A Lifetime Opportunity

What will you do if you won a reward of more than
five million rupees?

No kidding, the problem is real and not one lifted of
a movie script. Believe it or not, a small group of LIS
professionals have earned this handsome reward
through sheer dedicated hard work of organizing the
IFLA 1992.

As is usually the case, this unexpected bounty has
brought up controversies and invited players befitting the
description of major roles of a *masala* movie.

The first and foremost question is who should be
the custodian? Should it find its way to the Consolidated
Fund of India? Whether MHRD — Deptt of Culture the
nodal ministry for the conference should take charge?
Could ILA lay its claim to the bonanza as surplus
(profits) earned out of an activity hosted by the
association and credit it to its general account. Or,
should ILA treat it as a separate accounting unit. One
could also think of creating a new trust to manage the
fund etc., etc. There could be many such options.
However, the rules are not very clear for a final choice,
to be made.

One could come close to a decision if it were
possible to say unequivocally as to who would have
borne the brunt in case there was a deficit.

The next potential question is what to do with this
big amount. That it should be utilized for the advance-
ment of library and information science in India through
research and education and for the welfare of LIS
professionals at large, few would disagree. The interest
on the capital which may be 0.5 to 1 million, depending
upon the investment portfolio, could support a large
delegation from India to participate in the IFLA con-
ference. Training of young information scientists in India
or abroad on a regular basis may be made possible. A
scheme of visiting professorships, research scholarships,
on-the-job training could be instituted. This may help
producing LIS text books in Indian languages. A large
building may be acquired to house seminar and class
rooms and to provide shelter to various library associ-
ations. Here also lots of possibilities exist. Whatever it
may be, the activities should accrue benefits that are
direct and visible (unlike the well known endowment
funds in existence now).

Such opportunities come but once in a lifetime. The
pride of position is that the money has been earned
through slogging and not through donations and
therefore demands special treatment and attention.

— A. Lahiri

CONTENTS

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CDS/ISIS: Fourth National Meet, Pune

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

- to assess the status of the use of CDS/ISIS package in the country.

- to provide solutions to technical problems raised by users.

- to facilitate exchange of experiences and applications and to get recommendations for further improvement/development of the package.

The participants, numbering 54, were regular users of the package with enough practice in its use. A number of papers from the participants were circulated in the meeting.

The inaugural session commenced with a warm welcome by Dr S. Krishnan, Head, S.M.I.S. Unit, NCL. Welcoming the participants, he briefly
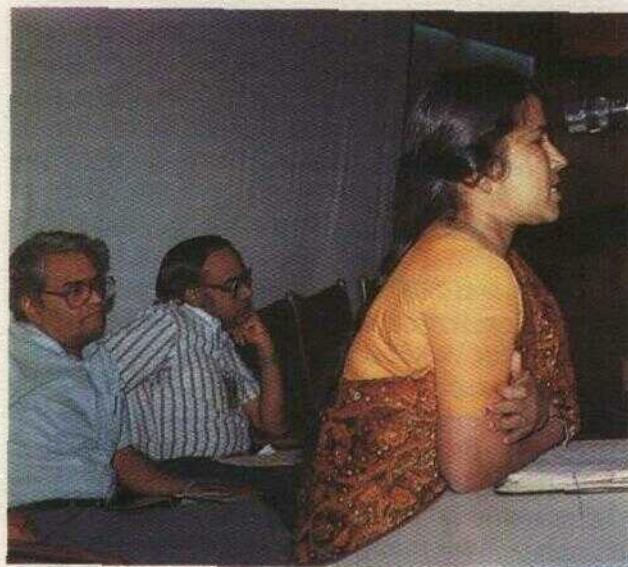
Introductory Remarks by Mrs S. Ravindran (NISSAT). Seated (*r. to l*) are Dr S. Sivaraman (NCL) and Dr S. Krishnan (NICHEM)

Inaugural Session: A Section of Participants

indicated the background of the meeting, activities of NICHEM and its achievements. It was followed by the introductory remarks by Mrs. Sreedevi Ravindran, Principal Scientific Officer, NISSAT. She briefly described the advantages of the package, recent developments and the policy of NISSAT in the distribution of the package. She also stated that the application packages like "SANJAY" and "TRISHNA" developed by NISSAT and the statistical package IDAMS are now available for distribution. An assessment of the utility of the package is very essential, and the users group meetings are organized annually. User views/experiences are always considered in developing and adding new features to ISIS; While PC version is popular, UNIX version of the package will be ready soon.

Inaugurating the meeting, Dr. S. Sivaram, Head, Polymer Chemistry Dept., emphasized the need for providing access to information and contribution of CDS/ISIS in this regard. He mentioned that till date such a user friendly package has not been utilized by the scientific community to manage and develop their own databases especially bibliographies. He emphasized that library/information scientists should work towards popularizing the CDS/ISIS software amongst the scientific community in their host institutions. The scientists still keep their data on note books or cards. If the scientists make use of CDS/ISIS, after an year or so, if their individual efforts can be consolidated, we could end up having a powerful data base. He appealed to research workers to exploit the capability of this unique package. In this context, he requested NICHEM to take action to implement this package for the use of all scientists in NCL and conduct training courses for the scientists.

Mr. V.G. Deodhar extended a vote of thanks to NISSAT for sponsoring this meet in NCL, to Dr. Sivaram for finding time to be with the participants, to the participants and their sponsors for participation; and to all others who were involved in the meet directly or indirectly.

Technical Sessions

4   There were six technical sessions. These were structured to give ample time for open house discussions on the problems and use of the package.

The first business session after the inauguration was developed to reviewing the progress in the promotion and application of CDS/ISIS package. The session was chaired by Dr. N.K. Gopalakrishnan, Project Director, National Institute of Agricultural Extension Management, Hyderabad. The speakers included Mrs. S. Ravindran and Sri B.N. Sarkar of NISSAT and Sri. A. Kanjilal, ISRO, Sriharikota. The specific achievements mentioned were:

(i) NISSAT has distributed 815 copies of CDS/ISIS since 1989. Of these 207 copies were distributed in the year 1992. The maximum number of licensed copies of software has been distributed in Delhi, followed by Maharashtra, Tamil Nadu, Kerala, Gujarat and West Bengal.

(ii) Imparting training in CDS/ISIS has been an integral part of NISSAT activities. About 2500 persons have already been trained so far. Regular training facilities have been created in institutions like INSDOC, DRTC and Pune University. In addition various professional bodies are also organizing short-term courses on behalf of NISSAT. The subject content of these courses generally included application of CDS/ISIS, Dbase, MS-DOS, ISIS, PASCAL, etc. However, subjects like CD-ROM technology, On-line accessing etc will be included in the course content from 1993 onwards.

While introducing the "SANJAY" package, Mrs. Ravindran gave a background on why NISSAT went for its development. She stated that the development of "SANJAY" was a follow-up action of the recommendations of 1st users group meet, towards the development of an integrated software for library automation.

She gave a brief presentation of the capabilities of the package. SANJAY is an augmented version CDS/ISIS Package. The system provides password protection and takes direct advantage of CDS/ISIS capabilities and PASCAL interfaces. It has modules on Acquisition System, Catalogue, Circulation Control and Serial control. She also informed the participants that this package will be available to various institutions at a nominal cost. Mr. B.N. Sarkar gave a demonstration of the Package.

Talking about NISSAT training programmes, she stated that NISSAT had created facilities at INSDOC, DESIDOC and Pune University for organizing series of training courses regularly on computer based bibliographic activities. Also various professional bodies are organizing courses on behalf of NISSAT. So far INSDOC & DRTC were dealing with CDS/ISIS, dBASE, etc. Next year onwards, topics on new Information technology like CD-ROM, On-line accessing etc., will be taken up. She said that so far more than 2500 people were trained in various topics. Participants who can participate as resource persons in NISSAT courses were requested to register their names with NISSAT.

She informed the participants that UNESCO had recently finalised a standard training programme on CDS/ISIS in the Distributor's meeting held in Philippines in October 92. According to it a modular approach with adequate flexibility to package the modules to suit the needs of the trainees would be adopted. The modules were introduced to the participants for their views and comments.

Mr. A. Kanjilal, ISRO Sriharikota presented the activities undertaken in SHAR Centre. They have developed modules in PASCAL for acquisition and cataloguing. This application also takes care of accounting part of the library. He also discussed a pascal programme for permuted keyboard index.

Sessions III to VI were devoted towards the presentation of user applications. Each session was followed by an open house discussion. Dr. S. Krishnan/NCL, Mr. ARD Prasad/ISI, chaired the different sessions.

The participants presented status of the use of the package in their institutions. Besides the usual bibliographic applications, the papers presented in various session included the following interesting applications:

Mrs. S. Ravindran/NISSAT, give a brief presentation on the status of ISIS use in the country. This was a summary of data received in response to a questionnaire circulated by NISSAT. Besides the usual bibliographic applications, the package is used by various institutions for creation of databases on Directories, Full text, Reports/Memo, Abstracting and numerical applications.

About 10 institutions out of 67 institutions are using ISIS PASCAL. The type of applications include Indexing/Abstracting, Acquisitions, Serials Control, Circulation Control, SDI, etc.

Mr. A.R.D. Prasad, ISI, introduced the ISIS PASCAL software "Pygmalion" for converting any ASCII file to CDS/ISIS. He informed that the program will allow the user to download databases from CD-ROM and dialogue to CDS/ISIS. This software is available in DRTC, Bangalore at a nominal cost.

Mr. G.K. Manjunath, Institute of Rural Management, Anand presented the Integrated Book Acquisition System developed for his institute. The program contains four databases containing details on bibliographic, program also print addresses on envelops/dispatch slips. The program will do address management, order books, print order copies of books, process bills and print payment approval letters, payment to supplies, payment adjustments letters to bank for foreign exchange, search on author, etc.

