor industry) (800) (XIX) Mass rapid urban transport (1200) (XX) Communication technologies in higher education (1400) (XXI) Automated machinery and production system for manufacturing of capital equipment for industries like cement, sugar, fertilizer etc. (750) (XXII) Monoclonal antibodies (1100) (XXIII) Genetically engineered plants (1700) (XXIV) Enzymes; genetically engineered and immobilised (1500) (XXV) Bio-Polymers (1650) (XXVI) Medical electronics and agri-electronics instrument for indigenous development - Volume I (medical electronics) (400), Volume II (Agri-electronics) (350) (XXVII) DDC Systems in thermal and nuclear power plants (800) (XXVIII) Instrumentation needs of the Food processing industries (XXIX) Performance Material Volume I - Structural Ceramics (1450), Volume II - Advanced Composites (1500), Volume III - Light Alloys (1350), Volume IV - Hi-Tech. Coating and Surface Engineering (1400) (XXX) Automated machinery & prodn. systems - Dry Cells production as a case (800) (XXXI) Demand survey on Titanium and downstream products (1750) (XXXII) Transportation Technology (700) (XXXIII) Biomass generation and utilisation : Compilation of statistics (900) (XXXIV) Ropeways beneficial option for urban transportation (800) (XXXV) Technologies to make STU's operation energy efficient (1000) (XXXVI) Biotechnology; Fermentation; Tissue Culture, Medicine etc. (1800) (XXXVII) Management of industrial safety in forge shop & small foundries (1400) (XXXVIII) Application of technology for recycling of Nickel used in Electroplating, Electrolysis & Electroforming process (675) (XXXIX) Metrics, methods & case in India for achieving global software competitiveness (1100) (XL) Energy conservation technologies (cement industry) (1350) (XLI) Energy saving technologies for FHP motors upto 5 Hrs. Power (1300) (XLII) Technology for futuristic pesticides (1250) (XLIII) Information technologies : Application to industry (850) (XLIV) Surface treatment processes (1000) (XLV) Availability of potable water (Application of technology to rural area) (1200) (XLVI) Application of technology to rural area of Poultry - feed (650) (XLVII) Conversion of slaughter house waste (1200) (XLVIII) Rabbit farming (1200) (XLIX) Inland fish farming (Application of Technology to rural area) (1200) (L) Bio-technology for sewage and municipal waste water treatment (1400) (LI) Adaptation of irrigation canal for navigation (900) (LII) Technologies for the treatment of molasses based distillery effluents (1000) S:038 Export market for Indian aviation products (3000) S:040 Information technologies : State of the Art (2300) S:042 Micro electronics : State of the Art (2400)

In addition, TF/TA reports on the following fields are also available :

- | | |
|---------------------------|--|
| (i) Human Settlement | (v) Technology Assessment for Select High Value Chemicals |
| (ii) Sugar | (vi) (TIFAC:P:020) Intellectual Property Protection in India |
| (iii) Technology Planning | A Practical Guide for Scientists, Technologists and other |
| (iv) Steel | users |

Scientific Translation: Current Perceptions

The Indian Scientific Translators Association (ISTA) organized a one-day colloquium on the occasion of the International Translation Day on September 30, 1992. This day is dedicated universally to St. Jerome, the patron saint of translation and translators. The theme of the colloquium which brought together 40 experts from ISTA, INSDOC, DESIDOC, Delhi University, IIT Delhi, JNU, etc. was "Translation: Current Perceptions".

NISSAT and the Cultural Department of the French Embassy in Delhi partly funded this programme. The School of Languages, JNU collaborated with ISTA in organizing this colloquium.

Welcoming the participants Prof. K.S. Dhingra, President ISTA, who is Dean of School of Languages of JNU, said that the Day was being observed for the first time in India. He highlighted the importance of translation in the overall development of a nation and the significance of this day for translators. In his presidential address Prof. S. Dey of JNU stressed on the need to exercise caution while translating from the foreign language. Mrs. Lucy Rudent, Cultural Counsellor of the Embassy of France underlined the important role of translation in the present-day context and reaffirmed the interest of her Department in translation activities. Prof. T. Viswanathan, Director of INSDOC in his inaugural address delineated the role of machine translation. He mentioned that the structure and grammar of Sanskrit were such that it is best suited to be an appropriate intermediary language for machine translation.

The morning session of the colloquium held in INSDOC was presided over by Prof. A.M. Kunte of JNU. Prof. S.B. Verma (Professor of JNU) expounded the translation concepts and practice by citing the English and Hindi translation of some Haikus. Prof. P. Talgeri of JNU, speaking on the "Problem of Cultural Recontextualisation in Literary Translation" stated that the translator has to recreate the meaning in a target language by putting it in a reorganised context in the target language. Shri R.S. Saxena of INSDOC spoke on the "Internationalisation of Scientific and Technical



Seen (from left are) Shri Ashok K. Chawla, Secretary, and K.S. Dhingra, President, ISTA, Prof. S. De, Acting Vice-Chancellor, JNU, Prof. T. Viswanathan, Director, INSDOC and Ms. Luce Rudent, Deputy Cultural Counsellor, French Embassy

Information" with special reference to Japan. He mentioned that Japan has taken a number of measures in order that the other countries can have greater access to Japanese information. Dr. Lajpat Rai of IIT, Delhi illustrated the important role of translation in the dissemination of knowledge and promotion of R&D activities in his talk on the "Role of Translators through the Ages".

The afternoon session of the colloquium was held in JNU and presided over by Dr. Lajpat Rai (IIT) Delhi. Dr. R.P.S. Dhaka (INSDOC) spoke on "Scientific Translation: Retrospect and Prospect". He suggested various measures for exploiting scientific translation for the all-round development of industry and economy. Mrs. Alamelu Gopal (Miranda House) Delhi University emphasized the need to exercise quality control in technical translation. She felt that ISTA should develop a system for accrediting technical translators. Mrs. Chitra Harshavardhan (JNU) spoke on the possible misinterpretation of meaning and interest, specially when an economically powerful nation takes up the task of translating the literature of a Third World country. Mr. Anil Dhingra (JNU) talked on the need to take conference translation more

seriously. He stated that adequate training should be given to translators taking up conference translation.

Presentations in both sessions were followed by lively discussions. The meeting ended with the participants reaffirming their determination to promote translation activities, to improve the status of translators, and to set up a data bank for terminology. As part of the programme scheduled for the day, an essay competition was held for

students of translation in different institutions of the country where translation is taught. Participants in this contest were required to write an essay on the role of translation in national development or on the role of translation in cultural integration. Two articles on the second topic written by students of the Centre of French Studies, School of Language, and an article on the first topic authored by a student of CIEFL, Hyderabad, were selected for award.

Ashok K. Chawla

Form IV

(See Rule 8)

- | | |
|---|--|
| 1. Place of publication | New Delhi |
| 2. Periodicity of its publication | Quarterly |
| 3. Printer's Name | Dr A. Lahiri |
| Whether citizen of India? | Yes |
| Address | Technology Bhawan, New Mehrauli Road,
New Delhi-110 016 |
| 4. Publisher's Name | Dr A. Lahiri, Jt. Adviser, Department of Scientific
Industrial Research, Government of India |
| Whether citizen of India | Yes |
| Address | As above in (3) |
| 5. Editor's Name | Ram D. Taneja |
| Whether citizen of India? | Yes |
| Address | Society for Information Science, PID Building,
Hillside Road,
New Delhi-110 012 |
| 6. Names and addresses of the individuals who own the newspaper and partners or share holders holding more than one per cent of the total capital | Dr A. Lahiri
Department of Scientific and Industrial
Research,
Technology Bhawan,
New Mehrauli Road, New Delhi-110 016 |

I, Dr A. Lahiri hereby declare that the particulars given above are true to the best of my knowledge and belief.

