Acquisition Unit

The Unit accessioned 1348 books during the period under report, out of which 1035 books were purchased and 313 books were received on complimentary basis including 238 books acquired from NBHM Grant. The Unit also accessioned 525 books which were purchased out of Project funds.

Periodicals Unit

The Unit received 3200 loose issues of journals and placed orders for 538 journals. Besides this, the Unit also received a number of journals against exchange.

The Unit completed binding of 1158 journals.

Circulation & Stack Maintenance Unit

The Unit issued 72,850 books and other documents to the users on loan and reference. The total membership of the Library was 2,102. The members include ISI staff, Research Scholars, Project Assistants, students of various courses like B.Stat., M.Stat., M.S.(QE), M.Tech.(CS) and M.Tech.(QR&OR). ISEC Trainees, etc. as well as non-ISI students and Institute members. 955 readers were given special permission to use the Library for a short period.

Inter Library Loan

35 books and journals were borrowed from other libraries and 45 books and journals were loaned to other libraries under the inter-library loan arrangement.

The Unit processed 1.592 books for binding. Lamination and de-acidification of rare collections, had been taken up for conservation of documents. As a part of computerization of Library functions, the Unit completed the process of issue/return of documents with barochlag of documents and membership cards.

Reports & Records Unit

The Unit processed 97 titles and 439 titles were issued to users on reference.

Circulating Library

The Workers' Circulating Library acquired 111 new titles bringing the total collection to 37,310 and assued 2,200 books to the members.

Technical Processing Unit

The Unit classified and catalogued 1831 new books and added them to the LIBSYS database. The Unit issued 12 issues of Current Additions to the Library.

Documentation Unit

The Unit issued, during the year, Current Contents List to the users on the following groups of subjects:

(a) Statistics and Mathematics, (b) Electronics and Communications Science, (c) Geology, (d) Life Science and tel Economics. It also brought out Recent additions of books to the ISI Library. A total number of 105 photocopies were sent against specific request across the country.

Reprography & Photography Unit

The Unit provided 6.75.923 Xerox prints to the users. 3896 photographic enlargements were made during the period. 23,760 pages of offset prints and 1472 frames of lecture slides were made and 2606 pages of Compouer output were printed in colour during the period.

Projects Undertaken by the Indian Statistical Institute Library: Bar coding of LibraryDocuments

Bar coding of books and bound volumes of journals (1,73,000 volumes) was Completed.

North-Eastern Region NBHM Collection

The Library is recognized as the Eastern and North-Eastern Regional Centre of the National Board of Higher Mathematics (NBHM).

The Library received abour Rs 18.00 lakhs from NBHM grants for development of collection floots, and journals) in the areas of Mathematics, Applied Mathematics, Statistics, and Theoretical Computer Science. A Consortium had also been formed with the Universities and Institutions of the North -Eastern Region for providing on-line access to database of the Mathematical Reviews (Math Sci net). The Chief Librarian acied as the Coordinator to the Constraints or the Coordinator to the Constraints or the Constraints of the Cons

Electronic Library

During the year, the library had subscribed to Econlit and Math.Sci on-line. Steps had also been taken to develop electronics collection in CD-ROMs.

Library (Delhi)

Indian Statistical Institute, Delhi Centre, maintains an academic library, which aims to be a leading library in the fields of Mathematics, Statistics, Economics, Econometrics, Operations Research and Statistical Quality Control. The Library caters mainly to the needs of bonafide students, scholars and staff of the Institute. However, it is also open for reference to academic and research users of other educational and scientific institutions of the city and its neighbouring regions. Following were the activities of the Library during the period April 1, 2001 to March 31, 2002.

Acquisition

The Library acquired 499 new books, 230 from regular Institute funds and 181 from NBHM during the year. Besides the books purchased, it also received 66 books as gift from various sources. Total collection, as on March 31, 2022, was 38,608.

Periodicals

The Library subscribed to 253 titles of journals, both foreign as well as Indian. 261 sets of loose issues of periodicals duly bound have been added to the stock. During the period under review, Delhi Centre Library renewed the Consortium Agreement for MathSciNet with the American Mathematical Society and Academic membership with Society for Industrial and Apolied Mathematics (SIAM).

Circulation Services

During the period April 1, 2001 to March 31, 2002, 162 members availed the lending facilities as permanent members of the library and 1018 members availed reference facilities as temporary members of the library. More than 6833 publications were circulated among the members. During the period under review, 22 publications were borrowed on ILL from neighbouring Institute libraries and 26 books were lent out to other Institutes under the same program.

Reprographic Services

During the period under review, 54,302 pages were xeroxed and made available to both the permanent and temporary members of the library. Xerox facilities were also provided to the research scholars of neighbouring Institutes on a nominal charge of 50p. per exposure.

Other Activities

The Institute's Delhi Centre Library, being the regional library to serve the Northern Region, got an additional grant of Rs. 18,00,000 from National Board of Higher Mathematics. Department of Atomic Energy.

Government of India, for strengthening its resources in the field of Mathematics and Statistics. To keep the libraries of the northern region informed of the contents of the journals in Mathematics and Statistics, a monthly issue of "Current Contents" containing the Contents page of each journal received at Library, is prepared and distributed to the Department of Mathematics of each university in the northern region.

The Library has decided to undertake the project of getting barcoding done for the library resources. All the activities of the library have been fully sutomated through "LibSys" library automation package. Journals for which an online access to the full text of the articles has been acquired, have also been listed on the web with direct access to the publisher's web page.

Library (Bangalore)

Acquisition

During the period under review, 430 books were added to the library by purchase and 100 were received graits. Thus the total collection as on 31 March 2002 was as follows: Books = 21643, Books received graits = 780, Bound volumes of periodicals = 10270, No. of periodicals subscribed = 262, No. of periodicals received graits = 20.

Technical Processing

About 480 books were classified and catalogued during the period.

Circulation Statistics

During the period, library facilities were enjoyed by 450 users. 290 of them availed lending facilities. Six visiting professors of different units of Indian Statistical Institute were also provided with lending facilities. A total of about 6700 books and periodicals (including loose issues) were circulated by the library. The in-house use of books and periodicals was around 4500. About 50 inter-library loan transactions were registered.

Inter Library Loan Service

Inter library loan facilities were availed by the Institute's Bangalore Centre Library users from the local libraries

Reprographic Services

The Library provided 130000 Xerox copies to the users during the period April 2001 to March 2002.

Documentation Service

Following publications were brought out regularly from the library: Bimonthly list of books, Monthly list of current periodicals, Current content of journals, Online Public Access Catalogue (OPAC).

Computer and Statistical Services Centre

The Computer and Statistical Services Centre (CSSC) manages the central computing facilities of the Institute at Kolkata. Internet facilities are also managed by CSSC. It serves about 500 users including the students, research scholars and scientific workers with the inhouse computer systems SUN E 3000 Server, DEC Alpha 4100 server and IBM AS-400 server. There are four terminal rooms with 60 PCs. In addition to the six SUN work stations, 10 more have been added this year for the benefit of the students. Campuswide Network is also maintained under the supervision of CSSC.

Besides the standard compilers, other important application softwares available in SUN E 3000 server are SAS, BMDP, IMSL, SHAZAM, TSP, Matlab, Mathemetica and S-Plus. S-Plus has been added this year.