Mr. Narayan Kutty of VSSC explained in details how VSSC library is automated using CDS/ISIS. He informed that Book database of VSSC library was completed in March 1992 and the database is updated regularly with new records in respect of new documents added to the library. The library has developed 4 modules for managing works in Indexing and Acquisitions. He stated that the powerful capabilities of Print Formatting Language with DOS shell 5.0 helped him to develop these modules.

Dr. Manilal of CFTRI, Mysore discussed about the Search interface developed by his institute for searching database with minimum number of steps.

Mr. M.B. Patil of NICHEM presented a paper on using CDS/ISIS for building up the Indian Chemical Patents Abstract (ICPA) data base and publishing an abstracting journal. Since chemical structure diagrams are the natural language of the chemists, and since CDS/ISIS does not support graphics he has to create a diagrams using some other software and integrate them only in the print version of ICPA. Mr. V.G. Deodhar presented an application of CDS/ISIS for creating a union catalogue of current periodicals for the Pune libraries.

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Mr. R.B. Gaddagimath of National Academy of Agricultural Research Management, Hyderabad presented a paper on "Customization of CDS/ISIS to create a user friendly database".

In Session VII, Mrs. Ravindran dealt with new features of ISIS ver 3.0 apart from answering technical queries from the participants on the Package.

Technical Problems

The following questions and answers present the essence of technical aspects of the proceedings:

Q: Quarterly publications be started on CDS/ISIS applications.
A: It will not be advisable to start a newsletter for each activity. In NISSAT newsletter a few pages can be reserved for this activity; provided we get materials.

Q: Provide Manuals on floppies
A: At present, UNESCO do not allow that.

Q: Right Justification of CDS/ISIS output and checking of duplicate entry.
A: Not available. Already requested UNESCO to incorporate this feature.

Q: Global editing facility
A: Yes, there is a Pascal Program available. Interested persons can get it from NISSAT.

Q: ISIS cannot support Alphabets other than English like Mathematical symbols; French/Spanish titles are not possible
A: No. According to UNESCO source, this would require enormous programming. Possibly ISIS will handle this in Windows version.

Q: If a field is repeatable, what is the command to print only first two authors; only the third occurrence
A: It is not possible to print an occurrence of a field. Design the database accordingly.

Q: Some special features of DTP may be incorporated.
A: It is nice to have. UNESCO has set up some priorities. First let us have all the essentials such as LAN version, UNIX version etc. Now

after the release of UNIX version, UNESCO will concentrate on Window version. Till then try to use other packages like Wordstar, DTP, etc.

Q: Numerical Calculation to be introduced for fund control
A: Possible through an ISIS PASCAL program

Q: Can we combine data from different databases for output?
A: ISIS can combine data within the same database. It is also possible, if the different databases are properly designed.

Recommendations

The following recommendations were presented by the participants.

UNESCO

(1) Unix version of ISIS may be made available at an early date.

(2) Installable "Device Drivers" should be provided in CDS/ISIS so that the output can be printed in printer.

(3) Facility for checking duplicate records and Facility to store the search strategies so that some of the frequently used queries need not be re-entered.

NISSAT

(4) The documentation of SANJAY has to be improved.

(5) PASCAL programs developed by various users should be published in NNL.

(6) Unix version of TRISHNA may be developed.

(7) Region-wise User Groups may be formed to solve the problems of users in each region. There can also be regional meet twice or thrice in a year; and a national meet could be held once a year.

(8) CDS/ISIS tutorial and a detailed manual on ISIS PASCAL needs to be prepared.

(9) Directory of users should also contain the

databases developed by them and the areas of application.

(10) Standard Format for database creation may be provided with the sample database.

(11) SANJAY may be given to professional/ commercial institutions for vigorous marketing, if policy allows.

(12) Training Courses on PASCAL & ISIS PASCAL to be organized.

Concluding Session

The valedictory address was given by Prof. A.S. Kolaskar, Head, Zoology Dept. and Head, Bioinformatics Centre, Pune University. He emphasized the need for precise information to be made available to the scientists quickly. He felt that Indian scientists can and should start creating good quality databases. He described his own experiences in developing the virus data base which is now available world wide on the network. He felt that NISSAT should start funding projects for creation of databases in India.

Mrs. Ravindran presented summary of the participants evaluation on the meeting. On the whole, the participants noted that the objectives of the meet have been mostly achieved and the meet was valuable for their work. The most outstanding developments useful to them are LAN facility of Micro-ISIS and conversion programs. The facilities provided by NICHEM were very good.

In his concluding remarks, Dr. Krishnan expressed the desire for greater cooperation among users of CDS/ISIS, locally as well as nationally. He thanked NISSAT for hosting the users meet at NCL.

Mrs. Ravindran extended vote of thanks to NICHEM on behalf of NISSAT for their excellent arrangement, Prof. Kolaskar for his remarks, all the participants for their active role in making the meet a success, and their institutions for nominating the participants, all the chairmen of various sessions, engineers for providing the LAN facility and the rapporteurs noting down the deliberations and all others who have directly and indirectly involved.

SPIRIT OF LEARNING

"Exact knowledge of facts is as essential as common sense; a thorough grasp of the latest forms of technique is as necessary as general flair. A true spirit of learning and research should replace the attitude of self-sufficiency."

— SR Ranganathan
in Library Development Plan

Information Management For Rural Development: Its Parameters — XII SIS Annual Convention

Information Management for Rural Development was the theme of the Twelfth Annual Convention & Conference of the Society for Information Science held during 28-30 January, 1993. It was hosted by the Indian Institute of Chemical Technology, Hyderabad. The Conference discussed, among other things, a Model Plan for execution of rural programmes, rural communication system, linkage systems between urban and rural population for development, identification of information sources for rural development and building up rural databases.

About 35 information and library science professionals, scientists, and technologists, administrators and experts in rural development programmes in the country discussed the impact of rural development communication and information management systems and emphasised the need for better co-ordination particularly with the NGOS. The discussions, spread over five technical sessions, culminated in a set of recommendation aimed at integrated rural development programmes through a community information resources centre at village cluster level to facilitate effective development of rural people. Eleven papers were presented at these technical sessions.

Inauguration

The Chief Guest Dr. K.V. Raman, Former Director of National Academy of Agricultural Research Management, Hyderabad while delivering his inaugural address emphasised the need for building up an information bank for the benefit of rural population. He mentioned that rural development was a multi-faceted activity. It covered such wide areas as agriculture, education, health, sanitation, infrastructure development, social and organizational structure, etc. Most of these are human welfare and human resources development programmes, and are generally handled by several specialized sectors. Planning such a multi-faceted
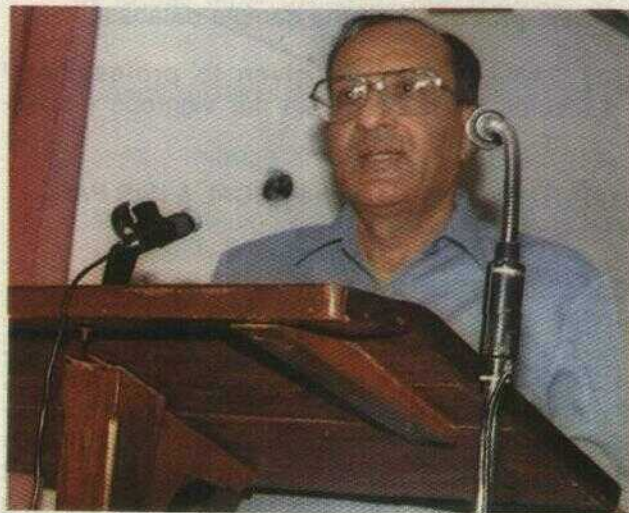
Inaugural Address: Dr. K.V. Raman, Director NAARM, Chief Guest

activity requires organized data availability. In spite of conscious endeavors on the part of the concerned organizations, co-ordination efforts in generation and sharing of information and data have not been always successful. Dr. Raman made some valuable suggestions like authenticity and reliability of primary data sources, role of NGOs in the collection and dissemination of information, evaluation of the existing networking systems, their adequacy and steps needed for improvement, training professionally qualified manpower, helping professional scientific societies like SIS in the Governmental efforts to collect, regulate and facilitate flow of information. Finally, he suggested that a Futuristic Think Tank be established within the society that will be continuously studying and monitoring the advances in modern information technology, and produce learned papers on the subject, and provoke enlightened thinking.

Dr. A.V. Rama Rao, Director IICT presided over the inaugural session.

Earlier, SIS Secretary P.C. Bose welcomed the distinguished gathering and gave a brief resumé of information management activities in the field of rural development especially by the National Institute of Rural Development (NIRD),

Hyderabad and other organizations in the country. SIS President S. Nagarajan in his presidential address reviewed the activities of the Society and the measures taken by Government on various programmes for helping the rural poor through Integrated Rural Development Programmes and setting up of Panchayati Raj.

Prof. R.G. Gupta, Dean, School of Computer and Systems Sciences, JNU, New Delhi receives Hony Fellowship. At right is Shri P.C. Bose, Secretary, SIS.

Hony Fellowships

The Chief guest gave away the Awards of Hony Fellowship of SIS and Young Information Scientists for 1992 to the following:

1. Prof. R.G. Gupta, Dean, School of Computer & Systems Sciences, Jawaharlal Nehru University, New Delhi for his outstanding contribution to computer science.

2. Dr. Sukumar Mallick, Deputy Adviser, Extra Mural Research Division of CSIR, New Delhi for his outstanding contribution in developing current research information system of CSIR.

3. Shri N.M. Malwad, Librarian, Indian Institute of Science, Bangalore for his outstanding contribution to Library and Information Science.