March 1993

Sd/-A. Lahiri
Signature of Publisher 13

Technical Communication: SIS Training Course Chandigarh

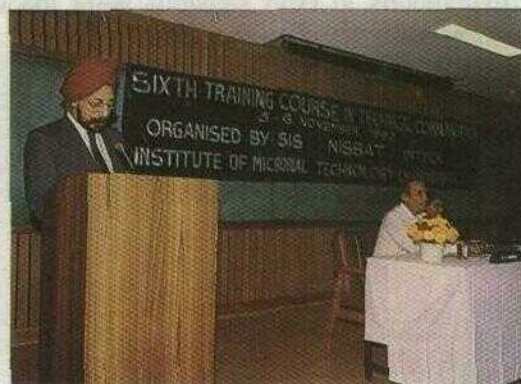
The sixth course in the series of courses in technical communication organized by the Society for Information Science and the Department of Scientific and Industrial Research (under the NISSAT Programme) was held at the Institute of Microbial Technology (IMTECH), Chandigarh, during 3-6 November 1992.

The present course had certain notable features:

- (i) It attracted the largest number of participants to date (30), which belied the expectations of even the organizers.
- (ii) All participants from outside Chandigarh were housed in the Institute Guest House. This permitted close interaction among them on the one hand and smooth conduct of the day-to-day programme on the other hand.
- (iii) The course material provided to the participants in the form of an elegantly produced and bound booklet drew favourable comments from the participants. There was unanimity that the volume would serve as a handy source of guidelines for the day-to-day information handling work for the participants and their colleagues.
- (iv) A lecture-cum-demonstration programme arranged by PCL on desk-top publishing generated keen interest among the participants with regard to the potentialities offered by recent developments in information technology.

In its composition, the group represented a fairly even distribution of persons belonging to various streams of information handling activity—editors, information scientists, librarians, computer experts and research scientists. As a consequence, a lively and critical discussion was a notable feature of all sessions.

14



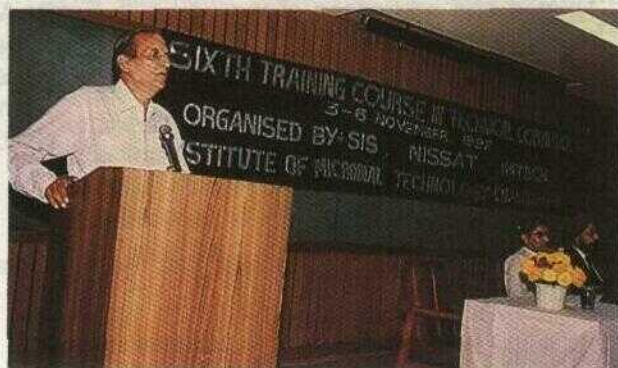
Dr. B.N.S. Walla Inaugurating the Course

The institutional breakup of the participants was as follows:

CSIR institutes, 22; ICAR and agricultural universities, 3; University system, 2; ICMR, 2; and Private sector, 1.

The Faculty comprised retired and serving experts belonging to different specializations in information activity—editing, storage and retrieval of information; computerized handling of information; and dissemination of information to industry.

The following topics were dealt with in the lectures and tutorials: Effective communication in today's information society; Basics of effective



Shri R.N. Sharma Course Coordinator welcoming participants and guests. At the dais are Dr C.M. Gupta, Director (IMTECH), Dr B.N.S. Walla, Director PGI, Chandigarh and Shri Ram D. Taneja, Resource Person



Participant's Group with the Faculty

communication in S&T; Audience analysis and adaptation; Elements of a primary communication (title, introduction, abstract, summary, conclusions, data presentation); Language in technical communication; Readability yardsticks; Finding information (sources of information); Referencing and indexing; Proficiency in technical reporting; Variants of technical communication other than technical papers and reports; Oral presentation in S&T; Consolidation of S&T information (review articles, encyclopedias and reference works); Printing and production; Development of software specifically relevant to handling of S&T information; Dissemination of information to industry; Writing and finalising an S&T communication; and Desktop publishing.

Inaugural function

The course was inaugurated on the morning of 3 November 1992 by Dr B.N.S. Walia, Director, Postgraduate institute of Medical Education & Research (PGI), Chandigarh, with Dr C.M. Gupta, Director, Institute of Microbial Technology (IMTECH), Chandigarh, in the chair. In their remarks, both Dr Walia and Dr Gupta laid emphasis on the need to create awareness among the research community about the importance of effective communication. They expressed satisfaction at the various steps being taken by the Society for Information Science in this context. Dr Walia cited several examples of some common types of faults noticed in S&T writings. "We must feel the need for communication. It must be relevant to what we say and how to say. Shoddily presented papers raise many questions", Dr Walia observed. It must be remembered that research work is not done unless the paper work or the research report is finished, Dr Walia added.

Earlier, Shri R.N. Sharma, while welcoming the guests and the participants, gave a resume' of the activities of the Society for Information Science, with notable mention of the objectives set by the Society in respect of the series of courses in technical communication. Shri Ram D. Taneja while proposing a vote of thanks observed that in a short course like the present one it was only possible to focus attention on the basic principles of technical communication and talk of the skills and techniques that make for a good writer and communicator. Good writing was a demanding job and required constant self critical practice over a period of years. He quoted—Thomas Alva Edison who said that unlike other forms of writing, technical writing was 99 per cent perspiration and one per cent inspiration.

Valedictory Function

At the valedictory function held in the afternoon of 6 November, Dr M. Balakrishnan, Director, Terminal Ballistics Research Laboratory, Chandigarh, gave away certificates to the participants. In his remarks, Dr Balakrishnan emphasized the need for paying as much attention to communication of science as to doing science. He lauded the efforts being made by the Society for Information Science to improve the general level of science communication in the country. In his remarks, Dr C.M. Gupta expressed satisfaction at the manner in which the sixth course had been conducted. On behalf of the Society for Information Science, Shri Ram D. Taneja thanked Dr Gupta, Dr Naresh Kumar and their colleagues for the excellent arrangements made for the course. Dr Naresh Kumar proposed the vote of thanks.

Participants' Response

In their impressions and feedback the participants expressed general satisfaction at the manner in which the course had been planned and run. There was near unanimity about the high quality of the course content and the level of coverage. The participants appreciated the pains taken in compiling the elegantly produced course material booklet and the compilation 'Selected readings on scientific writing and editing' made available to the participants. They had high praise for the excellent arrangements made by the local organizing committee in respect of boarding, lodging, transport and local excursion trips.

Among the suggestions put forth for improving the usefulness of future courses, were:

- (i) arranging in-depth coverage of newer information handling systems thrown up by recent advances in information technology.
- (ii) allotting more time for tutorials.
- (iii) making an objective appraisal of the topics covered, so that some more essential ones could be included.
- (iv) examining the possibility of splitting the course into two—one for persons concerned primarily with the traditional communication systems, and the other for those primarily using automated systems

for information handling/communication.

- (v) exploring the possibility of extending the duration of the course, say to a week, so that more time can be devoted to tutorials and hands-down exercises.

Shri R.N. Sharma Retired Editor, CSIR was the Coordinator for the course, and Shri Ram D. Taneja, Chief Editor and Deputy Director General, BIS (Retired), acted as the Resource Person. The local arrangements at Chandigarh were looked after by Dr Naresh Kumar, Scientist, IMTECH, and his team, under the overall guidance of Dr C.M. Gupta, Director, IMTECH.