CSSC provides Statistical and Computational services to its users. Fourteen different projects have been provided statistical consultancy; five of them are from Indian Statistical Institute and nine are from external agencies.

As in other years, the staff members of CSSC served as faculty in various regular courses of the Institute and supervised dissertation of the students. The CSSC staff members also supervised the summer projects of many MCA.and B. Tech. students of other Universities/Institutes. The staff members of CSSC are also involved in research covering areas like data management, image processing and cryptology.

Details of the Statistical Consultancy provided by CSSC.

A. Indian Statistical Institute projects:

- 1. Psychlogical Requirements for Career in Information Technology (Psychology Research Unit)
- 2. Mental Retention Capabilities of Human Beings (Psychology Research Unit)
- 3. Physical & Chemical Variation in Mangroves (Agricultural Science Unit)
- 4. Growth Pattern of Palms (Agricultural Science Unit)
- Comparison of Economic Profitability of Growing Different Varieties of Sugarbeets (Plant Chemistry Unit)

B. External Projects:

- Changes in Micronutrients in Sub-soil and Water over time due to various treatments Palash Chakraborty, Research Scholar, Aquaculture & Applied Limnology Research Unit, Kalyani University.
- Computer Programming in relation to Creativity & Intelligence Ritu Singha Roy, Research Scholar, Department of Education, Calcutta University.
- Study of relationship of Learning Strategy. Creativity and Academic Performance in Science and Mathematics – Surita Som, Research Scholar, P.F. Studies in Education, Journalism & Library Sceince, Calcuta University.
- Temporal Changes in Insect Population Amal Kumar Patra, Marine Biological Research Institute, Sar Island.
- Role of Perceived Stress in Work Life and Experience in Academic Performance of Teachers Nandi Niyogi Research Scholar, Department of Education, Kalyani University
- A Study of Creativity in relation to Self-actualization, Extroversion & Intelligence Mitali Panda, Research Scholar, Vinaya Bhavan, Visva - Bharati.
- Psychicsim Variables & Allitude of Teachers Towards Teaching Sarmistha Basu, Research Scholar, Department of Education, Calcutta University.
- A Study of Creativity in relation to Extroversion and its Sub-dimensions- Soma Nandi, Research Scholar, Department of Education, Calcutta University.
- 9. Heredity & Blindness D. Choudhury, Asst. Teacher, Calcutta Blind School.

4. EXTERNALLY FUNDED PROJECTS

Ongoing Projects

1. Name of the Project: Techniques of topology, geometry and analysis on manifolds

Principal investigator: A. Mukherjee Unit involved: Statistics-Mathematics

Funded by Department of Science and Technology, Goyt, of India

Name of the Project: Audit Sampling - Phase II.

Principal investigators : T.J. Rao and A. Chaudhuri

Units involved : Statistics-Mathematics, Applied Statistics, Psychology Research and Physics &

Applied Mathematics

Funded by : Government of West Bengal

Name of the Project: Banach Algebra techniques and the geometry of Banach spaces

Principal investigator: T.S.S.R.K Rao Co-investigators: P. Bandyopadhyay, and Jarosz, K. SIUE

Units involved: Statistics-Mathematics, Kolkata and Bangalore.

Funded by : DST-NSF Project

4. Name of the Project: Studies in geometry of Banach spaces

Principal investigators: T.S.S.R.K. Rao and G. Godefroy

Co-investigators: P. Bandyopadhyay and Li, Daniel

Units involved: Statistics-Mathematics, Kolkata and Bangalore.

Funded by : Indo-French Centre for the promotion of Advanced Research (IFCPAR)

5. Name of the Project: Tensor product systems of Hilbert Modules

Principal investigator: B.V. Rajarama Bhat

Unit involved : Statistics-Mathematics, Bangalore

Funded by : Department of Science & Technology, Govt. of India

6. Name of the Project : Geometric Invariants for Quotients Modules

Principal investigator : G. Misra

7.

Unit involved : Statistics-Mathematics, Bangalore

Funded by : Department of Science and Technology and NSF

Name of the Project: Non-commutative Markov Processes and Operator Spaces

Principal investigator: K.B. Sinha

Unit involved : Statistics-Mathematics, Bangalore and Kolkata

Funded by : Indo-French Centre for the promotion of Advanced Research

8. Name of the Project : Cryptography - on Block Ciphers

Project Coordinator: R.L. Karandikar

Unit involved: Statistics-Mathematics, Delhi

Funded by : Indian Navy

Name of the project : Developing Audit Sampling Tools

Principal investigator: A. Chaudhuri

Unit involved: Applied Statistics

Funded by: Department of Finance, Govt. of West Bengal

Name of the project: Design/Aid Tool for Synthesis of Boolean Functions

Principal investigator: B.K. Roy

Units involved: Applied Statistics Unit and Computer and Statistical Services Centre

Funded by: Centre for Artificial Intelligence & Robotics (CAIR)

11. Name of the Project: Cryptanalysis of Complex LPSR-based Systems

Principal investigator: B.K. Roy

Units involved: Applied Statistics, Computer Vision and Pattern Recognition Funded by: Defense Research & Development Organization (DRDO)

12 Name of the Project: New Techniques of Fast Image Compression based on Human Vision

Systems and Geometric Data Structures

Principal investigators: B.B. Bhattacharya and M.K. Kundu

Co-Investigator: C.A. Murthy

Units Involved: Advanced Computing and Microelectronics and Machine Intelligence

Funded By: Intel Corporation, USA

13. Name of the project: Resource Centre for Indian Language Technology Solutions - Bengali

Principal investigator: B.B. Chaudhuri

Unit involved: Computer Vision and Pattern Recognition Funded by: Ministry of Information Technology, Govt. of India

14. Name of the project: Sharing Capability in Localisation and Human Language Technologies

(SciLaHLT)

Principal investigator: B.B. Chaudhuri

Unit involved: Computer Vision and Pattern Recognition

Funded by: European Commission

15. Name of the project: Depositional Motifs of Satpura Gondwana Succession; their spatial and temporal

variability in relation to Basin Tectonics. Project Coordinator: T. Chakraborty

Unit involved: Geological Studies

Funded by: Department of Science and Technology, Govt. of India

16. Name of the Project: Tectonic setting of alkaline intrusives: a case study for two such complexes around Rairakhol and Koraput in the Orissa sector of the Eastern Ghats granulite belt.

Project coordinators: S. Bhattacharya and R. Kar

Unit involved: Geological Studies

Funded by: Council of Scientific and Industrial Research

17. Name of the project: Turbulent and incipient suspensions due to bursting and their sedimentological

implications: an experimental study Project leader : B. S. Mazumdar

Unit involved: Physics and Applied Mathematics

Funded by : Department of Science & Technology, Goyt, of India

18. Name of the Project: Water Waves Scattering by Obstacles & Surface Discontinuities

Project leader: B. N. Mandal

Unit involved: Physics and Applied Mathematics

Funded by : National Board for Higher Mathematics

19. Name of the Project: Pattern-forming Instabilities & Interface Waves

Project leader: K. Kumar

Unit involved: Physics and Applied Mathematics

Funded by : Department of Science & Technology, Govt. of India

Name of the Project: Large Amplitude Ion Acoustic Double Layers in Multispecies Relativistic Plasma

Project leader: R. K. Roychoudhury

Unit involved: Physics and Applied Mathematics

Funded by : Council of Scientific & Industrial Research

Name of the Project: Researchable constraints to the use of Forest and tree resources by poor 21.

urban and peri urban households in developing countries

Principal investigator: D.K. Bagchi Unit involved: Agricultural Science

Funded by : Department of Foreign International Development (DFID)

Name of the Project: Rice based cropping system studies in rainfed regions of eastern Indian 22

Principal investigator: D.K. Bagchi

Unit involved : Agricultural Science

Funded by : International Rice Research Institute (IRRI), Manila,

23. Name of the Project: Work on Abiotic and Biotic Stress response in Jute Plant

Co-Principal investigator: A. Goswami

Unit Involved: Agricultural Science

Funded by : Indian Council of Agricultural Research, Govt. of India.