The Young Information Scientists' Award instituted in 1989 in memory of late Shri A.S. Raizada, Founder Secretary of the Society, was given to:

Shri N.C. Jain, Senior Research Officer in the Division of Publications & Information of the Indian Council of Medical Research, New Delhi in recognition to his contributions towards S & T information dissemination.
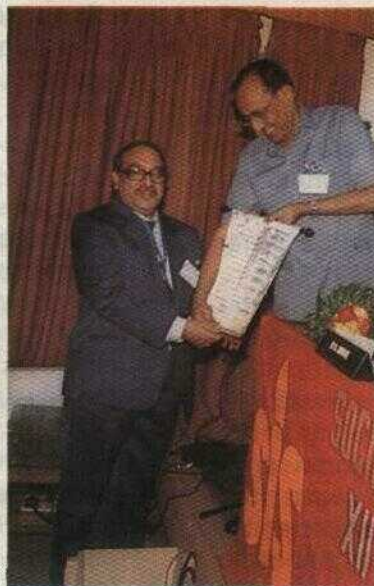
Above, other award winners (*from left*) Dr Sukumar Mallick Dy. Adviser, EMR Division CSIR, New Delhi; Shri N.M. Malwad, Librarian; Indian Institute of Science, Bangalore (Hony Fellowships); Shri N.C. Jain, Senior Research Officer, ICMR, New Delhi receives the Young Information Scientist's Award instituted in the memory of late Shri A.N. Raizada, Founder-Secretary, SIS.

Technical Sessions

The Technical Sessions which followed dealt with topics detailed as under:

Session I: Identification of Information Services — *Chairman*: Prof. , A.K. Dasgupta, Chief of Research, EENADU, Hyderabad.

Session II: Building up Rural Databases and Case Studies. *Chairman*: Shri L.J. Haravu, Manager, Library & Information Services, ICRISAT, Patencherru.

Session III: Rural Communication System: Working out strategies, *Chairman*: Dr. B.S.S. Rao, Director (Information), National Institute of Rural Development, Hyderabad.

Session IV: Linkage Systems between Urban and Rural Population. *Chairman* — Shri S.K. Arora, IAS Director, National Institute of Agricultural Extension Management, Hyderabad.

Session V: Model Plan for Information for Rural Development. *Chairman* — Prof. N.B. Inamdar, Director, Institute of Library Science, Hyderabad.

Recommendations

Discussions at the technical sessions culminated in a set of recommendations prepared by Shri A.K. Mathur, (NISTADS), the Rapporteur of the Conference which were discussed and presented by Dr. S. Mallick at the Plenary Session. Some of the main recommendations were:

1. To meet the challenge posed by the complex task of Rural Development, it is critically important to build systems for information generation, collation, storage, retrieval, analysis and dissemination at local, regional and national levels. For this various tools and techniques offered by information science including modern information technology as well as other disciplines need to be consolidated, and pressed into services.

2. Government efforts by themselves are
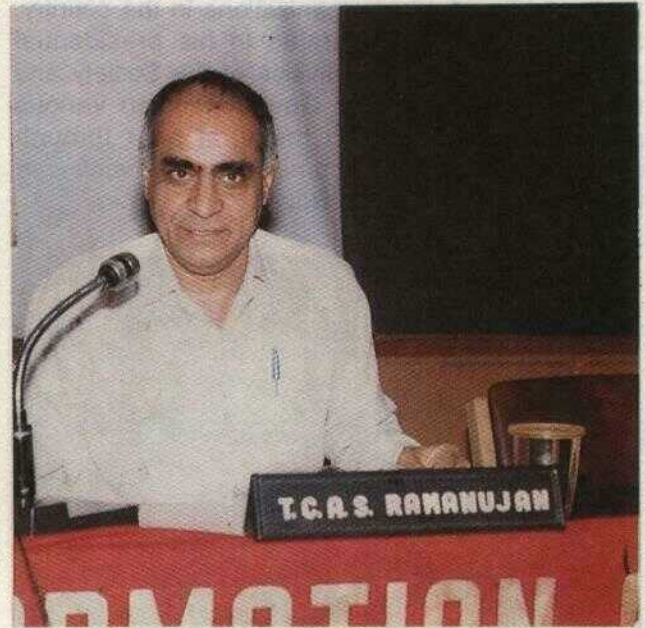
Shri T.C.A.S. Ramanujam, Director General NIRD addressed the Plenary Session

inadequate to meet the above challenge and should be supplemented by the efforts of various national and state level autonomous institutions and non-governmental organizations.

3. There is an urgent need to map out enormous information already available at micro and macro levels in the form of manuscripts, journal articles, reports, bibliographies, statistics, directories, databases, etc., with government bodies, research institutions, NGO's, etc. Particular notice should be taken of (a) Sectoral studies bibliographies, and databases, for example on tribals, ethnic medicines etc., (b) Non-conventional literature produced by institutions NGO's and other activist groups; (c) Information on technologies, products and processes developed by individual laboratories, etc.

4. For optimum resource sharing and to cater to the needs of various users, there is an imperative need for state and national level institutions to come forward for building information systems in the form of large databases, regional networks thereof and information products and services covering various aspects of rural development. An apex

body may be charged with the task of guiding and co-ordinating the operation of these regional networks and also for formulating modalities for interaction of these networks with the NIC networks like DISNIC, etc.

5. It is of necessary to fashion out and establish at each village or village cluster level a Community Information Resource Centre (CIRC) to facilitate effective development of the rural people. There is need to clearly define the role, organisational set up, manpower skill requirements, participative management style, mode of linkage with the govt. officials and information networks for these CIRC's.

6. Various state and national level institutes must be geared up for training and retraining of manpower to be associated with the proposed CIRC's, networks, etc.

7. Information management for rural development must be recognised as an important area for rural development funding research programmes, action research, etc. by various state and central departments related with rural development. The same area should also be considered important for carrying out research programmes in the library and information science, social science, etc. faculties at the universities, including agricultural universities and other premier institutes like NIRD, IIM's, IISc, IRMA, etc.

8. To clearly delineate the various issues involved in the all important task of information management for rural development, an appropriate agency may be approached to commission writing of status papers on the following important issues:

a) A model village level information resource centre.

b) Mapping the country's available conventional and non-conventional information resources relevant to rural development.

c) Guidelines for building large regional databases, networking them and for their interaction with DISNIC, etc.

d) Modalities for reconciliation of the centralised or "top-down" approaches inherent in the govt. instituted informatics networks and rural development programmes and the "bottom-up" approaches sought to be followed or advocated for the NGO's, CIRC's, researchers, etc.

Plenary Session

The Plenary Session was chaired by Shri T.C.A. Srinivasaramanujam, Director-General, National Institute of Rural Development, Hyderabad. Secretary, SIS, P.C. Bose in his introductory remarks spoke about the theme of the conference and the different technical sessions which discussed the information management aspects of rural developments and its parameters resulting in a set of recommendations which will be forwarded to the Ministry of Rural Development and the National Institute of Rural Development where there is already a Centre of Rural Documentation (CORD) for implementation.

Shri T.C.A. Srinivasaramanujam in his valedictory address outlined the various problems faced by the 74 per cent of rural population out of India's 878 million people. This is the most vulnerable section of the society with 136 million S.Cs and 67 million STs, 23 million are unemployed and 301 million children are suffering from malnutrition and diseases. Problems like potable drinking water, housing, sanitation, healthcare, road, education, low productivity of crops and commodities needed to be tackled properly: It requires an information system linkage with rural development. This information would depend on availability, accuracy, absorbity and adoption. The entire planning process depends on the accuracy of the data. Communication system is also important for the success of rural development programmes.

In his vote of thanks, S. Nagarajan President, SIS, thanked Shri T.C.A. Srinivasaramanujam for his scholarly address. He expressed deep gratitude of the Society to Dr. A.V. Rama Rao, Director, IICT, Shri M.M. Hasan, Shri K. Hari Hara Prasad and their colleagues and other members of the local organizing committee for the excellent arrangements made for the conference.

11

Status of CDS/ISIS Training and Use in Asia and the Pacific: Regional Report

Based on Country Reports submitted by Participants to the Asian Regional Training of Trainers and Meeting of Distributors of UNESCO's CDS/ISIS Software Package

Patricia B. Carino Institute of Library Science
University of the Pilippines Diliman

1.0 Introduction

UNESCO released the mini-micro version of CDS/ISIS in 1985. Since that time and due to great demand worldwide, distribution of the software and training on its use have been decentralized. UNESCO no longer deals with each requesting party. A network of regional, national and special distributors now exists to service the specific needs of users.

This decentralization gave rise to two areas of concern in the Asia/Pacific region. First, there is no system of exchanging information on users and the types of applications they have developed. *While regular CDS/ISIS columns are now included in two UNESCO publications (UNISIST Newsletter and ASTINFO Newsletter), these have limited distribution. Second, while provision of training is voluntary and dictated by the trainees' needs, there is no indication of regularity nor consistency in coverage amongst the various training courses now offered by various institutions in the region. What is called "beginner's course"* in one country may not mean the same in another country; there might even be differences within a country!

Cognizant of these concerns, the Institute of Library Science, University of the Philippines (UPILS), the Philippine CDS/SIS national distributor, proposed to the Regional Adviser of the UNESCO General Information Programme in Bangkok, a meeting of both trainers and national distributors. The meeting was expected to result in an inventory of CDS/ISIS users and their applications as well as a proposed standard

training program that could be adopted regionwide. The meeting was held in the Philippines on 5-9 October 1992. It was sponsored by UNESCO and organized by UPILS in cooperation with ISISPHIL—The Philippine CDS/ISIS Users' Group.

To facilitate discussions during the meeting, a survey of national survey and training courses was conducted before the meeting. The survey resulted in country reports from 14 ASTINFO member countries, namely, Australia, China, India, Indonesia, Iran, Korea, Malaysia, Nepal, Pakistan, Papua New Guinea, the Philippines, Sri Lanka, Thailand, and Vietnam. Based on these, a summary of the state of CDS/ISIS use and training in the Asia/ Pacific region is herein presented.