R.N. Sharma
Ram D. Taneja

Obituary

Dr Peter LAZAR

We record with profound sorrow the death of Dr Peter LAZAR in Budapest last June.

Dr LAZAR, a most distinguished internationally renowned information scientist held the post of Director General of the Technical Library and Information Centre for several years in Budapest, Hungary. From 1968 to 1973 he worked with UNESCO as Chief of the Division for the Promotion of Research and International Cooperation in Documentation, Department of Documentation, Libraries and Archives.

Dr LAZAR was also Vice-President of FID. He visited India several times on the mission of development of library and information systems. He was Visiting Professor, Department of Library and Information Science, BHU during 1982. In the same year he delivered the Sarada Ranganathan Lecture on Information System Design and Management.

We wish to record our deepest appreciation for the outstanding contributions of Dr LAZAR and pay our humble tribute to the multifaceted and versatile personality of the great man whose contributions will continue to inspire and enlighten library and information scientists for many years to come. His passing away is a great loss to the profession.

LOVELY
ART PRESS (India)
(A House of Quality Printers)

- * All Job of Quality & Colour Printing
(Brochure, Folder, Leaflet)
 - * DTP Facility
- * Colour Screen Process Printing
on Paper, PVC, Cloth & Bag
- * Colour Stickers * Labels * Banners
 - * Spiral & Spico Binding
- * Official & Conference use Stationery items
 - * Quality Bags for compliments

Printers * Stationers * Govt. Order Supplier

10402/3, 1-E, Bagichi All-u-din, Gali No. 13
Pahar Ganj, New Delhi - 110 055

Phone : 7510722, 520311

Information Seeking and Communication Behaviour of Indian Scientists — NISSAT Study

The study was conducted by the Institute of Social Analysis and Communication under the sponsorship of the Department of Scientific and Industrial Research in 1992. A summary of the report is presented here.

1. Selection and Composition of the Sample

The sample of 148 respondents was chosen from six research and research-cum-teaching institutions in Delhi. The institutions with the number of respondents from each were: Indian Institute of Technology (IIT, 49); National Physical Laboratory (NPL, 40); National Institute of Health & Family Welfare (NIHFW, 28); Jamia Millia Islamia (JMI, 19); Jawaharlal Nehru University (JNU, 5); and Publications and Information Directorate of CSIR (PID, 7). While selecting the sample, research experience and subject background were also taken into consideration. It was observed that NPL and IIT respondents had the highest research experience in years (21.22 and 18.30 years respectively) while the lowest were found in PID and JMI (7.42 and 9.94 years respectively). The distribution of the respondents according to their subject background was as follows: Physical Sciences-71 (47.97 per cent spread over five institutions, except NIHFW); Biological Sciences-13 (8.78 per cent spread over all the six institutions); Engineering-36 (24.32 per cent with main concentration in IIT); Medicine-5 (24.32 per cent with concentration in NIHFW); and Social Sciences-32 (15.54 per cent with heavy concentration in NIHFW).

The levels of the scientists and their qualifications were also analysed. There were as many as 29 Professors, 28 Assistant Professors, 2 Scientists F, and 15 Scientists E1. In terms of highest qualification, there were 112 Ph.Ds, 4 Dr. Engng, 3 M.Ds. and 14 M.S./M.Sc./M.As.

2. Pattern of Library use

Responses were obtained on how exactly the library of one's own institution was used, how often the library was visited, and whether any other library was used. It was observed that more than 28 per cent of the respondents visited their respective libraries to select and borrow books; more than 26 per cent to browse through latest issues of periodicals; more than 21 per cent to browse through new books; nearly 12 per cent to consult abstracting and indexing periodicals; and over 12 per cent to consult reference books.

Regarding frequency of visit, it was found that over 46 per cent of the respondents visited the library at least once a week and more than 21 per cent almost everyday. At the same time over 17 per cent of them preferred to visit about twice a month and over 9 per cent only occasionally. Nearly 6 per cent stated that they did not visit but got materials issued from the library.

Replies to another question indicated that as many as 92 (more than 62 per cent) respondents were using a number of libraries other than of their own institution's. Three libraries that were being used most were the National Medical Library, IIT and Delhi University libraries. Some of the other libraries mentioned were those of NCERT, IARI, NPL, National Science Library (INSDOC), British Council Library and the American Library.

3. Keeping Abreast of Current Developments

As keeping abreast of current developments in one's own field is mandatory for most scientists, an in-depth analysis of this aspect of information behaviour was made. Out of several possible methods or channels, the most preferred channel was found to be 'scanning of current issues of

periodicals' followed by 'scanning recent issues of abstracting indexing periodicals', 'personal communication'; 'scan current awareness services'; 'scan documentation lists'; 'read advances series publications'; and 'use SDI services' and in that order. The high ranking of the channel 'personal communication' is surely an interesting phenomenon. The actual sources/titles that were used by the respondents were taken note of and separate lists were prepared for each institution. The top five common titles of abstracting/indexing periodicals being used in most of the institutions were: *Chemical Abstracts*; *Physics Abstracts*; *Current Contents*; *Mathematical Reviews*; and *Biological Abstracts*.

Most of the respondents were using the above channels in combination. It was observed that a greater number of respondents were using 3 channels (43) and 36 of them were using 4 channels. All other combinations were far less used. The channel 'scan current issues of periodicals' was one of the channels most often chosen along with other channels.

4. Relative Importance of Types of Documents

Analysis of the responses indicated that there was a marked preference for journal articles. On the average, the respondents assigned 38.5 per cent to journal articles; 27.2 per cent to books; 11.4 per cent to conference papers; 8.8 per cent to technical reports; 7.2 per cent to theses; and 2.5 per cent to trade literature. It was also observed that there was a high degree of variation in the estimation of the respondents from different institutions on the relative importance of the types of documents. For example, for journal articles, the score was as low as 10 per cent from two respondents from IIT and NIIFW and on the higher side it was 90 per cent in one case in NPL and 80 per cent in three cases in IIT, NIIFW and JMI.

It was also observed that wherever there was a teaching component, the relative importance of books was higher. As is well known, books continue to be considered as the best instrument for teaching. However, PID respondents had the highest preference for books, for reasons relevant to the nature of their work.

5. Finding Relevant Documents in Specific Topics

Responses to the question, which actually related to retrospective search, indicated that out of 7 possible methods or routes there was clear preference for some. The route "consult abstracting/indexing periodicals" was checked by as many as 103 respondents to give it the first rank, closely followed by the route "locate existing bibliographies" in the second rank, which was checked by 102 respondents. The other routes in the subsequent ranks were: "consult colleagues/peers" (third rank); "through advances series publications" (fifth rank); "obtain bibliography from librarian" (sixth rank); and "ask information centres" (seventh rank). Again, the PID respondents had a different behaviour pattern than the general trend. For them "locate existing bibliographies" and "consult colleagues/peers" were the two most important routes. It would be much to the dismay of information workers that the two routes directly related to library and information centres, got the last ranks, i.e. 6th and 7th.

The important tools and centres that were consulted while following the above routes were taken note of. Titles of abstracting/indexing periodicals and advances series publication were listed. A few more titles of abstracting/indexing periodicals came up in addition to those noted in the context of current awareness and mentioned in Sec 3 above. Some of the additional titles were: *Engineering Index*; *World Textile Abstracts*; *Applied Mechanics Review*; *Geodex*; *OR Abstracts*; *Electronics Abstracts*; *Computer Abstracts*; *Key Abstracts in Superconductivity*; and *Analytical Abstracts*.