Name of the Project: Glutathione-s-transferase (GSTMI and GSTTI) and incidences of tobacco

related oral cavity precancer and cancer in India

Principal investigator: B. Roy

25.

Co-Principal investigators : P. P. Majumder, R. R. Paul,

Unit involved: Anthropology and Human Genetics

Funded by : Department of Science and Technology, Goyt, of India

Name of the Project: Tuberculosis-drug induced hepatotoxicity

Principal investigator: B. Roy

Co-Principal investigators: P. P. Majumder, A. Roychowdhury,

Unit involved: Anthropology and Human Genetics

Funded by : Indian Council of Medical Research

Name of the Project: Human Genome Diversity Interlink 26.

Principal investigator: P. P. Majumder

Unit involved: Anthropology and Human Genetics

Funded by: Department of Biotechnology, Govt. of India

27. Name of the Project: Human Genomic Diversity and Continuity from West Asia to India

Principal investigator: P. P. Majumder Unit involved: Anthropology and Human Genetics

Funded by : Department of Biotechnology, Govt. of India

28 Name of the Project: Uterine Cervical Cancer Prevention: A low cost screening program in West

Bengal

Principal investigator: C. Duttaguota

Units involved: Biochemistry, Statistics-Mathematics and Sociological Research

Funded by: West Bengal Department of Science & Technology and NES

Name of the Project: Environmental Management Capacity Building Assistance Project:

Environmental Economics Component Principal investigator: R. Mukherjee

Co-Investigator: D. Coondoo

Unit involved: Economic Research

Funded by : World Bank

Name of the Project: Study of status of women in West Bengal

Project Coordinators: A. Dasgupta and S. Bandyopadhyay

Unit involved: Sociological Research

Funded by ; West Bengal Women's Commission, Govt. of West Bengal.

31. Name of the Project: Emperical study on the labour-related problems of tea gardens in West Bengal

Project Coordinator: A. Dasgupta
Unit involved: Sociological Research

Funded by : Ministry of Labour, Govt. of West Bengal

32. Name of the Project : Report on State Development

Project Investigators: V.K. Ramachandran and M. Swaminathan

Unit involved: Sociological Research

Funded by: Planning Commission, New Delhi

33. Name of the Project: Physical Verification of Food grain in FCI Godowns

Project Leaders: B. Majurndar and S.S. Handa

Unit involved: Statistical Quality Control and Operations Research, Delhi

Funded By: Food Corporation of India

34. Name: Forecasting of Demand for Ball and T/R Bearings in India and Assessment of

Customer Satisfaction

Project Coordinators: S.R. Mohan, S.K. Neogy and Arvind Seth

Unit involved: Statistical Quality Control and Operations Research, Delhi

Funded by : National Engineering Industries, Jaipur

 Name: Development of Generic algorithm for path optimization in PCB manufacturing Project Coordinators: S.R. Mohan, S.K. Neogy and Arvind Seth

Unit involved: Statistical Quality Control and Operations Research, Delhi

Funded by: R Systems International Limited, Noida

 Name of the Project: Proficiency Testing Programme on Egg Powder Testing Project Coordinators: S.R. Mohan, S.K. Neogy and Arvind Seth Unit involved: Statistical Quality Control and Operations Research, Delhi Funded by: NABL, Department of Science & Technology, Govt. of India

37. Name of the Project: Implementation of ISO 9000 Quality Systems in ONGC,

Baroda and Mehsana

Project Coordinator: Pathik Mondal

Unit involved: Statistical Quality Control and Operations Research, Baroda

Funded by: Oil and Natural Gas Commission (ONGC)

38. Name of the Project: Implementation of SPC systems

Project Coordinator: Pathik Mondal

Unit involved: Statistical Quality Control and Operations Research, Baroda

Funded By: Philips Glass, Jammusars

Completed Projects

1. Name of the Project : Geometric Invariants of Quotients of Hilbert Modules

Principal investigator: G. Misra
Unit involved: Statistics-Mathematics, Bangalore

Funded by : National Board for Higher Mathematics

2. Name of the Project: Connection Polynomials of LFSR-based Systems

Principal investigator: B. K Roy

Units involved: Applied Statistics and Computer and Statistical Services Centre

Funded by : Scientific Analysis Group, Defense Research & Development Organization (DRDO)

 Name of the Project: A Fast Software Implementation of LFSR-based Cryptosystem Principal investigator: B. K Roy Units involved: Applied Statistics and Computer and Statistical Services Centre Funded by: Indian Navy

4. Name of the Project: Analysis of West Bengal Assembly Elections Data

Principal investigator: D. Sengupta

Units involved : Applied Statistics, Statistics-Mathematics and Computer and Statistical Services Centre

Funded by : Doodarshan Kendra, Kolkata

Name of the Project: Compilation and Optimization for Reconfigurable Co-Processors (CORCOP)

Principal investigators: B.B. Bhattacharya, S. Rajopadhye (IRISA, France) Co-Investigators: B. P. Sinha and S. Sur-Kolay

Unit Involved: Advanced Computing and Microelectronics

Funded by : Indo-French Centre for the promotion of Advanced Research (IFCPAR)

6. Name of the Project : Efficiency of Air Pollution Control Technology in the Iron Foundry Industry, Howrah

Principal investigator : S. Chakrabarti

Unit involved : Economic Research

Funded by : West Bengal Pollution Control Board

 Name of the Project: Health Sector Reforms- An Evaluation of Impact and Patterns of Utilisation among Vulnerable Groups in Three Indian States (Andhra Pradesh, Tamil Nadu and West Bengal)

Project Co-ordinators: S. Guha Roy and B.N. Bhattacharya.

Unit involved: Population Studies

Funded by: European Commission.

8. Name of the Project: Upgradation of ISO 9000 to the 2000 version at ORG-MARG

Research Ltd., Baroda

Project Coordinator: Tirthankar Dasgupta

Unit involved: Statistical Quality Control and Operations Research, Baroda

Funded by : ORG-MARG Research Ltd.

Name of the Project: Implementation of SPC & MSA for OS 9000

Project Coordinator: Tirthankar Dasgupta

Unit involved: Statistical Quality Control and Operations Research, Baroda

Funded by: Vijay Jyoti Seats Ltd.

5. SYMPOSIA, CONFERENCES, WORKSHOPS, LECTURES AND SEMINARS ORGANIZED

SYMPOSIA. CONFERENCES AND WORKSHOPS

Conference on "Functional Analysis and its Applications" was organized by Stat-Math Unit, Kolkata during June 13-15, 2001 at ISI, Kolkata.

Workshop on "Statistical Techniques in Health Sciences" was organized by Stat-Math Unit, Kolkata during March 23-25, 2002 at the Department of Statistics, Gauhati University.