2.0 Methodology

2.1 The National Surveys

The UPILS as lead agency prepared the survey forms and guidelines for the preparation of the *country reports. Multiple copies of these forms* were sent through the national distributors to the duly-designated national delegate to the regional meeting, who was tasked with conducting the national surveys.

Two types of forms were used:

1. Survey of CDS/ISIS Users, Applications, Programs and Utilities.

This form was used to generate detailed information on CDS/ISIS users within the country, the kinds of applications or databases they have developed, as well as accompanying ISIS PASCAL programs and utilities used with these databases.

2. *Survey of CDS/ISIS Training Courses*

This form was used to generate information on the types of training courses offered in the country,

their content, methodology, course materials used, and the institutions offering such courses.

While the national surveys were in progress, UPILS modified its existing data base of users in preparation for the expected inputs from the various countries. The revised database provides for the encoding of data in the survey forms which the participants were requested to submit with their reports. Due to lack of time, it was not possible to collate the individual forms. In addition, only a few such filled-in forms were returned.

2.2 The Regional Summary

Data provided in the country reports were collated and organized under common areas. Difficulty was encountered in the process for two reasons: varied levels of detail (e.g. summaries vs. simple enumeration) and varied presentation of figures (numbers vs. percentages). Again due to time constraints, most of the country reports could cover only a sample of the users. This summary, therefore, is a representative but not a comprehensive picture of CDS/ISIS training and use in the region.

3.0 Status of CDS/ISIS use

3.1 CDS/ISIS Users

Official registers show that there are more than 2,457 licensed users. This figure is broken down as follows:

Table 1. Licensed CDS/ISIS Users

Country	Licenses
Australia	70
China	1000 +
India	755
Indonesia	75 +
Iran	28
Korea	156
Malaysia	87
Nepal	20
Pakistan	10
Papua New Guinea	12
Philippines	131
Sri Lanka	60
Thailand	209
Vietnam*	
Total	**2457 +**

*no details given

Several reports cited the possibility of other institutions within the country who have acquired a copy of CDS/ISIS from other sources but are not registered with the distribution center. In Sri Lanka, for example, it was noted that there are in fact 85 known users although only 60 are registered with NARESA, the national distributor. No exact figures could be given for China and Indonesia. It was also noted that the national figures represent the number of licenses granted but not the total number of users within a licensed institution.

Table 2. User Categories (by type of organization)

Category	No.	%
Government agencies	269	25.94
S/T units	258	24.88
Academic institutions	237	22.85
Private agencies/Associations	180	17.36
State corporations/Statutory bodies	61	5.89
International/Regional bodies	16	1.54
Non-governmental organizations	8	0.77
Others	8	0.77
Total	**1037**	**100%**

Table 2 shows the user categories by type of organizations. The total figure of 1,037 represents only 42.2% of the total number of users reported. This is because several reports did not specify the types of institutions using CDS/ISIS in their countries.

3.2 Types of Data Bases and Applications

As expected, a great majority of databases are bibliographic in nature (76.62%). These databases are used for different library services and housekeeping operations:

Library services: abstracting, indexing, current awareness services and SDI, cataloging.

Housekeeping operations: acquisitions control, inventory control, circulation control, serials control.

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There are a number of non-bibliographic databases, such as directories, numerical, and administrative records, as well as patent information. These are used for research management,

personnel management, budgeting, production of mailing lists and directories.

Table 3. Types of Data Bases

Type of Data Base	No.	%
Bibliographic	213	76.62
Directory of institutions	23	8.27
Directory of persons	19	6.83
Administrative records	7	2.51
Directory of activities	5	1.8
Full text	3	1.1
Numerical	1	0.36
Others	7	2.51
Total	**278**	**100%**

3.3 *Applications Development*

A majority of these applications use the standard ISIS program. Only about 21 cases reported use of databases with ISIS PASCAL programs. In India, 15% of applications requires ISIS PASCAL programs. Examples of these programs are enhancements to the standard ISIS menus, print routines, enhanced search operations, and automatic indexing. Most utilities available are for converting files created using other softwares or downloaded from other databases into the ISO 2709 format.

A significant development is the design of national standard formats for bibliographic records. This is true of China, Thailand and Vietnam. This eliminates or minimizes individual efforts in developing applications. It also contributes to greater capability to share and exchange databases and training on how to use them among libraries. Some institutions also develop packages which they make available to other users, either for free or for a minimal fee (e.g. India).

Another development is the customization of ISIS into national languages and scripts. Several versions are now available in the region, to wit, Devnagiri (Sanskrit), Farsi, Korean, Vietnamese, Chinese, and Thai. On the other hand, the problem of lack of absence of a Reference Manual and other reference materials in the same language faces many users.

3.4 *Users of CDS/ISIS Applications*

CDS/ISIS databases and applications are generally accessible to the library staff and users. Searches, however, still have to be delegated because of the users' lack of knowledge or training on ISIS operations. Other user categories are computer personnel, research and technical staff, administrative staff, and visitors to the institutions using CDS/ISIS.

3.5 *Subject and Geographic Coverage*

It was difficult to determine the specific coverage of databases. The reports indicated such topics as agriculture, socio-economics, engineering, health, community development and environment. Since a large number of users are libraries, it is expected that both the subject and geographic coverage of databases are global in nature, although there were some references to database that concentrate on national and local data.

3.6 *Shareware Information*

There was very little mention of "shareware", i.e., availability of existing applications, programs and utilities to other users. In the case of Australia, the national distribution center is willing to share its programs and utilities for free or for a nominal fee. The Indian national distributor provides three packages under varying terms: Nalanda (fee-based), Sanjay and Trishna (free package and technical support; training at nominal cost). Thailand has no policies regarding shareware; only one is available free-of-charge from the national distributor, i.e., NCARD (used to generate catalogue cards on continuous forms).

3.7 *CDS/ISIS Users Groups*

All national distributors face the problem of the heavy demand on their human and other resources to provide technical support and training of new and old users, over and above the administrative aspect of processing new requests. Except in the case of China, Vietnam, and India (where a duly-mandated institution has been designated as national distributor and provided funds for this purpose) most national distribution centers are small operations, with only a few staff (in several cases, only one or two) and without funding

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support. To partially solve this problem, national distributors have initiated the formation of national CDS/ISIS users groups. There are now nine such groups organized in the region. These groups assist the national distribution centers by conduct-*ing training courses and providing technical support* to other users. In addition, they hold annual meeting of users, conduct study tours, publish user directories, conduct special lectures and discussions, and publish newsletters to exchange information on activities and share experiences, problems and solutions. The CDS/ISIS users groups can be found in the following countries:

Table 4. CDS/ISIS User Groups

Country	Date established	Name
Australia	ca. April 1991	—
China	1991	China User's Asso. for micro-CDS/ISIS (informal)
India	—	—
Malaysia	10 March 1990	Kumpulan Pengguna CDS/ISIS Malaysia
Nepal	January 1992	CISN-CDS/ISIS Society — Nepal
Papua New Guinea	October 1991	PNG CDS/ISIS Users' Group
Philippines	October 1988	ISISPHIL — The Phil. CDS/ISIS Users' Group
Sri Lanka*	November 1990	CDS/ISIS Users' Club in Thailand
Thailand	—	

*no details available

3.8 User and Distribution Problems

Users encounter several problems with the use of CDS/ISIS. Many of these have been addressed by the release of Version 3.0, which incorporates corrections to problems found in Version 2.3 as well as new features, the most important of which is the ability to share CDS/ISIS databases in a network environment. (Refer to the Final Report, Asian Regional Training of Trainers and Meeting of Distributors for details on specific technical problems). A basic reason for these problems is lack or absence of training on the part of the users. Few are willing to put in time to read the Reference Manual and learn the software by themselves. *Another is the absence of reference materials in* their own language and script.

These situations have contributed to a commonly reported problem faced by national distributors: non-use of CDS/ISIS even after licensing. Other factors, in addition to lack of trained manpower and local language materials, are:

● a felling or impression that the software is difficult to use;

● lack of technical support;

● lack of understanding of what the package can do on the part of library planners and computer vendors; and

● lack of hardware.

Only one country (Papua New Guinea) reported difficulty of getting the software from the official distributor as a problem.

Interestingly, one country (Indonesia) reported *"overexpectation"* as a problem. Perhaps this is true of other countries as well. For example, a problem commonly cited is the inability of CDS/ISIS to handle statistical operations, symbols and graphics, whereas the CDS/ISIS Reference Manual categorically states that the software is designed for textual data. users also tend to look *for capabilities or features they have earlier seen* in other softwares, such as relational databases modeling, pop-up menus, etc.

Lastly, as already cited earlier, national distributors encounter difficulty in monitoring the presence of copies unlicensed users have acquired from other sources. The most common source is training courses, wherein trainees can copy the software and acquire the accompanying manuals for a fee. Even when institutions apply formally for a license for the copy already they have, national distributors still have to evaluate the institutions' request vis-a-vis the terms and conditions UNESCO has set for the transfer of CDS/ISIS.

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4.0 Status of CDS/ISIS Training

4.1 Types of Training Courses

There are three main types of courses being offered by various institutions within the region: beginner, advanced and special.

4.1.1 Beginner's Course

There are two types of beginner-level courses: those designed for operators of pre-developed databases, and those organized for database designers.

For the data operators, areas covered include data entry and maintenance, inquiry and searching, and printed report generation. Depending on the trainee's background, an introductory module on computers and DOS may be included. Course duration varies from institution to institution; the course may last from two to five days. At the end of the course, trainees are expected to be proficient with the ISIS user services, enabling them to use applications developed for them by others.