Some of the important advances series publications mentioned by the respondents were: *Springer Verlag Lecture Notes*; *Advances in Applied Mechanics*; *Textile Progress*; *Advances in Analytical Chemistry*; *Progress in Optics*; *Advances in Electronics*; *Advances in Photochemistry*; *Advances in Inorganic Chemistry*; *ACS Series*; *Review of Geophysics*; *Review of Modern Physics*; and *Methods in Enzymology*.

There were not many responses regarding approach to documentation/information centres to

obtain bibliography/reading list of relevant documents in a specific topic. From the positive responses it was found that INSDOC was mentioned by a total of 12 respondents. A few mentioned the names of Delhi University Library, TIFR (Bombay), ICSSR, Planning Commission, and the National Medical Library. IIT and NPL libraries were also mentioned by respondents from JMI.

6. Tools Used for Obtaining Data Type Information

Some respondents categorically stated that they did not require such information while some did not respond. From the positive responses the following titles appeared prominently: *ASTM Handbook*; *BIS Handbook*; *Textile Asia*; *Encyclopedia of Chemical Technology*; *ACS Surveys*; *Handbook of Mathematical Functions*; *Table of Integrals...*; *Chemical Engineering Handbook*; *International Critical Tables*; *Fluid Mechanics Handbook*; *Fluid Engineers' Measurement*; *Handbook of Flow Metering*; *Hydraulics Handbook*; *Dictionary of Organic Compounds*; *Dictionary of Chemistry and Physics (CRC)*; *Beilstein's Handbook of Organic Compounds*; *Kirk-Othmer Encyclopedia*; *Mechanical Engineering Handbook*; *Tribology Handbook*; *Economic Survey*; *Machinery Handbook*; *Polymer Handbook*; *NSSDC Data Listing*; *CRC Handbook*; *Lonospheric Data*; *Handbook of Liquid Crystal*; *High Vacuum Technology on Thin Films*; *District Handbooks (Census)*; *WHO Reports*; *Yearbook of Ministry of Health and Family Welfare*; *Health Information Statistics (Ministry of Health and Family Welfare)*; *Sample Registration Bulletin*; *Annual Report of DGHS*; *CBHI Pocket Book on Health Statistics*; *Asian Recorder*; *Data India*; *India—A Reference Annual*; *Keasing's Contemporary Archives*; *Handbook of Hydrology*; etc.

From the above listing it would be evident that some of the best known sources of data-type information were in use among the respondents of the resent sample.

7. Steps Taken to Obtain Copies of Documents

Respondents were also asked to state how they usually obtained copies of relevant documents

which were not available in their library. Of the possible steps, 88 respondents checked (a) 'ask librarian to procure copy' 58 checked (b) 'get copy from colleagues/peers'; 44 checked (c) 'order copy from national documentation' centre. IIT respondents depended most on step (b) A good percentage of IIT and NPL scientists also mentioned that they procured copies in other ways also. For example, "requesting author for reprint" or "requesting friends abroad to send photocopies".

8. Getting Information from Documents In Unfamillar Languages

When face to face with the language barrier, 57 respondents preferred to take the step (a) "get a translation done"; 53 would opt for (b) "try to find out if a translation is available" ; 46 said they would just "read an English abstract"; (c) and 12 (from IIT and NPL only) would take other steps. These steps actually included "use a dictionary", "try to decipher on my own", and "consult colleagues who know the language".

8.1 Index of Translations

Responses to one question clearly indicated that the scientists were not at all familiar with any of the available index of translations. This implies that the responsibility of locating and procuring a copy of any existing translation rests ultimately on the library or a documentation centre.

8.2 Estimate of the Extent of Information Being Missed Due to the Language Barrier

One important relevant aspect of the language barrier is the information users' awareness or estimation of the amount of useful information being missed by them because of their unfamiliarity with some languages. As many as 120 respondents gave their estimates in concrete terms. 72 respondents believed that they missed only upto 10 per cent of information; 24 respondents estimated this to be 11-20 per cent; 17 respondents thought it was 21-30 per cent; and only 7 scientists estimated this to be as high as 31-50 per cent.

Some of those who did not respond were actually, undecided as they said 'cannot say' or 'do not know'. Even some of those who were in the 0-10 percentage group maintained or believed that

they were hardly missing any useful information.

Responses to another part of the same question revealed that the most important foreign languages according to the respondents were German, French, Russian, and Japanese — in that order. However, for NPL scientists, Russian was the most important and for NIHFV and JMI, it was French.

9. Use of INSDOC's Services

It was found that out of 148 scientists in the sample, 87 had used some of the services being provided by INSDOC and 61 did not. It was also observed that most of them (58) had availed of document procurement service and 50 had availed of translation service. The other two services that were mentioned were used sparingly—only 8 respondents had asked for bibliography and 10 respondents used on-line search. It was further observed that the scientists of NPL, JNU and PID were using the services of INSDOC in greater measure than their counterparts in IIT, NIHFV, and JMI.

10. Use of On-line Facilities

As is known, on-line search facilities are extremely limited in the country at present now. There were only 21 responses in the affirmative from the entire sample. The NIHFV respondents had better experience in this area than all others. 11 of them had some experience of using the POPLINE, and 8 respondents from IIT had some experience of using different facilities, both in India and abroad.

11. Publication Rate of Scientists in the Sample

It was found that the average number of publications per scientist was for JNU = 47.50; IIT = 41.58; NPL = 37.18; NIHFV = 29.13; PID = 17.00; and JMI = 10.68. In terms of research experience in years their position was as follows; NPL = 21.22; IIT = 18.30 NIHFV = 18.10; JNU = 13.00; JMI = 9.94; and PID = 7.42. JNU scientists, thus, had the highest publication rate in spite of comparatively lesser research experience.

Stock was also taken of the titles of host periodicals which had published the contributions of the scientists. Responses on the publication of short communications were also obtained, as such publications indicate in a way a scientist's alertness of the developments in his field. It was observed that 37 respondents (25 per cent) had published short communications and in 10 cases these were subsequently developed and published as full-length papers. These 37 short communications were published in some of the best known scientific periodicals and Letters Journals. The JNU scientists were found to be most alert in this matter, as all of them had published short communications.

11.1 Choosing Host Periodical for Publishing One's Contribution

As it is an important aspect of communication practice to select the appropriate host journal for publishing one's contribution, responses were obtained regarding the possible determining factors for the choice of the host journal. Respondents were asked to rank five apparently important factors according to their preference, the result was as follows: (a) Standing of the journal in the field (1st rank); (b) should be well edited and referred (2nd rank); (c) should be a foreign publication (3rd rank); (d) minimum waiting time in publication (4th rank); and (e) should be an Indian publication (5th and last rank).

The above ranking of the factors has some interesting aspects. Although factor 'a' was of prime importance, factor 'c' also was of some importance. The JNU respondents, as a group, however, rejected this factor. It is also to be noted that waiting time (i.e. factor 'd') was not of great importance.

12. Time Allocation for Information Gathering/ Communication Activities

Responses regarding allocation of time on five common activities were obtained. It was observed that most of them spent more time in reading. Similarly, they spent far less time in scanning recent issues of periodicals than either in discussions with colleagues or in writing, preparing 21

abstracts, etc. or in delivering lectures. Of the last three activities, lecturing took more time, which was only next to reading.