Conference on "Probability and Statistics" was organized by Stat-Math Unit, Delhi during January 18-21, 2002 at ISI, Delhi.

Workshop on "Combinatorial Methods in Group Theory and Number Theory" was organized by Stat-Math Unit, Bangalore during May 14 - 20, 2001 at ISI, Bangalore

Workshop on the work of Kaplan, Cattani and Deligne was organized by Stat-Math Unit, Bangalore in May 2001 at ISI, Bangalore.

"Nurrure Programme for the 1998 Indian National Mathematical Olympaid (INMO)" was organized by Stat-Math Unit, Bangalore in June 2001 at ISI, Bangalore.

Mini Workshop on "Classical Quantum Probability" was organized by Stat-Math Unit, Bangalore during September 20 - 21, 2001 at ISI, Bangalore.

Workshop on "Analysis, Probability and Statistics" was organized by Stat-Math Unit. Bangalore during December 10 - 21, 2001 at Kottayam.

Workshop on "Recent Advances in Operator Theory and Operator Algebras – II" was organized by Stat-Math Unit, Bangalore during December 24, 2001 – January 04, 2002 at ISL Bangalore.

Workshop on "Computational Geometry" was organized by Applied Statistics Unit, Kolkata during March 18-19, 2002 at ISI, Kolkata.

Winter School on "GIS" was organized by Applied Statistics Unit, Kolkata during January 8-18, 2002 at 1S1, Kolkata.

North-East Training Programme for officials of the Govt and Public Sector Units from North Eastern part of India, on the use of PC in Data Processing was organized by Applied Statistics Unit, Kolkata during February 11—March 8, 2002 at 151, Kolkatu.

Short term course on "Algorithms for VLSI CAD", was organized by Advanced Computing and Microelectronics Unit, Kolkata during August 6-9, 2001 at ISI, Kolkata.

Short term course on "Design & Analysis of Algorithms" was organized by Advanced Computing and Microelectronics Unit during February 25 - March 1, 2002 at 1SI, Kolkata.

Workshop on "Computational Geometry" was organized by Advanced Computing and Microelectronics Unit during March 18-19, 2002 at ISI, Kolkata.

School on "Recent Trends in Intelligent Computing Techniques" was organized by Computer Vision and Pattern Recognition Unit during March 11-15, 2002 at North-Eastern Hill University, Shitlong.

Workshop on "Soft Computing" for Central Mining Research Institute, Nagpur was organized by Electronics and Communication Sciences Unit, Kolkata during July 25-26, 2001 at ISI, Kolkata

Workshop on "Soft Computing in Land Cover Classification" was jointly organized by Electronics and Communication Sciences Unit. Kolkata and Indian Space Research Organization during September 3-4, 2001 at Space Application Center, Ahmedabad.

School on "Image Processing, Pattern Recognition and their applications in Remote Sensing" was organized by Electronics and Communication Sciences Unit, Kolkata During September 26-28, 2001 at Kohima Science College, Joscoma, Kohima.

International Conference on "Fuzzy Systems", (2002 AFSS) was jointly organized by Electronics and Communication Sciences Unit, Kolkata and Jadavpur University, Kolkata during February 3 - 6, 2002 at Science City, Kolkata.

National Workshop on "Soft Data Mining and Intelligent Systems" was organized by Machine Intelligence Unit during September 13-15, 2001 at Tezpur University, Tezpur.

Winter School on "Soft Computing, Pattern Recognition, Image Processing and Data Mining" was organized by Machine Intelligence Unst during November 20-22, 2001 at P.U. College, Mizoram University, Aizawi.

Conference on "Auxology in India in the New Millennium" was organized by Anthropology and Human Genetics Unit during January 18-19, 2002 at 1SI, Kolkata.

Workshop on "The Prevention of Uterine Cervical Cancer in Manipur" was jointly organized by Biochemistry Unit, Kolkata, Leirik Memorial Charitable Society, Imphal and Babina Diagnosue Centre, Imphal during March 9-10, 2002 at Imphal, Manipur.

National Seminar on "Mathematical Biology: State of the Art" was organized by Embryology Unit on May 18, 2001 at ISI, Kolkata.

Training programme in "Micro and Macro Theory and Econometrics for ISS probationers" was organized by Economic Research Unit during May 14 - June 8, 2001 at ISI, Kolkata.

Conference on "Perspective on the Indian Economy and an Evaluation of Economic Reforms in India" was organized by Planning Unit, Delhi during October 12-13, 2001 at ISI, Delhi.

Symposium on "West Bengal Economy" was organized by Economic Research Unit on August 2001 at ISI. Kolkata.

Faculty Upgradation Programme on "Environmental Economics" was organized by Economic Research Unit during November 5 - December 1, 2001 at ISI, Kolkata.

Conference on "Models and Methods in Economics" was organized by Economic Research Unit during January 29-31, 2002 at ISI, Kolkata.

Developing an Academic Programme on "Communication" was organized jointly by Central Institute of Indian Languages, Mysore and Linguistic Research Unit, ISI, during June 25-26, 2001 at ISI, Kolkata.

National Dissemination Semina on "Health Sector reforms – An Evaluation of Impact Upon Patterns of Utilisation among Vulnerable Groups in Three Indian States" was organized by Population Studies Unit during October 4-5, 2001 at ISI, Kolkata.

Regional workshop on "Economic and Socio-Cultural Tensions in North Easterm States of India" was organized by Population Studies Unit during March 2 - 3, 2002 at Department of Statistics, Gauhati University, Guwahati.

A training programme on "Quality Function Deployment" (for Vijayjyot Seats Ltd.) was organized by SQC & OR Unit, Baroda on May 4, 2001 at Baroda Productivity Council.

A training programme on "Six-Sigma Quality" was organized by SQC & OR Unit, Baroda during July 12-13, 2001 at Hotel Sayaji, Baroda.

A training programme on "Statistical Process Control" was organized by SQC & OR Unit, Baroda during July 20-21, 2001 at Banco Aluminium, Baroda.

A training programme on "Multivariate Regression Analysis" was organized by SQC & OR Umi, Baroda during September 20-21, 2001 at Essar Steel Ltd., Hazira.

A training programme on "Awareness of ISO 9001:2000" was organized by SQC & OR Unit, Baroda on December 19, 2001 at Philips Carbon Black.

A training programme on "Statistical Process Control" was organized by SQC & OR Unit, Baroda on February 23, 2002 at Gujarat Propack Ltd., Karjan.

One day seminar on "Application of Statistical Techniques in ISO/QS - 9000 for Automobile Sector" was organized by SQC & OR Unit, Delhi on October 17, 2001 at ISI, Delhi.

A seminar on "A Critical Look at Six Sigma" was organized by SQC & OR Unit, Delhi on February 27, 2002 at ISI. Delhi.

Programmes on "Six Sigma" were organized by SQC & OR Unit, Bangalore during April 04 - 26. May 03 and 10, June 07 - 21, July 02, 11 and 19 and August 02, 2001 at Ottobilz Ltd., Doddaballapur, Bangalore.

A programme on "Internal Quality Audit" was organized by SQC & OR Unit, Bangalore during April 27-28, 2001 at Grasim Industries Ltd., Harihar.

A programme on "Six Sigma Implementation" was organized by SQC & OR Unit, Bangalore during May 04-05, 2001 at Grindwell Norton Ltd., Bangalore.