For the database designers, the course incorporates all ISIS features and facilities. Trainees may have little, if any, experience with CDS/ISIS. A typical course would have the following outline (taken from the China country report):

1. System overview (including installation)

2. ISIS database tables

3. Editors

4. Simple formatting language for print/display

5. Defining databases: .FDT,.FMT,.PFT,.FST

6. Data entry

7. Search language (including .ANY and STW)

8. Printing

9. Organizing databases (ISISXCH)

Differences with other outlines lie in the

sequencing of topics, amount of time devoted to workshops and exercises, and total course duration. Other training institutions (such as the UPILS and NARESA in Sri Lanka) include preliminary sessions on computers, DOS, systems analysis and design and sessions on searching an ISIS database, and inverted file maintenance. A case study is usually assigned to the participants. This type of course usually lasts five days.

4.1.2 Advanced Course

As in beginner-level courses, advanced-level courses may be classified into two: those that are essentially the same as the beginner's course for database designers and those that concentrate on ISIS PASCAL. Only Vietnam reported offering courses of the latter type, although NISSAT does cover ISIS PASCAL in some of its training programs but in conjunction with other programming languages.

There are differences noted between the "beginner" and "advanced" courses for beginners. In the first case, the time limitation allows for one simple case study and covers only the basic ISIS features to be able to design a simple applications. In the second case, because of the longer course duration, there is the option to assign a more difficult case study as well as discuss the more advanced features of CDS/ISIS, specifically its print formatting and search languages, and creating predefined worksheets. A typical course coverage, again using the Chinese example, is

How to:

1. Use a complex print formatting language

2. Add a new language

3. Add/modify system menus

4. Use ISISPAS

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(to be continued)

Technology Information, Forecasting and Assessment Council

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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 and developed an online Information System.

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    Intellectual Property Protection In India : A Practical Guide for Scientists, Technologists and Other Users (Rs. 900/-)

> For further information on TIFAC publications, please contact, Manager, TIFAC, Technology Bhawan, New Mehrauli Road, New Delhi.
> Ph. No. 6867764, 6862331 Fax : 011 - 686 3866

INFORMATION SERVICES

TIFACLINE: A project on on-line, interactive, spatially dispersed but centrally accessible Technology Information System is now ready for user access from Delhi and Bangalore. Technology databases on Composites, Non-Ferrous Materials, Energy, Food Technologies and Environmental Technologies are available on-line. Also supplementary databases on Standards (Indian and international) and Indian Experts (soon to cover NRIs too) can now be accessed by the users.

TIFAC would soon start offering accesses to internationally acclaimed databases viz. METADEX, CHEMABS, COMPENDEX PLUS, INSPEC 2 etc. Also databases on technology sources, business scenario, export opportunities viz. FT Profile, PROMT etc. would be available for on-line accesses by the users or alternately searches to be carried out at TIFAC on users' request.

> For further details on user registration, pass words etc. for on-line searches or for off-line information to be provided by us, please contact Project Officer, TIFACLINE (Telephone : (011) 686 3877, Fax : (011) 686 3866) at E-6, Qutab Hotel, New Mehrauli Road, New Delhi 110 016.

ISIS-Pascal Utilities Developed at NCSI

At the National Centre for Science Information (NCSI) three general utility programs have been developed in ISIS-Pascal by the present batch students of the one-year *Training Course in Information Technology Applications,*' as part of their course work. Two of the CDS/ISIS interface programs have been developed as individual minor projects and another one as a group project.

A brief description of these programs is given below. CDS/ISIS users who find these programs useful, can write to NCSI for listings of these programs.

LODCOM. PAS:

This program reads the records downloaded from CD-ROM databases and loads them into a CDS/ISIS database. NCSI subscribed to two CD-ROM databases COMPENDEX and MEDLINE supplied by DIALOG On Disc. The search & retrieval software supplied with the databases, naturally has options for downloading the search results into a text file as well as for printing them.

LODCOM program developed as a group project by the trainees can read records downloaded from CD-ROM in *"Full Record Tagged"* format and loads them into CDS/ISIS database. To avoid complicating the code, separate programs are written for loading the data from each of the above mentioned CD-ROMs. The CDS/ISIS databases are defined according to CCF standards and the program takes care of loading repeating fields and embedding the subfield delimiters into the field where required. The FDT of one of the databases is shown below.

| Field Definition Table (FDT) | | | | | Data Base: COMPEN |

Tag	Name	Len	Typ	Rep	Delim. / Patrn.
200	TITLE	250	X		
300	AUTHOR	150	X	R	ABCDEF
310	CORPORATE SOURCE	250	X	R	BD
440	PUBLICATION YEAR	4	X		
490	SOURCE	200	X		ABCD
31	LANGUAGE	10	X		
102	CODEN	10	X		
101	ISSN	12	X		
600	ABSTRACT	1650	X		
610	E I CLASSFN. CODE	100	X		
620	DESCRIPTORS	300	X		
625	*IDENTIFIERS*	*150*	X		

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These programs can be easily modified for loading records downloaded from CD-ROMs supplied by Silver Platter, another popular publisher of CD-ROM databases.

GLBMOD.PAS:

This program, developed as a minor project allows global modification of any field in CDS/ISIS database records. This program can be used on CDS/ISIS databases just as the *'REPLACE ALL'* command is used in dBASE for global modification of a field in all the records of a database. GLBMOD program asks the database user for:

the tag of the field to be replaced
the string it should look for and
the string that should be used for replacement.

It then gets each record of the CDS/ISIS database, checks each occurrence of the field for the presence of the given string and replaces it with the new string if it is found. The record is re-written after all the replacements are completed. This process is repeated for all the records of the database.

SELFMT.PAS:

This utility — also developed as a minor project — helps a CDS/ISIS database user to select a pre-defined display format. The *Information Retrieval Services* menu of CDS/ISIS provides an option for selecting a display format from the available formats for a database. But in order to use this option, the user is expected to know not only the names of the pre-defined formats but also how the display looks like. The above program is written with a view to overcoming this problem.

This program gets the names of the available formats for a particular database from the file in which the FDT of the database is stored. It then formats the first record of the database according to each format and displays it alongwith the format name. The database user can select the required format by a single key-press.

NCSI is willing to share the source listings of the above programs with the CDS/ISIS user community in order to avoid duplication of efforts and *'re-inventing the wheel.'* The programs can be sent either by e-mail or by post in printed form. Interested users can write to National Centre for Science Information, Indian Institute of Science, Bangalore 560 012.

LIS: Put On Your Thinking Caps

Today, in-depth knowledge of information sources, advances in information technology, rapidly changing communication media and newer designs of information systems are necessary. Moreover, each situation demands a highly perceptive and skilled approach to retrieving, repackaging and producing value added information tailored to the specific needs of the problem on hand and the social environment in which it emerges.

Recently the draft paper on Science and Technology was put out for public debate. Enterprenuership in technology, increased productivity in industry, re-orienting R & D effort, linking of national laboratories, industries and universities creating awareness of indigenously generated information — will no doubt be discussed in detail. Instant access to ideas globally and active interaction among researchers, scientists and technologists will bring the many facets of the task into sharper focus.

But what does all this imply for information professionals? It should spontaneously trigger off the desire to re-think, redesign all possible means of informational support and response at every stage. They need to put on their thinking caps and explore the most fruitful ways of integrating appropriate information into the entire process.

— Dr. Suseela Kumar in *MALA*, April 1993.

News and Events

Training Course on Science Writing

A short-term training course on Science Writing was organized by the Publications & Information Directorate (PID), New Delhi, from 15 to 22 March 1993; seventeen scientists/ editors from 10 institutes/laboratories of the Defence Research & Development Organisation (DRDO) attended the course.

The course was inaugurated by Dr. G.P. Phondke, Director, PID. He also delivered the theme lecture in which he dealt with various levels and channels of S & T communication. The faculty for the course was drawn from experienced science communicators and editors of PID. In addition, some outside experts also addressed the participants.

Prof. H.Y. Mohan Ram, Department of Botany, University of Delhi, and Chairman, PID-RC, spoke on Ethics of Communication in Science. He discussed plagiarism and other dishonest practices followed by some scientists while publishing their results. Stating that honesty is an essential factor in the scientific field, he emphasized the need to keep integrity in publishing of scientific results. Dr. Gian Singh, Scientist PID, proposed the vote of thanks.

Designing and Illustrating Scientific Publications — Workshop

A workshop on Designing and Illustrating Scientific Publications' was organized by the Publications & Information Directorate (PID), New Delhi, from 15 to 19 February 1993. Sixteen participants from different institutes, which are engaged in bringing out scientific publications, attended the workshop.

The workshop was inaugurated by the noted artist Gopi Gajwani of the American Centre, New Delhi. Addressing the participants he pointed out that designing of a publication is a specialized field like any branch of science, whose main purpose is to improve communication, and to make reading interesting and comfortable. It calls upon the designer to have a proper understanding of the target audience. Shri Gajwani stressed the importance of typography, proper placement of the various parts of the text and judicious use of colours in making the publication more attractive. Discussing the aim of the workshop, Dr. G.P. Phondke, Director, PID, said that designing and graphic presentation are integral parts of science communication. Science communication aims at breaking the barriers between the various disciplines of science, leading to inter-disciplinary research, and establishing a relationship between science and society. The workshop, he said was an attempt to bring together scientists, editors and artists to discuss ways for improving science communication.

Dr. Phondke mentioned the various levels at which a scientist or technologist has to communicate; each level has its own vocabulary, degree of complexity, presentation format and design requirements. Good illustrations and design of the text can often help remove the inhibition of a reader for reading a scientific publication, he added.

Among the scientists who addressed the participants were Dr. M.N.M. Rao of the National Physical Laboratory, and Prof. Asis Datta of Jawaharlal Nehru University, New Delhi. Dr. Rao discussed the evolution of life on earth and the possibility of extraterrestrial life. Prof. Datta spoke on the fundamental concepts of biotechnology. After the talks the participants held discussions with the speakers to prepare illustrations on these topics.