13. Information Through Invisible College

It was observed that some of the respondents expressed that they were not quite familiar with the expression 'invisible college', while for some it meant only participation in seminars, workshops, lectures, etc. A few responded but could not quantify the amount of information thus received. Altogether, 58 scientists did not respond to the question, while 23 said they were not getting any information through such channel. Of the remaining 67 scientists, who responded in positive terms, 35 (more than 50 per cent) thought that the amount of information thus received could be only 1-10 per cent, 16 thought it could be 11-20 per cent. However, there were at least 3 respondents who thought this percentage was as high as 41-50.

14. Epilogue

Information gathering/communication behaviour of Indian scientists, as revealed through the present survey, appears to have a very close resemblance to findings from similar surveys conducted elsewhere, even though information resources and accessibility differ. The similarity could be due to the fact that information behaviour to a great extent forms a part of research practice and scientific tradition. The Indian scientific community has also been carrying forward the same scientific tradition and hence have very similar information gathering/communication behaviour.

The study team had Prof. B. Guha as the Principal Investigator and Dr. Gurveen Rikhy as Research Officer.

— B. Guha

Information Network on Trade and Investment Opportunities Expands its Reach

UNDP's Technological Information Pilot System (TIPS) now has 6,000 subscribers and contains 50,000 entries on technology and trade information, making it one of the biggest data bases in the world on trade and technology opportunities in the developing world. TIPS is an information network which disseminates commercial data, business and investment opportunities, the latest prices and availability of certain equipment, and offers for joint collaboration. TIPS also carries information on consultancy services, featuring consultancy contracts and equipment procurement tenders from governments and the United Nations system.

One aim of the network is to enhance the flow of trade and investments among developing countries. TIPS can present alternatives for companies in developing countries before they decide, for example, to buy equipment from industrialized countries. They can first compare prices and prospects.

Approximately 150 staff worldwide linked by a 24-hour telecommunications system, collect and disseminate TIPS information daily. Direct collection, printing and dissemination of the information bulletins are carried out by national bureaux in Brazil, China, Costa Rica, Cuba, Ecuador, Egypt, India, Mexico, Pakistan, Peru, Philippines, Uruguay, Venezuela and Zimbabwe. A small international operations centre is based in Rome, with regional offices in Manila for Asia and Caracas for Latin American.

Subscription prices may vary. In the Philippines, for example, the daily TIPS bulletin costs \$100 a year for a total of 240 packages with three bulletins per package, or 720 pages of business information. Each one-page bulletin contains an average of 300-800 words.

22 The bulletins cover such topics as agro-industries, business opportunities, biotechnology, electronics, energy, fisheries, food processing, machinery, pharmaceuticals and textiles. Most are abstracts, offers and requests for trade and technology, announcements of research and development breakthroughs, trends, reports, events, technology and trade policies and investment opportunities.

To become a TIPS subscriber, contact: TIPS, Via Panisperna 203, Rome, Italy 00184, FAX: 39 6 482 8838, Telephone: 396 482 6967.

News and Events

GEOSPACE: Geographic Information System Developed at the RRSSCs

The need for optimal management of earth's resources in a multidisciplinary way has necessitated the development of the Geographic Information System (GIS) which helps to visualise, organise, combine, analyse, predict and query the spatial data along with non-spatial data. Geospace a GIS package is a totally indigenous, cost effective solution and aims at meeting to a large extent the specific needs of the Indian environment. With the ultimate goal of National Natural Resources Management System being the realisation of the National Resources Information System (NRIS) with GIS base which will ultimately lead to decision support systems at village level, the geospace developed by the Regional Remote Sensing Service Centres (RRSSCs) is one step towards realising NRIS.

The package handles both spatial and non-spatial data and runs on a PC-AT platform and works under XENIX environment. It is essentially a raster based system, with the following capabilities:

- Data inputting/editing
- Data management
- Spatial data manipulation
- Proximity analysis, buffering etc.
- Generation of 3D terrain/elevation models
- Network analysis
- Attribute information management
- Output presentation on display/printer

It is supported by a symbol library of 158 symbols and can be assigned any of the fourteen possible colour combinations. The organisation is shown in Figure 1.

Applications: With a view to developing viable methodology for integrating spatial data on resources and non-spatial data using GIS for developmental planning at microlevel, a pilot study is being carried out using GEOSPACE for Chandrapur taluk of Maharashtra. Various theme maps have been generated using either visual/digital technique covering soils, lithology/landforms, ground water potential, drainage etc. These have been integrated using the GIS with different criteria assigned to each individual thematic class and various land and water resources management units named as Composite Units (CUs) have been synthesised. Socio-economic data pertaining to the taluk forms part of the attribute system. The CUs are being evaluated for arriving at specific prescriptions, in conjunction with the socio-economic data.

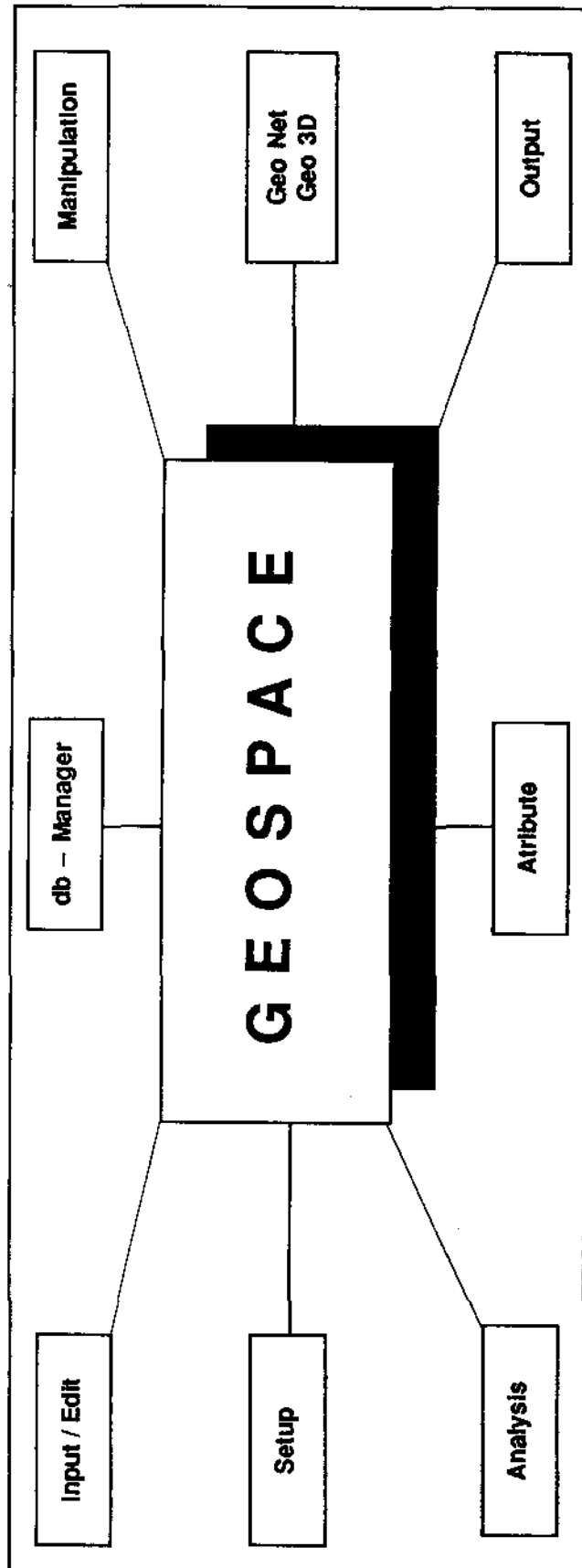


Fig. 1 Organisation of Geospace

INPAT Database

CSIR has developed a database containing bibliographic information of more than 30,000 Indian patents published during 1972-92.