A programme for vendors on "Quality and 7 QC tools" was organized by SQC & OR Unit, Bangalore a Lincoln Helios (India) Ltd. Bangalore.

A programme on "Design of Experiments" was organized by SQC & OR Unit, Bangalore during July 16-18, 2001 and August 13-14, 2001 at MICO, Bangalore.

A programme on "Taguchi Robust Design" was organized by SQC & OR Unit, Bangalore during July 06-07, 2001 at TVSE Ltd. Bangalore.

An awareness programme on "ISO 9001: 2000" was organized by SQC & OR Unit, Bangalore during August 03 and 10, 2001 at DCB-HMT Ltd., Bangalore.

A programme on "Six Sigma" was organized by SQC & OR Unit, Bangalore on August 08, 2001 st Satyam Computers Ltd., Bangalore.

A programme on "Six Sigma" was organized by SQC & OR Unit during August 16-17 and August 23-24, 2001 at Satyam Computers Ltd., Bangalore.

Programmes on "Problem Solving techniques" were organized by SQC & OR Unit, Bangalore of August 01, 2001 and September 07, 2001 at IFB Industries Ltd., Bangalore.

Programmes on "Process FMEA" were organized by SQC & OR Unit, Bangalore on August 08, 2001 and September 06, 2001 at IFB Industries Ltd., Bangalore.

An awareness programme on "QS-9000" was organized by SQC & OR Unit, Bangalore on August 16, 2001 at IFB Industries Ltd., Bangalore.

An awareness programme on "ISO-9001:2000 for top management" was organized by SQC &OR Unit, Bangalore at KAP India Ltd., Bangalore,

A programme on "Internal Quality Auditors" was organized by SQC & OR Unit, Bangalorest KAP India Ltd., Bangalore.

A programme on "Six Sigma" was organized by SQC & OR Unit, Bangalore on September 7, 2001 at MSIL, Bangalore.

A programme on "Six Sigma" was organized by SQC & OR Unit, Bangalore on September 8, 2001 at Praxair Ltd., Bangalore.

A programme on "Statistical Techniques" was organized by SQC & OR Unit, Bangalore at Ottobil2 Ltd., Doddaballapur.

A programme on "Simple QC tools" was organized by SQC & OR Unit, Bangalore at Tata Tea Ltd. Bangalore.

Summer School on "Operations Research and its applications" was organized by SQC & OR Unit. Bangalore on June 18, 2001 and July 17, 2001 at 1S1, Bangalore.

LECTURES AND SEMINARS

Lectures/Seminars organized by the Institute and delivered by visiting scientists are listed below.

Theoretical Statistics and Mathematics Division

Stat-Math Unit, Kolkata

Adhikari, Sukumar Das, HRI, Allahabad (12-11-2001): Glimpses of some ramification of the early Ramsey-type theorems in combinatorial number theory.

Aithal Ravi, Dept. of Maths. University of Mumbai (11,13,15,18,20 and 22-02-2002): Riemannian Geometry.

Athreya, K.B., Cornell University (11-12-2001): Persistence of the critical random logistic map. Balasubramanium, R., Director, IMSc., Chennai (11-10-2001): Prime Numbers and Elliptic Curves.

Barnes, B.A., University of Oregon, USA (09-04-2001): Spectral Properties of Linear Operators and Their Extensions.

Basak, Gopal, University of Bristol, UK (28-12-2001): Stabilization of Dynamical Systems by adding a noise.

Behera, Biswaranjan, IIT, Kanpur (24-04-2001): Bounded Symmetric Wavelet Sets.

Bhatt, Suresh K., University of Manitoba, Winnipeg (02-04-2001): Productivity of Service Organizations and Some Downsizing and Outsourcing Issues.

Chakraborty, Kalyan, HRI, Allahabad (20-09-2001): Solving t+s+t=rst=1 in the ring of integers of quadratic fields.

Chatterjee, Pralay, TIFR, Mumbai (13-08-2001): On the surjectivity of the power map of a solvable lie group.

Dey, Rukmini, University of Texas at Austin, USA (09-05-2002): Honographic Coordinates for minimal Surfaces.

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- Dey, Rukmini, (1, 3, 8, 29 and 31-08-2001): Curves and Surfaces.
- Ghosal, Subhashis, University of Minnesota (22-06-2001): Nonparametric Bayesian Estimation of the Spectral Density of a time series.
- Goswami, Debashis, (04-12-2001): Noncommutative Geometric Aspects of SU_a(2).
- Hati A.K., Former Director, Calcutta School of Tropical Medicine (24-09-2001): Malaria: Practice, Research, Statistics.
- Kodiyalam, Vijay, IMSc Chennai (18-03-2002): Planar Algebras and Subfactors.
- Kodiyalam, Vijay, IMSc Chennai (19-03-2002): Hopf Algebras: A Diagrammatic Approach to The Existence and Uniquness of Integrals.
- Kodiyalam, Vijay, IMSc Chennai (20-03-.2002): Kac Algebras and Subfactors.
- Krzysztof, Jarosz, Southern Illinois University, Edwardsville, USA (11-02-2002): Automatic Continuity and Reversed Automatic Continuity in Banach Spaces.
- Muitra, Ashok, (06-06-2001 and 08-06-2001): Inductive Definability in Optimization.
- Mallick, B.N., School of Life Sciences, Jawaharlal Nehru University, New Delhi (25-02-2002): Norepinephrine and Rapid Eye Movement (REM) Sleep.
- Mitra, Amit, Assistant Adviser, RBI (14-01-2002): Estimating the Parameters of Signal Processing and Some Related Models.
- Mukherjee, Avijit, (14-05-2001): On the Symplectic Structure of the Moduli Space of Higgs Bundles over a curve.
- Mukherjee, Avijit, (19-09-2001 and 21-09-2001): Higgs Bundles on Curves and some related Moduli Spaces.
- Nadkarni, M. G., University of Mumbai (08-05-2001): Mean Topological Dimension.
- Raghunathan, M.S., TIFR, Mumabi (07-02-2002): The Word Metric On SL(n,Z).
- Rao, S., Department of Clinical Psychology, National Institute of Mental Health & Neuro Sciences, Bangalore (04-10-2001); Methodology in IMRI Research.
- Roy, Rahul, Indian Statistical Institute Delhi (14-12-2001); Exit Time of Equilateral Triangles.
- Samarov. Alexander. University of Mussachusetts & Mussachusetts Institute of Technology, USA (15-10-2001) Adaptive Semiparametric Estimation in the long memory time series and related problems.
- Sengupta, Ambar, Lousianna State University (18-04-2001): Discrete Yang-Mill's Measures.
- Shastri A.R., 17T, Mumbai, (11, 14, 15, 18, 20 and 22-02-2002): Geometric Group Theory.
- Shastri, A.R., IIT, Mumbai (18-12-2002): Paper Folding An Invitation To PI-Topology.
- Srinivas, Vasudevan, School of Mathematics, TIFR, Mumabi (07-05-2001): Zero-Cycles on Singular Varieties.
- Srinivasan, Balaji, New Jersey Institute of Technology, Newark, USA (20-08-2001): Risk Sensitive Control and Multiplicative Ergodicity of Markov Chains.

Tewari, U.B., ITT, Kanpur (27-12-2001): Multipliers of LP(G,X)

Stat-Math Unit, Delhi

Ahuja, J. (15-03-2002): Recurrence relation for minimum variance unbiased estimation of left truncated poisson distributions.