A team of expert designers/illustrators, namely Ramesh Kothari from Ahmedabad, Ramesh Sanzgiri and Vithal Nadkarni from Bombay, and Ravi Paranjape from Pune, briefed the participants about the fundamentals of art, design and illustration. The aspects covered included history of art and design, evolution of design, typography, layout, and use of multimedia in design and illustration. Dr. Pradeep Srivastava of the Central Drug Research Institute, Lucknow, highlighted the role of cartoons (scientoons) in science communication. Shri Nadkarni stressed on the interaction between scientists and artists in improving the quality of scientific publications. Shri Paranjape spoke on the technique of perspective rendering of architechtural designs. Role of computers in designing also came up for discussion.

Biman Basu and Pallava Bagla of PID presented case studies on illustrating popular science journals and books published by PID.

Science Writers Convention

The Indian Science Writers Association held its first national convention at New Delhi during 12-13 February, 1993. Over 100 participants comprising scientists, science policy makers, science editors, reporters and writers attended.

Inaugurating the Convention, Dr. S.K. Joshi, Director-General of the Council of Scientific and Industrial Research, New Delhi exhorted the participants to work towards 10 to 15 per cent of time and space in the media for coverage of issues relating to S & T. He particularly emphasized the need for active participation of institutions like the Indian National Science Academy and institutes engaged in the popularization of science like the Publications and Information Directorate, New Delhi.

"S & T are soon going to change the very life styles of people. The responsibility of preparing the people to this cultural shock is in the hands of science communicators" Dr. Joshi, who has also just taken over as the President of the Indian National Science Academy, also emphasized the obligatory role of scientists to interact more closely with

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science communicators by providing them timely information about their activities. "Our Parliamentarians, non-scientists intellectuals, and general public have to be well informed about issues in S & T" Dr. Joshi concluded.

A Souvenir and a directory of ISWA members were also released on this occasion.

The two day meet focussed on the following areas. Status of coverage of S & T in audio-visual media and means of improvement. The need for expanded coverage of hard science news in the print media and means to achieve it. Reasons for inadequate discussion of science in the Parliament and how to rectify the situation. Find means to interact with Parliamentarians to keep them well informed on issues of S & T. Take stock of trained pool of qualified science communicators and find means to improve the number and quality in this area.

In the Session on electronic media, senior professionals shared their own special problems. Usha Bhasin, an All India Radio official complained about lack of good ideas for science programmes on the AIR.

Experiences with the popular science television serial Turning Point were shared by M.M. Choudhury of the Times TV. He explained the reasons why this science TV serial is popular ever since its started in 1991. It may be due to their efforts in maintaining quality and accuracy of contents. Apparently the producers of the serial believe in taking science literacy from top-down and therefore the programme is made in English. He lamented the lack of support, particularly from private industrial houses without whose sponsorship it is difficult to make good quality science programmes for the TV. As in the case of radio, Choudhury said, that there is a dearth of good script writers experienced in communicating science through the TV.

That print media has its own oddities was eloquently brought out by the panelists. Surendra Jha, commented ruefully that the status of science coverage and popularization in the media continues to be deplorable. Coming as it does from the former editor of the popular science magazine India has seen — Science Today (though closed now) — it does not augur well for the country with an expanding base of S & T and ever increasing illiterate population exposed to new technology be it cable TV or a new disease with an acronym like AIDS. He said that unless we involve the decision makers in this process, very little can be achieved.

Results of perhaps the only survey undertaken on the awareness of science by Parliamentarians were presented by Ashok Jain, Director of the CSIR's National Institute of Science, Technology and Development Studies. This Delhi-based Institute polled the Parliamentarians about their awareness and interest in issues relating S & T. A majority of MPs agreed that there is lack of adequate discussion of S & T issues in the Parliament. The major constraints according to them include lack of public pressure, inadequate importance given by the political parties, inadequate training and lack of proper briefing. But nearly everyone agreed with the need for more emphasis as they believed that social upliftment is possible only through S & T.

(i) Scientific knowledge and technological information must be made accessible to the science communicators for dissemination to the people of India. "Science education" be made a "science mission" in the 8th Plan, and private-industrial sector should be asked to take up the task of "popularisation of science".

(ii) In order to overcome lack of science awareness among the public, and communication skills among professionals, short term and long term science communication courses should be encouraged. "Science communication" course (paper) should be made an integral to Science degrees in colleges and universities.

(iii) Greater coverage of science and technology news and reporting is necessary if the citizens are to think critically about science policy and public policy issues and participate in the S & T public policy decision making process. But, politics have become an obsession with the national press. In contrast, news and studies about scientific research and lectures and seminars on important S & T subjects receive little attention of our national press. As a part of National Science Communication Policy, it is suggested, our Parliament and the print media may consider devoting at least fifteen per cent of its time and space to problems and issues, news and events of S & T ministries and departments and on related topics of science and technology. We recommend formulation of National Science Communication Policy.

Mr N.C. Jain, Jt. Secretary, ISWA has been awarded the Raizada Memorial Award-1992 for Young Information Scientists of the Society for Information Science, New Delhi for his contributions in the dissemination of S&T informaiton. Mr Jain received a merit certificate and a medal during the inaugural function of the Annual Convention of the Society held at the Indian Institute of Chemical Technology, Hyderabad.

IT ASIA 93

MAIT will organise its trade show for this year, providing another opportunity for the Indian sellers to showcase their best wares and justify their presence among an International audience. Spread over four days from 16 to 19 September 1993, it will primarily be a focussed business event, enabling the best of the Indian IT (not computer alone) to be shown and providing ample opportunity to help itself grow internationally. Over a sprawling 60,000 sq ft of air-conditioned exhibition space at Pragati Maidan, New Delhi, there will be a wide option of stall sizes to choose from. Seminars on hardware & software application solutions and lectures on technology will be held, alongwith manufacturers presentations.

A two-pronged strategy has been developed to make IT ASIA '93 an allround success.

For the first time, a SITO (Southeast Asia Information Technology Organisation) CEO Round Table Meeting shall be convened to coincide with the dates of the exposition.

In order to ease product definition and service identification, the exhibition shall also be divided into 3 broad categories.

General: For those exhibitors covering a comprehensive range of IT activities.

Solutions: For those displaying solutions on multiple platforms and showing their own developed products/services. Under this, the computer education and corporate training is expected to be covered also, and

OEM: For those exhibitors manufacturing peripherals and sub-assemblies which are used as Original Equipment (OE) in branded machines, plastic/metal cabinets, power supplies, PCBs, etc.

INFLIBNET Training Programmes

The Information and Library Network Programme organized its First Training Course on Application of Computer to Library and Information Services during Nov. 23-December, 12, 1992 at Ahmedabad.

The course covered basic theory to familiarise participants with data preparation, data capturing, information retrieval, standards, modern services etc. These were followed by demonstration, assignments and extensive practical sessions in the computer laboratory in the use of various library management software packages viz CDS/ISIS, SANJAY and similar Multiuser packages. Demonstrations were also given for E-Mail service and remote access to central data bases. Special lectures were arranged on experience in library automation by experts actually involved in the computerisation of their libraries.

Participants were selected from university libraries, which have already been sanctioned PC/AT-386 with appropriate software by Computer Development Committee (CDC) of University Grants Commission for INFLIBNET work. Other university libraries which are already equipped with computer or in the process of acquiring computer were also included. This is to ensure that the knowledge gained during training is immediately put to use. Maximum number of participants have been restricted to 20 based on the available computer facilities. A two person team from each university comprising one person with library science background and one person with computer science background was selected. Participants from Goa, Gulbarga, Gujarat Kakatiya, Kalyani, Marathwada, Mother Terressa Women's, North-East Hill Roorkee, S.N.D.T Women's and Sri Venkateswara University attend d the course.

INFOTEX '93

An International Conference and Exhibit on database production and distribution: resources, technology and management will be held at Bangalore, India during 28 Nov. 1 Dec. 1993.

INFOTEX '93 intends to focus on the role that countries like Indian in the developing world need to play in the global alliance of information industry and profession. INFOTEX '93 also aims to offer a common platform for joint ventures both at the academic and the industry level.

The Society for Information Science (SIS), New Delhi, India, are promoters for the Conference organised by the Informatics (India) Pvt Ltd, Bangalore.

Database is the prime resource of information industry. The inputs required to design, develop, produce and distribute the databases form the theme of the Conference. Seven sessions, being planned, will reflect several aspects of this theme and will focus on all issues relating to resources, technology and management employed in database production and distribution.

Papers are invited in the following areas:

● Intellectual base for database production;

● Production technology for database industry;

● Full text databases;

● Retrieval engines;

● Online-emerging trends and challenges;

● CD-ROM and multimedia;

● Impact of new media and new technologies on publishing and global dissemination/distribution of information resources; and

● Marketing opportunities in developing world.

All papers will be published by Tata McGraw-Hill well before the conference. There will be awards for three best papers.

Sponsorships for the Conference are welcome from organisations involved in the activities of database development, production and dissemination.

A unique feature of the Conference is integration of Conference sessions and exhibits. State-of-the-art exhibits reflecting the Conference theme will serve as the background for the Conference. Exhibitors will have the opportunity to present their products and technology during relevant sessions.

For further information, write to: The Conference Co-ordinator, INFOTEX '93 C/O Informatics (India) Pvt Ltd Information PB No. 360, No. 87, II Floor 11th Cross, Malleswaram Bangalore 560 003.

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UGC-AMU Refresher Courses

The University Grants Commission will conduct subject-oriented refresher courses in Library and Informatics Science

at Aligarh Muslim University during 1993-94. The themes chosen are: 1) Academic Library Management — Problems and Prospects. *Dates:* 20 Aug. 93 to 17 Sept. 93. 2) Trends in Library and Information Services. *Dates* 3 Jan. 94 to 2 Feb. 94.