Called INPAT, the database makes computerised search facility available on: applicant's name, inventor's name, catchwords, Indian/international patent classification, patent number, application number, and publication date.

The information supplied comprises: patent number, publication date, applicant's name and title.

The database has been developed by Patent Unit, Technology Utilization Division, CSIR C/o INSDOC, Special Institutional Area, New Delhi-110 067. The project is funded by the Department of Biotechnology, Govt of India.

Micro CDS/ISIS: India Offers to Host Clearinghouse for Training Programme

At a recent meeting of distributors of Micro CDS/ISIS held in Manila attended by participants and observers from 14 countries including India national representatives presented comprehensive reports on the use of CDS/ISIS in the respective countries and the type and level of technical support provided to their users. The subject of training was discussed at length. Among the main conclusions arrived at by the meeting were: the recommendation to adopt a standard modular training programme for CDS/ISIS, providing for various levels of difficulty adapted to different categories of users (a proposal was developed and approved by the participants); the creation of a clearing-house for training programmes and materials developed in the region. NISSAT, India, volunteered to host the clearing-house.

Project Information Villages

The project is part of a large project being executed by the MS Swaminathan Research Foundation, Madras. It would investigate how developments in modern information technology can be blended with traditional wisdom and practices to promote sustainable livelihood security for the rural poor.

The major components of this project are: Development of a knowledge and skill dissemination system for rural areas by using advances in technology, establishment of model information villages, and measurement of the impact of knowledge and skill input on the productivity, profitability and sustainability of the rural systems and the quality of life in the villages. The new system will be demonstrated in 25 blocks covering 100 villages throughout the country. Initially, six districts—Midnapore (West Bengal), Bikaner (Rajasthan), Garhwal (Uttar Pradesh), Dharmapuri (Tamil Nadu), Ranchi (Bihar) and Pondicherry have been identified.

consisted of presentations by experts and working group meetings. The topics covered were Small Farmers Agri-Business Consortium; Models for implementation of 'Information Villages'; Overview of National Information Resources Centres; NIC Resources & NICNET; Remote Sensing Data & Products; Architecture of a Project Report; Report Preparation; Assessment Methodologies; Value Addition; Role of Extension Centres; Role of Universities; Multimedia Information Systems; and Instrumentation for rural areas.

Networking of Specialised Information Systems—UNESCO Consultation Meeting

Inaugurating the second consultation meeting of experts of UNESCO member countries of South-East Asian region for networking of specialised information systems on cultural heritage, Shri K.R. Narayanan Vice President of India said in New Delhi on 24 February, 1993 that to bring down the barriers of communication ancient wisdom and heritage and modern science and technology should be brought together. For sharing information within nations and between different countries, it is essential to have a dialogue between men of traditional knowledge and those with scientific and technological expertise.

The Vice-President said the large amount of cultural material available in the form of unpublished manuscripts should be collected to form a modern database adding "I am happy to know that the Indra Gandhi National Centre for Arts (IGNCA) has made a new beginning by developing a major database on the catalogues of unpublished manuscripts of Indian and Asian origin from all parts of the world." These first beginnings must be developed by evolving a compatible database in all the libraries in the region.

Welcoming the delegates from Australia, Bangladesh, Bhutan, China, Indonesia, Iran, Malaysia, Nepal, Philippines, Sri Lanka, Thailand, Vietnam and India to the five day meeting Dr. Kapila A Vatsyayan Member Secretary IGNCA said the network information in the region would help in sharing of cultural heritage in the region.

Dr. T.A.V. Murthy of the Indra Gandhi National Centre for the Arts (IGNCA) touched upon the regional strategies for network development. He suggested methodology for planning data networks and also steps which would include the user information requirement, qualification of traffic data, network structure and related guidelines for the implementation of networks.

He was of the view that in implementing the retrospective conversion it is necessary to work out a mechanism of creating and exchanging data. As the hardware and software are already available and the technical personnel, too, what is now required is the determination to make a sound beginning in order to cope with the increasing demand for information and technological innovations, he said. He emphasised that the traditional system of librarianship needs has to be converted into automated system to maintain a balance by modernising the entire system of information management and services and it has to be made compatible with the newer media.

24 INSDOC, which has been deeply involved in the execution of the project, organized a two-day orientation programme in October last for the project formulation teams to enable them to prepare project proposals. The programme

Directory of Conferences In Agriculture

The Publication and Information Division of ICAR has started publishing a Directory of Conferences, Seminars, Symposia, Workshops in agriculture and allied sciences in India. The first issue covers the period July-December 1992. It lists 217 entries.

The publication provides advance information to the scientific community. This is indeed a useful service of great benefit to the prospective participants and their organisations.

The next issue covering conferences scheduled to be held between January and June 1993 is under compilation. The Director (P&I) invites ICAR institutions and agricultural universities to send in relevant information on important events for incorporation in the Directory. Entries may be sent to Dr. V.S. Bhatt, Director (P&I), Krishi Anusandhan Bhawan, Pusa, New Delhi-110 012.

UNESCO Clearinghouse

UNESBIB, the bibliographic database of all documents and publications of UNESCO since 1946, is now available on line on ECHO, the host of the Commission of the European Communities (CEC).

This database is intended for: universities, research institutions, governmental bodies and libraries and all others concerned with the aims and activities of UNESCO, which are reflected widely in published work covering the fields of education, science and technology, social science, humanities and culture, communication, information, libraries and archives.

Documents include main documents working series, conference papers, mission reports, speeches of the Director-General, Executive Board and General Conference documents. Publications include monographs and articles of UNESCO since 1946.

The printed version of the database is the *UNESCO List of Documents and Publications* which is published quarterly with annual and triennial cumulations. Copies of this list can be obtained from the UNESCO Information, Library and Archives Division (DIT/IR).

Microfiches of all current and out of print publications periodicals and documents can be ordered directly on line.

To access UNESBIB on ECHO, to get documentation and a free password, please contact:
ECHO, BP 2373
L-1023 Luxembourg G.D.

Regional Training Seminar on CDS/ISIS and Information Technology

National Social Science Documentation Centre (ICSSR) organised the "Regional Training Seminar on CDS/ISIS and Information Technology" from 27-29 August 1992, at New Delhi with financial support from UNESCO. National Information System in Science and Technology (NISSAT), New Delhi, and National Institute of Science, Technology and Development Studies (NISTADS), New Delhi, collaborated in conducting the Training Seminar.

The Seminar followed the 3rd Meeting of APINESS Regional Advisory Group (RAG III), held from 25-27 August, 1992. There were over 25 participants including the delegates, from thirteen countries in the Asia-Pacific Region, to the RAG III Meeting and few other library professional from Delhi.

The methodology used in the training seminar consisted of lectures, visits, visual demonstrations and of course playing with machines. The following main topics were covered:

- *Information and Communication Technology;CDS/ISIS:* Introduction, advance features, database structure, creation and storage of data; and
- *Standards:* CCF, UNIMARC, etc.

The demonstration of Sanjay, Trishna, and Pascal applications was arranged for participants. They also closely observed databases like 'CLOSS', 'STAR', and 'LIBRARY', at the NISTADS and a Database on Indian Economy at the Institute for Studies in Industrial Development. The latter database covers literature published in forty-three Indian Social Science journals and sixteen newspapers. Software package for computerisation of land records developed by NISTADS was also demonstrated.

The Course was structured in such a way that each participant could have his own pace of learning. The participants were, therefore, divided into two groups—Group I: Those who were new to CDS/ISIS and Group II: Those who knew CDS/ISIS and were interested in learning its advance features.