Budhiraja, Amarjit, (20-12-2001): Stability properties of constrained jump-diffusion processes.

Chaintreau, Augustin, (19-09-2001): Linear equations in (Max, +) algebra, Utility, methods and applications.

Choi, M.D., (19-11-2001): Norm estimates for sum of two matrices.

Dani, S.G.. (19-02-2002 and 20-02-2002): Positive integral solutions of multi-variable quadratic inequalities.

Das, Manav. (26-09-2001): A characterization of strictly contracting digraphs.

Govindarajulu, Z., (11-03-2002): Accelerated sequential risk-efficient estimation of the mean.

Kannan, Ravi, (07-01-2002): Randomised algorithms in linear algebra.

Mukerjee, Rahul. (24-12-2001 and 26-12-2001): (i) Optimal main effect plans with nonornhogonal blocking and (ii) Probability matching priors for predicting a dependent variable with application to regression models.

Nandi, Swagata. (07-12-2001): Analyzing some one dimensional signal processing models.

Samarov, Alex. (22-10-2001 and 13-11-2001): (i) Adaptive semiparametric estimation in the long memory time series and related problems and (ii) Logarithmic uncertainty inequalities and logarithmic Sobolev inequalities.

Verma, D.N., (14-01-2002): The Jacobain Conjecture: A survey and a new approach.

Stat-Math Unit, Bangalore

Athreya, K.B., Cornell University, (12-07-2001): Persistence of the critical logistic process and (02-08-2001). What is Mathematics?

Balaji, S., New Jersey Institute of Technology (08-08-2001): Multiplicative ergodicity and large deviations for Murkov processes.

Biswas, Indranil, Tata Institute of Fundamental Research (19-07-2001): Principal bundles admitting a flat connection on a Riemann surface.

Cheintreau, Augustin, Ecole Normale Superieure. Paris (03-09-2001): Introducing (max, +) algebra, a linear structure for decision making and discrete event system.

Douglas, R.G., Texas A&M University (16-08-2001): Some thoughts on Calculus.

Doumenc, Thomas, Ecole Normale Superieure, Paris (04-09-2001): q-analogue of Schur-Weyl duality.

Feichtinger, G., University of Vienna (09-01-2002): Wiener's third Tauberian theorem.

Folland, G.B., University of Washington (October 2001): Gaussian integrals, quantum physics and integral

Griess, Robert, University of Michigan (17-08-2001): Sporadic simple groups - a survey.

Groechenig, K., Institute of Mathematics, Vienna (10-01-2002): Wiener's lemma for twisted convolution and Gabor frames.

Hauray, Maxime, Ecole Normale Superieure, Paris (29-01-2002): Ordinary differential equations.

Korwar, Ramesh M., University of Massachusetts (August, September, October 2001): Series of Jectures,

Lust-Piquard, F., University of Cergy (12-09-2001): A simple minded computation of the heat kernel on Heisenberg groups.

Maciean, Catriona, Ecole Normale Superieure, Paris (03-09-2001): Some results concerning the Noether Lefschetz Jocus.

Marche, Julien, Ecole Normale Superieure, Paris (29-01-2002): Finite type invariants of knots and their connection with Lie algebras.

Mhaskar, Hrushikesh N., University of California (04-11-2001 and 05-11-2001): (i) Neural networks for modeling of scattered data and (ii) A new theme in wavelet analysis.

Mohanty, Sara, (24-09-2001): Higher degree invariants of almost generic immersed curves.

Nadkarni, M.G., Bombay University (03-07-2001): Mean topological dimension.

Nandakumar, Ratna, University of Delaware (29-11-2001): Statistical assessment of item bias (also known as DIF) in the context of computerized adaptive testing.

Parthasarathy, K.R., : Indian Statistical Institute, Delhi (Reid.) (20-09-2001) (i) The quantum Fourier transform circuit and the order finding algorithm on a quantum computer - 1 and II.

Raghuram, A., Tata Institute of Fundamental Research (05-09-2001): An introduction to the Langlands program via examples.

Ramachandran, B., Indian Statistical Institute, Delhi (Retd.) (22-02-2002): Some identifiability problems in Probability theory.

Sethuraman Sunder, Iowa State University (14-08-2001, 16-08-2001): (i) Introduction to simulated annealing, (ii) A short proof of Dobrushin's CLT for nonhomogeneous Chains.

Shah, Riddhi, Tata Institute of Fundamental Research (04-05-2001): Levy's measures on Lie groups.

Shankar, Shivu, Chennai Mathematical Institute (08-06-2001): A duality theorem for systems of PDE.

Sreekantan, Ramesh, Tata Institute of Fundamental Research (24-10-2001): An analogue of cyclotomic units for products of elliptic curves.

Sunder, V.S., The Institute for Mathematical Sciences (02-05-2001): Planar Algebras.

Verma, D.N., (14-01-2002): The Jacobian Conjecture: A survey and a new approach.

Zvonkine, Dimitri, Ecole Normale Superieure, Paris (04-09-2001): Counting polynomials with prescribed multiplicities of critical points.

Applied Statistics Division

Applied Statistics Unit

Bhattacharjee, Arnab, Reserve Bank of India and Department of Applied Economics, University of Cambridge (24-01-2002): Monotone Departures from the Proportional Hazards Model with respect to Continuous Covariates.

- Chatterjee, Asish Kr., University of Calcutta (22-05-2001): Measure of Social and Occupational Mobility.
- Ghosh, Malay, University of Florida, USA (15-01-2002): Current Trends in Small Area Estimation.
- Sahu, Sujit Kr., University of Southampton, UK (24-07-2001): A New Class of Multivariate Skew Distributions with Applications of Bayesian Regression Models.
- Samarov, Alexander, University of Massachusetts and Massachusetts Institute of Technology, USA (16-10-2001): Shortfall as a Risk Measure: Properties, Optimization and Applications...

Computer & Communication Sciences Division

Advanced Computing and Microelectronics Unit

- Birch, Nigel, International Group of the Engineering And Physical Research Council, UK (15-01-2002): EPSRC and its role in supporting collaborative research.
- Kankanhalli, Mohan, S., National University of Singapore (27-01-2002): Research activities of the School of Computing, NUS.
- Mukhopadhyay, A., University of Windsor, Ontano, Canada (02-08-2001): A linear time algorithm for computing a minimum perimeter triangle that enclases a convex polygon: resolving a ten-year old open problem.
- Sen, Aranabha, Arizona State University, Tempa, USA (13-06-2001): On Routing Problems in Networks.
- Thomus, Peter, Middlesex University, UK (15-01-2002): UK activities and concerns in the area of ubiquitous computing.

Electronics and Communication Sciences Unit

- Dasgupta, Soura, University of Iowa, USA (11-07-2001): Structural equalizability of non-linear channels.
- Dubois, D., Universite Paul Sabatier, France (07-02-2002): Possibility theory, probability theory and multiple-valued logic: A clarification.
- Dutta, Kaushik, Information Technology Management, Georgia Institute of Technology, USA (02-05-2001): Word Wide Wait.
- Pawlak, Z., University of Information Technology & Management, Poland (07-02-2002): Rough Sets: An introduction and applications.
- Vidyasagar, M, Tata Consultuncy Services, (17-08-2001): An Introduction to Statistical Learning Theory.