Closing date for theme (1) is 10 July '93 and for theme (2) 15 Nov. '93. Applications and further details are available from the Director, Academic Staff College, Aligarh Muslim University, Aligarh 202 002.

India's First CD Manufacturing Facility

Compact Disc India Limited is setting up the country's first facility for manufacture of compact discs (CDs) in technical and financial collaboration with Netstal and First Light Technology Inc. of USA.

Compact disc is the new revolutionary recording medium for storing sound, data and video images. Although, CDs have world-wide market of more than 900 million discs per annum, India does not have any manufacturing facilities for them.

Compact Disc India Limited plans to set up the CD project at a cost of Rs. 11.75 crore with a manufacturing capacity of 4.2 million CDs per annum.

Compact discs were an outcome of the optical memories technology which revolutionised music storage around the world by making piracy virtually impossible, providing at the same time, a high quality medium for recording.

The technology also provided piracy proof recording medium for storage of data and video images. The Kodak company of Japan has recently also developed a CD for recording still photographs.

However, while the world market of compact discs is estimated to be growing at more than 20 per cent per annum, the Indian market has been slow to take off on account of lack of availability of hardware for playing back CDs and their high cost of imports.— *AIS Tech. News* Vol. 4, No. 1 Jan.-March 1993.

Compendex Plus Database at Thapar Institute of Engineering & Technology, Patiala

The Central Library of the Institute has obtained a powerful search tool — Compendex Plus Database from the year 1988 onwards.

Engineering Index is the most comprehensive index of current periodical literature in all the branches of engineering and allied sciences. The printed version of Engineering Index is now available in CD-ROM format also and this computer searchable version is named: *Compendex Plus.*

Capacity of one disc is 2,50,000 pages of text of A-4 size. Compendex Plus contains abstracts of research papers of journals, technical reports, engineering society publications, conference proceedings and individual conference papers in engineering and related fields. Compendex Plus scans 1500 international engineering journals exhaustively, more than 200 selectively, and 600 conference proceedings to prepare this

database. It covers every engineering discipline including bio-chemistry, chemical, civil, electronics, computer, communication, mechanical, automotives, transportation, materials and many more.

The Library has also produced Hitachi CD- ROM Drive *1700 stand alone model which is attached to the Computer* and user can easily get the desired information on screen and take a print.

The Database can be searched in the computer workstation of the Library by working engineers, faculty and P.G. students of the engineering institutions in Punjab, Haryana & Himachal Pradesh.

Medicinal and Aromatic Plants Database

Medicinal and Aromatic Plants Abstracts (MAPA) Database covers the abstracts of the current world literature on medicinal & aromatic plants. The database has been prepared by the Publications & Information Directorate (PID) of CSIR. Nearly 600 journals published in 22 languages from 55 countries are scanned for information. Under a bilateral agreement, some member countries of Association for Science Cooperation in Asia (ASCA) are sending their inputs from their respective countries for MAPA. This prestigious indigenous database is immensely useful to scientists and R&D personnel working in the field.

UNESBIB Online

Online access to UNESBIB, the bibliographic database of all documents and publications of the United Nations Educational, Scientific and Cultural Organisation (Unesco) since 1946, is now available on ECHO, the host of the Commission of the European Communities (CEC).

The database is intended for use by: universities, reach institutions, governmental bodies, 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 on the database include the 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 can be obtained from the Unesco Information, Library and Archives Division (DIT/IR).

To access UNESBIB on ECHO, to obtain documentation and a free password, please contact: ECHO, BP 2373, L-1023 Luxembourg GD.—*UNISIST Newsletter,* No. 4, 1992.

Trademarks on CD-ROM

ROMARIN is a new CD-ROM, just launched by the World Intellectual Property Organization (WIPO). It contains information on all trademarks registered under the Madrid Agreement Concerning the International Registration of Marks

in the International Register maintained by WIPO's International Bureau, and which are currently in force.

The ROMARIN CD-ROMs (ROMARIN stand for "Read-Only-memory of Madrid Actualized Registry Information") have been available since June 1992; they were developed jointly with Jouve Systèmes d'Information in Paris, France.

The CD-ROMs contain such information (on each mark) as: the serial number of its registration, the mark itself, the name and address of the owner, and data on exclusions or limitations.

If a mark contains or consists of an image, the image is stored on the CD-ROM in facsimile or bit-map mode.

The total number of international registrations presently valid in WIPO's International Register is around 280,000, approximately one third of which have images. The oldest valid mark was first registered in 1893.

Most of the data are indexed, and can be searched using a wide range of parameters, including the serial number of the registration, the name of the owner, or the details of the mark. Search software has been specially designed.

At present, two CD-ROMs (one containing the complete data from the register, the other containing the images), are distributed. The bibliographic data are provided monthly, the image data once a year.

ROMARIN runs on 80386 or 80486-type PCs with at least four megabytes of RAM, an 80Mb hard disk and a floppy drive. Two CD-ROM drives are preferable. A yearly subscription to ROMARIN costs CHF2,000, but a free trial of sample data, as well as further details, are available from Mr. Paul Claus, Director Advisor, WIPO, 34 chemin des Colombettes, 1211 Geneva 20, Switzerland.

Diffusion of Advanced Telecommunications in Developing Countries

Few changes are having a greater impact on the ability of firms and countries to compete in global markets than the revolution in telecommunications. The new capabilities of information processing and transmission are profoundly transforming are requirements for human skills, for capital equipment and for corporate strategies in countless manu-facturing ' and service industries. This transformation affects both developed and developing countries.

A study published by the Organisation of Economic Co-operation and Development (OECD) examines in detail the economic factors underlying the speedy adoption of advanced telecommunications in many newly industrializing economies and shows how they can catch up with — and even leapfrog — certain OECD countries. The study cites macroeconomic evidence and provides a model of diffusion linking technological change, investment and productivity growth.

UAP Workshop in Egypt

A workshop on the Universal Availability of Publications (UAP) in Arab-speaking countries was held in Cairo from 12 to 14 January 1993.

The meeting was organised by the following bodies: the Egyptian National Scientific and Technical Information Network (ENSTINET) and the IFLA Programme for UAP. Financial assistance was provided by the British Council, the British Library, the University of Bath (United Kingdom) and PGI.

The main objective of the workshop was to improve the availability of publications in Arab-speaking countries, especially in the Middle East region by, in particular, offering practical guidance on the development of appropriate models for interlibrary co-operation and providing practical experience of the capabilities of electronic methods of document delivery and communications.

Over 40 librarians and information scientists from Egypt, Jordan, Lebanon. Sudan, Syria, the United Arab Emirates and Yemen attended the meeting the programme of which include a detailed presentation of UAP and document delivery systems, the role of CD-ROM in the provision of document delivery services as well as detailed studies of the library cooperation situation in various countries in the region.

A series of resolutions at the national and regional level was passed by the participants to increase and facilitate interlibrary cooperation. It was also recommended that further assistance from IFLA and UNESCO be requested for the organisation of several workshops among which a Seminar, under the aegis of the UAP Programme, to review the progress made these resolutions.

AV Documentation and Archiving in Bhutan

For the development of the Bhutan Broadcasting Service (BBS), two consultants, Messrs George Boston and Steve Hartwell, were sent to Bhutan to work out an integrated system of news and programme creation, including a documentation system.

As BBS has several Macintoshes, the software Hypercard was seen by the consultants as being a particularly appropriate technology to link the data needed for different production and documentation functions in a convenient, user-friendly manner. This software now enables a news or programme producer to:

— commission a new programme;

— prepare the programme script

The advantage of this programme is that the commissioning and writing of the programme are themselves the actions that enter the data into the archives, creating both the catalogue entries and the documentation itself. Data about programmes, including full scripts as used on-air, can be quickly retrieved by name of programme, producer, data subject or key words.

A special feature built into Hypercard is pop-up choices for standard data, such as names of producers, programme series, languages used, regions of the country, tape formats. These pop-up choices help to prevent misspellings or inconsistent entry of data. A single standardized data entry form facilitates search and retrieval.

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This application of Hypercard on Macintosh computer is now being used and tested by BBS. The solution adopted by Bhutan may well be relevant to other countries where archiving expertise is limited. It ensures vigorous and correct inputting for all basic data, while at the same time providing *editing facilities. The producer, in creating his programme, at* the same time correctly catalogues and documents it in one and the same action.

Arabised Version of CDS/ISIS

Version 3.0 of micro CDS/ISIS has recently been arabised with the help of Mr. Jaafar Jaffal of the Arab League Documentation Centre (ALDOC) and is now available for distribution. This version is fully compatible with the standard version, and includes local area network support.

This arabization of version 3.0 takes advantage of the latest features provided by Microsoft MS-DOS with Arabic Language Support, which is required to run the arabized *version of CDS/ISIS.*

Industrial Development Abstracts now on Diskette

Industrial Development Abstracts (IDA), a machine-readable source of information on UNIDO activities on industrialization in developing countries is now available on diskette. The IDA database contains over 20,000 fully indexed records UNIDO documentation. It includes descriptions of major UNIDO studies and reports, publications in series and selected articles: reports and proceedings of expert working *groups, workshops and seminars; internal studies; and reports* related to UNIDO technical assistance activities. The time-frame is from 1965 to today. New entries are added each month.

A typical entry contains the title of the document, the master file number of ordering the full text, the author(s) and / or corporate authors(s) date, bibliographic information, language, and an English-language abstract of approximately 60 words describing the work.

The Industrial Development Abstracts database is maintained on the UNIDO mainframe computer at Vienna. It is, however, possible to obtain a selection of records, together with many-driven search software, on diskette for use on PCs. *These subsets run directly from diskette on IBM-compatible* PCs and are available in 3.5 in. (1.44 Mb) or 5.25 in. (1.2 Mb) densities.