Ms Denise Pelissier, Chief DIT/Clearing conducted a session on "Unesco Bibliographic Databases on CD-ROM" and gave a demonstration.

CISMOT '93: Call for Papers

Second International Conference on Information Systems & Management of Data, New Delhi.

Organizers: Society for Information Science (SIS) and Indian National Scientific Documentation Centre (INSDOC).

Conference Dates: 6-8 October 1993.

Papers describing original research, state-of-art reviews and innovative applications in the area of Database Management Systems and Information Systems are invited.

Submit 3 copies (max. 16 pages). For more information write to:

Prof. N.L. Sarda
Programme Committee Chairperson, CISMOT '93
Dept. of Comp. Sci & Engg.,
I.I.T., Bombay-400 078

Important dates for authors:

Paper due: May 3, 1993
Notification of Acceptance: July 1, 1993
Camera-ready copies due: August 2, 1993.

Demonstration of Accessibility of Databases Hosted on Various Networks from Technology Platform

NISSAT participated in the demonstration of potentials of databases hosted on different networks, developed and being operated by various organisations in the country, from a centralised place called *Technology Platform*. This platform was established at Pragati Maidan, New Delhi, during the 10th IETF from 14 to 21 February, 1993. Germany was the Partner Country and Madhya Pradesh was the partner state. Several hundred foreign and Indian companies have confirmed their participation. Officials and business delegations, buyers, entrepreneurs, professionals & students, etc. from many countries, developed and developing, will be visiting the Fair in large numbers.

The objective of the Technology Platform was

- to demonstrate data inter-change/display, alternate applications of the databases and network capability in the country.
- to create awareness, promote network/database exploitation for strengthening industry—institute linkages, and
- to provide information on transfer of technology and commercialisation, etc. particularly in respect of SME to improve their competitiveness.

Details of this event will follow in the next issue.

4th CDS/ISIS Users National Meet January 6-8, 1993

The fourth national meet of the CDS/ISIS Users was organised by NISSAT & NICHEM at the National Chemical Laboratory (NCL), Pune from January 6-8, 1993. The aims and objectives of the meet were:

- to assess the status of the use of the package in the country.
- to provide solutions to the technical problems faced by users.
- to facilitate exchange of experiences and applications and to get recommendations for further improvement/development of the package.

The participants were regular users of the package with sufficient practice in its use. There were as many as 54 participants and 4 resource persons. A detailed report will follow in next issue.

NISSAT—ATIRA MOU

NISSAT and ATIRA will now jointly market NISSAT information products and services. A Memorandum of Understanding has been worked out. Details will be published in the next issue of *NISSAT Newsletter*.

NISSAT—CMC MOU

NISSAT and CMC Ltd. will collaborate to further develop and market the MAITRAYEE (LIBERATOR) library automation and networking software. Detailed information will be published in the next issue of the *Newsletter*.

Workshop on Parallel Processing: Applications in Bioinformatics

The Centre for Development of Advanced Computing C-DAC and Bioinformatics Distributed Information Centre (BDIC), Pune University Campus, Pune Organized last January a workshop on the above topic.

During the workshop participants were introduced to parallel processing fundamentals and programming followed by exposition on the algorithms used and software packages developed for biological data analysis, modelling and visualization. The participants were given extensive hands-on training in the usage of these packages.

A report on the workshop will be published in the next issue of the *Newsletter*.

ISDN

Integrated Services Digital Network (ISDN) is an end-to-end digital network, which is widely seen as the successor to the public switched telephone system.

Voice and image transmission quality is enhanced with the use of ISDN, and the time it takes to send a fax or a computer file can be reduced by anywhere up to 85 per cent. On the minus side, use of ISDN costs at least twice as much as that of normal telecoms lines.

Special equipment is also needed to use ISDN—either complete systems, such as purpose-built private exchanges, or adaptors to connect existing PCs and data terminals.

Whatever the cost, ISDN looks likely to be the system of the future for telecoms transmission, as more and more countries bring it into service.

WORM Standard

The preparation of electronic images is covered by a new standard published by the British Standards Institution.

The standard, DD 206: 1991, recommends ways to capture and store electronic images of hard-copy documents to ensure the preservation and integrity of data. It applies to the WORM (Write Once, Read Many) optical disc format.

The first such standard to be published, it costs GBP22.50. For further information, contact the British Standards Institution, 2 Park St., London W1A 2BS, UK. *Information World Review*.

WHOTERM—WHO Terminology Software

WHOTERM is a new terminology database management system created by the World Health Organization's Technical Terminology Service. Throughout the years, WHO technical units had each developed their own glossaries of preferred terms. Such a situation can lead to duplication and inconsistency (different units each using their own, different definition of a term like "epidemiology", for example). The need for a fixed set of terms was evident, for technical units and for translators, who needed to be able to use consistent terminology.

WHOTERM was designed as a tool for both technical writers and translators. It is multilingual, handling any number of languages, and can be used on PC compatibles with DOS or WINDOWS. Its object-oriented design ensures optimum use of storage space. It claims to be user-friendly, and it comes with a variety of output formats, to facilitate desktop publishing.

While the fixed set of terms in the WHOTERM system cannot be changed by users of the Organization's LAN, the system can incorporate changes made on individual workstations. Once an individual's terms are approved, they can be transferred onto the LAN by the administrator.

WHO wants to make the package available as widely as possible to UN system organizations and Member States. Potential contributors of data to WHOTERM can, by arrangement, obtain a cost reduction, or even have the charge waived.

For details, contact: Mr. P. Lewalle, Chief, Technical Terminology Service, World Health Organization, Avenue Appia, 1211 Geneva 27, Switzerland. TP+41 22/791 24 58.

Glossary of Chemical Safety Terms

The language of chemical safety is drawn from many sources. Its terminology has developed in an unstructured manner, with proliferation into multiple terms, some with overlapping, alternative, or even ambiguous meanings.

This situation is a source of confusion and time-wasting to both authors and readers of chemical safety publications, and to experts attending meetings. It also poses problems for translators.

The International Programme on Chemical Safety (IPCS), jointly sponsored by the United Nations Environment Programme (UNEP), the International Labour Organisation (ILO) and the World Health Organization (WHO), has produced a *Glossary of Terms on Chemical Safety for use in IPCS Publications*, in an effort to improve matters.

Terms in the glossary are defined in accordance with International Organization for Standardization (ISO) usage or, where ISO definitions were not available, by definitions taken from WHO documents, or documents of equivalent status.

The glossary is intended to be a guide to terms that are widely used and adequately defined, rather than an exhaustive

compilation or a definitive list of approved terms — *IRPTC Bulletin*, Vol. 11, Nos. 1 and 2, 1992.

UNESCO Collaborates with ADONIS

UNESCO's Programme for General Information (PGI) is installing ten ADONIS systems and providing user training in developing countries. ADONIS is a CD-ROM documentation system that allows easy browsing and searching of articles.

Updated weekly, ADONIS draws material from around 370 scientific journals, covering areas such as biomedicine, chemistry, biochemistry, bioengineering and biotechnology.

ADONIS has the advantage that it can be run on relatively simple configurations: PC-ATs (or compatibles) with at least 640K RAM and 40Mb hard disk, with a CD-ROM drive.

UNESCO/PGI offers to cover the subscription fees for the first year on a trial basis to interested institutions in developing countries, while royalty fees would be paid by the user. For more information, contact: Mr. P. Harman, Area Sales Manager, ADONIS, Molenwerf 1, 1014 AG Amsterdam, The Netherlands — *INISTE Information Bulletin*, (Publication of UNESCO Section of Science and Technology Education) Vol. VIII, No. 2, 1992.