Physics and Earth Sciences Division

Physics and Applied Mathematics Unit

- Bhattacharyya, Somnath, Indian Institute of Technology, Kharagpur (10-07-2001): Effect of Surface Roughness of Flow & Heat Transfer.
- Bose, S. M., Drexel University, USA (21-02-2002): Fullerones and Carbon Nanotubes.
- Chakrabarti, A., Indian Institute of Science, Bangalore (01-01-2002 and 02-01-2002): Analytical Methods in Scattering Problem.
- Das, S. K., Mathematical Modelling Centre, Central Water & Power Research Station, Pune (25-06-2001): Numerical Simulation of Solute Transport in Porous Media with First Order Chemical Reaction.

- Das, S. K., Mathematical Modelling Centre, Central Water & Power Research Station, Pune (19-02-2002 and 20-02-2002). (i) Development of Finite Volume Method & its Applications and (ii) Development of Turbulent Method & its Application.
- Eldho, T. I., Department of Civil & Environmental Engineering, Indian Institute of Technology, Mumbai 03-05-2001; Boundary Integral Modelling of Hydrodynamics & Transport in Stratified Estuaries.
- Kafatos, Meno, George Mason University, USA (11-02-2002): The Problem of Observation in Cosmology & the Big Bang.
- Klich, Israel, Technion, Israel (27-11-2001): Casimir Energy in Dielectric Diamagnetic Medium Lokajicet, Milos, Institute of Physics, Czeck Academy of Sciences, Czeck Republic (07-02-2002): Source of Paradoxes in Copenhagen Quantum Mechanical Model.
- Revzen, Michael, Technion, Haifa, Israel (10-10-2001): Casimir effect: the Classical Limit.
- Roy. Satyajit. Indian Institute of Technology, Madras (22-06-2001): Non-Uniform Mass Transfer into Steady Luminar Boundary Layer Flows.
- Varma, R. K., Physical Research Laboratory, Ahmedabad (03-07-2001): Matter Waves & the Observability of Vector Potential in the Macrodomain.
- Verma, Mahendra K., Indian Institute of Technology, Kanpur (26-06-2001): Magnetic Energy Amplification in Magneto-hydrodynamic Turbulence.

Social Sciences Division

Economic Research Unit

- Banerjee, Sanjoy, McGill University, Canada (15-06-2001): On Financial Restructuring.
- Bose, Amirava, Indian Institute of Management, Kolkata (02-05-2001): The Concept of Intertemporal Changes in National Income.
- Bose, Deb Kumar, Chairman, WB State Finance Commission (28-09-2001): Natural Resources in Economic Theory.
- Chakraborty, Kalyan, Rabindra Bharati University (Retd.) (25-04-2001): Basis for a Production Theory through Organisational Approach.
- Daito, Ichiroh, Graduate School of International Cultural Studies, Japan (21-03-2002): Environmental Protection and Urban Unemployment: Environmental Policy Reform in a Polluted Dualistic Economy.
- Ghosh, Ambar, Presidency College, Kolkata (13-06-2001): Economics of Child Labour and Minimum Wage Law.
- Hartley, James E., Mount Holyoke College, USA (08-10-2001 and 12-11-2001): A Series of Talks on Real Business Cycle Models.
- Kanbur, Ravi, Cornell University, USA (24-07-2001): The Race to the Bottom from the Bottom.
- Lahiri, Sajal, ESSEX University, UK (11-07-2001): Official versus Private Foreign Aid and the Role of Crowding out, Free-riding and Political Economy.
- Mallick, Indrajit, CSSSC, Kolkata (20-06-2001): Theories of Banking Crisis.
- Mallick, Indrajit, CSSSC, Kolkata (28-02-2002 and 7 and 14-03-2002): A Series of Lectures on Monetary Theory and Principles of the Theory of Financial Intermediation.

- Marjit, Sugata, CSSSC, Kolkata (26-06-200) and 27-6-2001): Trade, Labour and Inequality.
- Mitra, Manipushpak, University of Bonn, Germany, (03-01-2002): Simple Sequencing Problems with Interdependent Costs.
- Mukherjee, Madhumita, Dy Director, Ministry of Fisheries, Govt. of West Bengal (20-12-2002): State Workers' Position on Sewage fed Fisheries in East Kolkata.
- Parikh, Kirit, Ex-Director, IGIDR (09-11-2001): Ten Years of Reforms: What Next ?.
- Pattanaik, P.K., University of California, Riverside, USA (16-08-2001): On Measuring Diversity.
- Roy Chowdhury, Probal, Jawaharlal Nehru University (04-07-2001): Repeated Moral Hazard and Convertible Debt.
- Sau, Aparna, Clark University, USA (28-08-2001): Price, Quality and Exchange Rate: Strategy in trade of Vertically and Horizontally Differentiated Goods.
- Weiskopf, Thomas P., University of Michigan, USA (19-09-2001): Perspectives of Affirmative Action in US Higher Education.

Economic Analysis Unit

Ganesh Kumar, A., IGIDR, Mumbai (i) Investments and Finance Constraints: The case of Indian Firms and (ii) Growth and Welfare Consequences of a rise in minimum Support Prices: An Applied General Equilibrium Analysis for India.

Plannine Unit

- Basu, Kausik, Cornell University, USA (14-01-2002): Aggregating Infinite Utility Streams.
- Dutta, Manjira, Arizona State University, (15-02-2002): Equilibrium in dynamic Economics.
- Hibbs, Douglas, University of Gothenberg, (20-07-2001): The Politicization of Growth Theory.
- Jain, Sanjay, University of Virgina, USA (18-01-2002): A Little at a Time: The Use of Regularly Scheduled Payments in Microfinance Program.
- Lahan, Amartya, University of California, Los Angeles, USA (02-11-2001). Costly Intermediation and the Poverty of Nations.
- Mehia, Shailendra, Business School, Purdue University, USA (19-12-2001): God Rewards Fools: The Role of Optimism In Entrepreneurial Choice.
- Mitra, Siddhartha, NCAER (01-03-2002): Corruption Reexamined
- Murty, Sushama, UC Riverside, USA (14-49-2001). Externality Policy Reform: A General Equilibrium Analysis.
- Ravalion, Martin, World Bank (17-01-2002): Hus India's Post Reform Economic Growth Left the Poor Behind?
- Ray, Tridip, Hong Kong University (11-01-2002): Bank based vs market based financial systems: a growth theoretic analysis.
- Takamiya, Koji, University of Hokkaido, Japan (14-12-2001): Strategy-Proofness and Single Valuedness.

Population Studies Unit

Alagarajan, Monoj. I.I.P.S, Mumbai (Raja Rao Memorial Award 2001) (11-01-2002): An Analysis of Fertility Differentials by Religion in Kerala State.

Psychology Research Unit

Sharma, N.K., Department of HSS, IIT, Kanpur (17 and 18-10-2001): (i) Multidimensional scaling: The concept, approaches and applications and (ii) Multicollinearity: The problem, detection and solutions.

Statistical Quality Control and Operations Research Division

Statistical Quality Control and Operations Research (T&P) Unit, Kolkata

Chowdhury, Subir, American Supplier Institute, USA (28-01-2002): Mahalanobis Taguchi System.

Taguchi, Shin, American Supplier Institute, USA (28-01-2002): Mahalanobis Taguchi System.