Subsets of the IDA database are available for the following industrial sectors:

- Electronics, electrical industry
- Leather and leather products
- Building materials, cement, ceramics
- *Industrial manpower training*
- Wood and wood product
- Textiles and wearing apparel
- Iron and steel, non-ferrous metals
- Petrochemicals, chemicals

- Food processing
- *Fertilizers*
- Environment
- Pharmaceuticals
- Capital goods, machinery

Each subset contains approximately 600 records and costs $35 ($25 for records from developing countries and Eastern Europe). This price includes the search software. The documents cited in the IDA database are available either on microfiche or, in some cases, in paper copy. Requests for documents other than sales publications should refer to the master file number and be sent to the address below. Each microfiche costs $ 2.00 (for diazo fiche) or $2.50 (for silver halide fiche). For paper copies of reports of 10 pages of less, *the charge for reproduction and surface mailing is $10. For* articles up to 50 pages, the charge is $25, and for up to 100 pages, $ 35. For documents over 100 pages, microfiche should be ordered. It should be noted that if a document is still in stock, a copy will be provided free of charge.

To place an order, or for further information, please contact:

Chief, Industrial and Technology Information Section, UNIDO, P.O. Box 300, A-1400 Vienna, Austria.

Industrial Statistics Handbook

The UNIDO Handbook of Industrial Statistics 1992 has just been published. This unique and comprehensive reference work, now in its sixth edition, provides detailed up-to-date statistical information that is not available from any other single source. It presents internationally comparable statistics *for over 120 counties at different levels of detail in industry/* product specification. The data appearing in the Handbook have been collected from national and international sources and supplemented through field work by UNIDO statisticians.

Information concerning major fields of industrial performance and industrial development can be found in the Handbook. These include measures of industrial growth and related long-term trends, indicators of structural change for both the manufacturing sector and individual industries, evidence regarding patterns of employment, wages and salaries, value added, gross output, patterns of consumption for specific manufactured commodities and related trends in trade in manufactures.

In compiling the data and indicators described above, UNIDO statisticians have given priority to the development if indicators which are internationally comparable among countries and across industries. The data to be found in the *Handbook* are also constructed at the most detailed level possible. Thus, the results of this work constitute a valuable source of information on world industry for researchers and decision makers. *The Handbook Of Industrial Statistics 1992* will be an essential source of reference for industrial economists and government officials needing an assessment of economic and industrial trends. It will also be invaluable for business *people seeking trade and investment* opportunities, industrial joint ventures and financial agreements in industrialized and developing countries.

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The handbook (ISBN 1-85272-792-9) is priced at £ 95. It comprises 597 pages and is available in English from sales agents or from Denise Riddell, Edward Elgar Publishing, Gower House, Croft Road, Aldershot, Hampshire GU11 3HR, United Kingdom.

New Periodical

IEEE/ACM Transactions on Networking is a new archival, bi-monthly journal available from February 1993. Jointly sponsored by the IEEE Communications and IEEE Computer societies and the Association for Computing Machinery (ACM), the journal will reflect the multi-disciplinary nature of communications networks.

It will publish high quality papers, advancing the state-of-the-art and practical applications of communication networks on theoretical research (including new techniques, concepts and analyses) and applied contributions.

With annual subscription at $ 22, *IEEE/ACM Transactions on networking* will also provide information on the latest work on high-speed data communications; papers on networking design, protocols and technologies; and professional competence, IEEE and ACM bring to the field.

Topics to be covered in IEEE/ACM *Transactions on Networking* include: network architecture and design; communication protocols; network software; network technologies; network services and applications and network operations and management. *For further details, write to:*

IEEE Communications Society
The Institute of Electrical and
Electronics Engineers, Inc
345 East, 47th Street
New York, USA.

— *Computer* **25** (11), 1992, 10

CPIS

A monthly bulletin under the title Current Published Information on Standardization has been launched by the Technical Information Services Centre of the Bureau of Indian Standards, New Delhi, the bulletin gives upto date information on standards, technical regulations and certification systems of India and other countries of the world. It is a compilation of abstracts of important articles on standardization, conformity assessment, testing and related issues published in more than 500 technical journals which are being received by the BIS periodicals section.

The annual subscription of the bulletin is Rs 300/$ 60. For further information please contact Director, Technical Information Services Centre, Bureau of Indian Standards, Bahadur Shah Zafar, Marg, New Delhi-110002.

Economic Growth with Clean Production

An International Conference is being jointly organised by CSIRO Australia and UNIDO at World Congress Centre, Melbourne during 7-10 February 1994.

The objective of this conference is to provide a forum for examination of issues of economic growth accompanied by clean production, with particular reference to countries of the Asia-Pacific region.

The theme of the conference targets the new approach that is emerging for environmental management, which reverses the priorities for management of pollutants in industry. Pollution prevention opportunities such as product and process changes and on-site recycling and recovery are looked at first, before turning to pollution abatment measures.

This conference builds on and extends the outcomes of the successful Asia-Pacific Cleaner Production Conference held in Melbourne, Australia in February 1992.

Enquiries to: Conference Australia Pty Ltd. GPO Box 1469 N Melbourne, Victoria 3001 Australia.

Online Information for Chemical Industry — NICHEM Workshop

The National Information Centre for Chemistry and Chemical Technology (NICHEM) Pune organized a one day workshop on 19 April '93 to introduce participants to a wealth of information available in a large number of databases in the field of chemical industry which can be searched online using telecommunication networks. The workshop was attended by R & D and project managers and planning and market research personnel.

Geographical Information System

UNDP has approved funding of a database and geographical information system (GIS) in Bangladesh. Through the database and GIS, information on soils, climates and plant properties will be available to rural farmers.

The database and GIS will help farmers identify crop diversification possibilities, develop efficient and environmentally sound farming practices; and map out strategies to best deal with disasters. The project is expected to contribute to higher production and farm income, improved nutrition, and enhanced employment opportunities for the rural poor.

UNDP contribution: $ 1.8 million. Funds will provide for international and national experts, including specialists in agro-climatology and land resource management. Equipment and overseas training will also be provided.

FICCI Programme on SPC

The Federation of Indian Chambers of Commerce and Industry has launched a computer-aided training programme on statistical process control as part of its total quality management programme. The first such programme that included application of computer simulation software for understanding of the SPC concept was attended by 25 persons across the country.

Computer Journalism

The Press Institute of India in Delhi introduced a short-term Course in 'Computer Journalism'. It will cover Lotus, Dbase IV, Q-Basic, Wordstar and Pascal for the students of journalism.

New Names for NAL & CFB

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The National Aeronautical Laboratory (NAL), Bangalore has been renamed as **National Aerospace Laboratories,** and the CSIR Centre for Biochemicals (CFB), New Delhi, has been renamed as **Centre for Biochemical Technology** w.e.f. 1 April 1993.

Write-once Optical Disk Storage :

In simple terms, Write-Once Read-Many (WORM) disks operate by data being permanently written to the disk by a write laser as a series of optical discontinuities. This data is then read from the disk by the use of a less powerful read laser, which reveals the discontinuities to a sensing device. Generally WORM disks have been used as high-capacity data storage devices. The following is a list of UN organizations that currently are using or planning to use WORM technology for optical storage.

Organization	Status	Application
Economic and Social Commission for Asia and the Pacific (ESCAP)	Using	Backup to magnetic disk storage on PC/Workstation, alternative to magnetic tape for mini/mainframe backup
Economic Commission for Africa (ECA)	Planning	Document Image Processing, text, Desktop Publishing backup, network mass storage, Computer Output to Laser Disk, distribution
Food and Agriculture Organization of the United States (FAO)	Planning	Managing Desktop Publishing files, database development and maintenance, Document storage
International Atomic Energy Agency (IAEA)	Planning	Document Image Processing
International Civil Aviation Organization (ICAO)	Planning	Document Image Processing, Management of text files
International Trade Centre (ITC)	Planning	Data distribution
United Nations (UN) — Geneva	Using	Document Image Processing, data distribution access to United Nations documents
United Nations Centre for Human Settlements (Habitat) — UNCHS	Using	Aerial photographs, GIS applications
United Nations Department of Humanitarian Affairs (UN DHA) — Geneva	Planning	Text files, backup to magnetic disks on PC/Work-station, network mass storage
United Nations Development Programme (UNDP)	Using	Archiving/storing on-line data processing application
United Nations Population Fund (UNFPA)	Using	Text files, Desktop Publishing files, multimedia publications
United Nations University (UNU)	Planning	Document Image Processing, text files
World Food Programme (WFP)	Planning	Desktop Publishing files, data distribution
World Health Organization	Planning	Data distribution
World Intellectual Property Organisation (WIPO)	Using	Document Image Processing, text files, network mass storage or client-server system

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Liberator

CMC's Comprehensive Library Management Software

* Designed by eminent library scientists and computer specialists under the auspices of NISSAT.

* Encompasses all activities of a library.

* Networked for libraries to share resources.

* Designed to international standards for data security and database management.

* Supports UNIMARC.

* Suitable for small/big libraries.

* ACQUISITION, CATALOGUING, CIRCULATION, SERIALS CONTROL, QUERIES & REPORTS, UNION CATALOGUE, INTER LIBRARY LOAN, E-MAIL & other features.

For more details, contact :

Mr. S Sasmal
CMC Limited
28, Camac Street
Calcutta - 700 016

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(Government of India Enterprise)

NISSAT Announces the Release of

Data Management and Statistical Analysis Software
supported by UNESCO

Micro IDAMS Ver 3.0

The 30 Module Software includes facilities for

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* Linkage with Micro CDS/ISIS for exploitation of texual/numeric databases

Handling Charges

*	Software with Manual & License	**Rs. 1500/-**
*	Additional Manual	**Rs. 500/-**

Demand Draft / Local Cheque may be drawn in favour of **ATIRA**, payable at **Ahmedabad**.

For Transfer Agreement forms and other details contact :

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New Mehrauli Road
New Delhi - 110 016

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