Arab Medical Information Network (AMIN)

A Regional Meeting on the establishment of AMIN was organized in Kuwait, from 10 to 14 October 1992, by the Arab Centre for Medical Literature (ACML). It was attended by representatives of five countries (Bahrain, Kuwait, Saudi Arabia, Syria, United Arab Emirates) together with international funding and support organizations. UNESCO/PGI, represented by Mr. R. Holmquist, also participated, particularly in view of the Organization's involvement in the preparation of the project and its foreseen participation in project execution.

The AMIN project would comprise:

- a bibliographic information system concerning Arab Medical literature, including the translation into Arabic of documentation tools and the arabization of MARC formats.
- a referral information system concerning Arab medical personnel, organizations, and pharmaceutical products data.
- a statistical information system concerning general statistical data on patients' health as well as the medical welfare situation in the various Arab countries.

Its objectives as a fully-operating Arab medical documentation and information network (centre) would include:

- Coverage of all medical disciplines with their specializations;
- Collection, organization and dissemination of related information;

27

- Addressing the correct channels in order to reach the right users at national, regional and international levels.

The Network would enhance Arab Medical Technology, compile results of medical research work in Arab countries, and make them accessible to world-wide institutions.

Useful Information Service from UK

The Institute of Development Studies, the University of Sussex, England has been doing commendable research work on developing countries. It has now established a database of books and reports on economic and social development originating in 191 countries, both developing and developed. Relevance to the developing world is the main criterion for selecting items for inclusion in the database. Material included is from a wide range of non-official, institutional sources, including banks, research bodies, pressure groups and academic institutions. The database is a depository for the UN publications. The information is available on-line through VOLNET, UK provided by the volunteer Centre UK and Community Development Foundation.

Nigerian, Mexican Share Kalinga Award

Dr. Jorge Flores Valdes of Mexico and Dr. Peter Akinsola Okebukola of Nigeria were presented the prestigious Kalinga award for science popularisation for 1992 at New Delhi on 8 Feb. 1993.

Dr. Okebukola, a Professor at Lagos University and a popular science communicator, is the first Nigerian and second African to win this international award. Dr. Valdes, a nuclear physicist, is the second Mexican to be so honoured.

The award, instituted in 1952 at the initiative of the Orissa Chief Minister, Mr. Biju Patnaik, is managed by the United National Educational, Scientific and Cultural Organisation (UNESCO). The winners are chosen by an international jury.

UNESCO chose New Delhi as the venue for the award ceremony to mark the 40th anniversary of the institution of this award.

Of the 47 Kalinga laureates since 1952, 10 were Britishers, eight Americans, four Russians and three Venezuelans. Two Indians—Dr. Jagjit Singh (1963) and Dr. Narender K. Sehgal (1991)—have so far won the award. The winners get about Rs. 50,000, a gold medal and an invitation to visit the country as guests of the Kalinga Foundation Trust.

A science teacher, Dr. Okebukola began popularising science in 1974 after completing doctoral studies in biology and science education at the University of Ibadan, Nigeria. He presents a popular science awareness programme on Nigerian television every week and on the radio twice a week.

The Nigerian Professor is also involved in popularising science with emphasis on medical and environmental awareness campaigns in all African countries. He has also authored over 120 books. Dr. Okebukola also travels to remote villages to educate villagers about developments in science, and campaign against superstitious beliefs and activities.

Dr. Valdes is currently Director of the Science Communication Centre at Mexico's national university. A nuclear physicist, he has helped establish a network of museums with exhibits on a variety of scientific subjects. He has authored a large number of science books aimed at the lay reader.

NCI Current Contents

A monthly publication under the above title carrying the tables of contents of Indian science and technology journals published in English is now being brought out from Bombay by the National Centre of Information.

The periodical utilizes the services of several technological societies and associations all over the country in various fields for compiling the contents which include (a) table of contents of Indian scientific data organized discipline-wise and subject-wise (b) bibliographical details (c) unique number for every article appearing in the issue (d) publisher's address (e) title word index and author index (f) recent advances in science and technology in Japan (g) books in print (h) conference announcements.

The publication seeks to serve as a single source of consolidated published information in the field of agriculture, chemical sciences, medicine, packaging, technology, physical sciences, textile, etc.

English abstracts of Japanese scientific periodicals are not easily available in Indian libraries. NCI downloads them via the satellite link and offers the readers this service on latest developments in Japan. Readers can save lot of time and labour through the services offered by this new venture in India.

The publication carries a modest subscription of Rs. 240 for 12 monthly issues. For further details contact National Centre of Information, Shiveshwarkar House, 32 Parekh Street, Bombay-400 004.

Honorary Fellowship for Dr. N.K. Sehgal

Dr. Narender K. Sehgal, Joint Adviser, NCSTC has been awarded the Honorary Fellowship of the Indian Science Writers' Association (ISWA) for his significant contributions in the field of S&T communication & popularisation. Dr. S.K. Joshi, Director General, CSIR, presented the fellowship to Dr. Sehgal with five others in a function on 12 February, 1993, during the First National Convention of ISWA, at INSA auditorium, New Delhi.

Society for Information Science

A new team of office bearers has been ushered in for the years 1993-94 with the election of the following LIS professionals in December 1992. According to the announcement by Dr. Sushil Kumar, Chairman, Nominations Committee, the elections were all unanimous.

The new office bearers are:

Prof. R.G. Gupta, *President*, Dean, Computer Sciences, Centre, Jawaharlal Nehru University, New Delhi-110 067; Shri Kuldip Chand, *Vice President*, Scientist Publications and Information, Directorate, CSIR, New Delhi-110 012; Shri I.R. Kumar, *Vice*

President, Deputy Manager (Informatics), National Research and Development Corporation, New Delhi-110 048; Dr. S. Mallick, *Secretary*, Scientist Human Resource Development Group, CSIR, New Delhi-110 012; Shri H.C. Jain, *Treasurer*, Scientist Publications and Information, Directorate, CSIR, New Delhi-110 012; Shri R. Kundra, *Joint Secretary*, Scientist National Institute for Science Technology and Development Studies, CSIR, New Delhi-110 012; Dr. Gian Singh, *Regional Representative (North)*, Scientist Publications and Information, Directorate, CSIR, New Delhi-110 012; and Shri S.J. Kulkarni, *Regional Representative (West)*, Bombay Hospital and Medical Research Centre, Bombay.

OFFLINE

First Law of Particle Physics

The shorter the life of a particle, the greater it costs to produce.

Langsam's Axiom

It is difficult to soar with eagles when you work with turkeys.

Streno's Law

When all else fails, try the boss' suggestion.

CDS/ISIS mini-micro Ver 3.0

An International text management software

- Works on PC/XT-AT etc.
- Handles databases in single user environment
- LAN environment

Now notionally priced to enlist serious users

Software with Manual & License	Rs.1500/=
Additional Manual	Rs. 500/=

(Note : First time users are required to execute a transfer agreement with UNESCO-NISSAT)

Demand draft / cheque (local only) may be drawn in favour of ATIRA , payable at Ahmedabad.

For Agreement forms and other details contact :

Joint Advisor
NISSAT / DSIR
Technology Bhawan
New Mehrauli Road
New Delhi - 110 016

Mr. P.C. Shah
Project-Coordinator
NICTAS / ATIRA
Polytechnic P.O.
Ahmedabad - 380 015

Existing users may note :

You can get your old version replaced free of cost
only upto **June 30, 1993**

niissat