Library, Documentation and Information Sciences Division

Library, Bangalore

Krishnamurthy, M., Rajiv Gandhi University of Health Sciences, Bangalore: LIBSYS library software.

6. PUBLICATION OF SANKHYA

Founded and edited by Professor P.C. Mahalanobis in 1933. Sunkhya, the Indian Journal of Statistics and the official organ of the Indian Statistical Institute is now published the monthly in two series: Series A on Probability and Mathematical Statistics, and Series B on Statistical Methodology and its Applications including Sample Survey and Quantitative Economics. Since inception, enument scholars all over the world have been contributing research articles for publication in Sankhya, one of the most prestigious and internationally renowned journals, Sankhya office takes care of publication of Sankhya (A&B) with the assistance of Publication and Printing Unit.

Journal Committee as on 31 March 2002

Editors : Arup Bose, Aloke Dev and B.V. Rao

Technical Editor : Debashis Sengupta

Co-Edinos: Barry Arnold, Krishna B. Athreya, G. J. Babu, Z.D. Bai, Probal Chaudhuri, Anirban Dasgupta, Mohan Delampady, Sanpei Kageyama, Wei Liem Loh, S.R. Mohan, Rahul Mukerjee, S. Ramkrishnan, R.V. Ramumoorthi, Rahul Roy, Debupriya Sengupta, Jun Shao, Kesar Singh, Winfried Stute.

The following publications were published during April 2001 to March 2002 :

April 2001 : Volume 63, Series B, Part - 1
June 2001 : Volume 63, Series A, Part - 2

August 2001 : Volume 63, Series B, Part - 2 (Special Issue on Waveletts)
Octuber 2001 : Volume 63, Series A, Part - 3 (Special Issue on Waveletts)

December 2001 : Volume 63, Series B, Part - 3

February 2002 : Volume 64, Series A, Part - 1

7. SCIENTIFIC PAPERS AND PUBLICATIONS

Books Published

Theoretical Statistics and Mathematics Division

Stat-Math Unit, Kolkata

Sinha, B.K., Liski, E.P., Mandal, N.K. and Shah, K.R.: Theory of Optimal Designs, Lecture Notes in Statistics, Vol. 163, Springer-Verlag, 2001.

Stat-Math Unit, Banealore

- Delampady, M., Krishnan, T. and Ramasubramanian, S.: Echoes from Resonance: Probability and Statistics, Universities Press (India), Hyderabad, 201, 2001.
- Pati, V. and Sitaram, A.: Echoes from Resonance: Mathematical Analysis. Universities Press, Hyderabad, 142, 2001

Applied Statistics Division

Applied Statistics Unit

SenGupta A. and Jammalamadaka, S.R.: Topics in Circular Statistics, World Scientific, Singapore, 320, 2001.

Computer and Communication Sciences Division

Electronics and Communication Sciences Unit

Pal, N.R. and Sugeno, M. (Eds): Advances in Soft Computing - AFSS 2002, LNAI 2275, Springer Verlag. Berlin, 536, 2002.

Machine Intelligence Unit

Pal, S.K. and Pal, A. (Eds.): Pattern Recognition: From Classical to Modern Approaches, World Scientific, Singapore, 2001.

Biological Sciences Division

Anthropology and Human Genetics Unit

Dasgupta, P. and Hauspie, R.C.: Perspectives in Human Growth, Development and Maturation, Kluwer Academic Publishers, The Netherlands, 380, 2001.

Social Sciences Division

Linguistics Research Unit

- Bandyopadhyay, D.: Anekania Sahiryatativa, The Theory of Plural Interpretation of Literary Texts, A Bilingsal Publication, Alocanacakra, Kolkata, 2001.
- Bandyopadhyay, D.: Linguistic Terrorism, Rabindra Bharati University, Kolkata, 2001.

Population Studies Unit

Roy, T.K., Espent, D., Bhattacharya, B.N., Lahari, S., Sahu, D. and Acharya, R.: National Family Health Survey India, 1998-99 West Bengal NFHS 2, International Institute for Population Sciences, ad MEASURE DHSX, ORC Macro, Mumbai, India and Calverton, Maryland, U.S.A, XV + 316. October 2001

SEVENTIETH ANNUAL REPORT : 2001-2002 Sociological Research Unit

Dasgupta, Uma: Rabindranath Tagore by Prasanta Chandra Mahalanobis, Ananda Publishers, 2002.

Swaminathan, Madhura and Ramachandran, V.K. (Eds.): Agrarian Studies, Tulika Press, New Delhi, 2002.

Papers Published in Journals

Theoretical Statistics and Mathematics Division

Stat-Math Unit, Kolkata

- Bandyopadhyay, P. and Lin, B.L.: Some properties related to nested sequence of balls in Banach spaces, Taiwanese Journal of Math, 5, 19-24, 2001.
- Bandyopadhyay, P. and Basu, S.: On nicely smooth Banach spaces, Extracta Math, 16, 27-45, 2001.
- Bhandari, S.K.and Bose, M.: Multinominal subset selection using inverse sampling and its efficiency with respect to fixed sampling. Sequential Analysis, 20, 165-191, 2001.
- Bishwal, J.P.N. and Bose, A.: Rates of convergence of approximate maximum likelihood estimators in the Omstein-Uhlenbeck process, Computers and Mathematics with Applications, 42, 23-38, 2001.
- Bose, A.: A boundary crossing problem with application to sequential estimation, Sequential Analysis, 20, 65-76, 2001.
- Bose, A. and Chatterjee, S.: Last passage times of minimum contrast estimators, Journal of Australian Mathematical Society, 71, 1-10, 2001.
- Bose, A. and Chatterjee, S.: Generalised bootstrap in non-regular M-estimation problems, Statistics and Probability Letters, 55, 319-328, 2001.
- Mukherjee, G. and Pandey N.: Equivariant cohomology with local coefficients, Proceedings of the American Mathematical Society, 130, 227-232, 2001.
- Purkayastha, S., Hali, A.K., Mondal, B., Chaudhuni, P., Mukherjiee, H. and Mukhopadhyay, A.K: Estimating parasite density in patients suffering from Falciparum malaria in an endemic area in Kolkata. Indian Journal of Malariology, 27, 82-87, 2000.
- Raha, A.B., Kundu, S. and Swardson, M.A.: Bounded subsets and weak realcompactness conditions, Questions Mathematicae, 24, 225-235, 2001.
- Raha, A.B.: An Innocuous problem of continuity: A set theoretic dilemma, Houston Journal of Mathematics, 28, 139-142, 2002.
- Raha, A.B. and Kundu, S.: The Stone-Weierstrass theorem and Dini's Theorem: An Insight, Houston Journal of Mathematics, 27, 887-895, 2001.
- Rao, T.J.: Ratio of means, mean of ratios or both?, Journal of Statistical Planning and Inference, 102, 129-138, 2002.
- Rao, T.J. and Bedi, P.K.: PPS method of estimation under a transformation, Journal of Indian Society of Agricultural Statistics, 53, 184-195, 2001.
- Saha, G.M. and Samanta, B.K.: A note on a characterization of C-designs, Statistics and Applications, 3, 9-10, 2001.
- Saha Ray, R.: Further study on optimal row column designs with unequal row column sizes, Statistics and Applications, 3, 165-175, 2001.

- Sinha, B.K., Lacayo, H and Neerchal, N.K.: Ranked set sampling from a dichotomous population, Journal of Applied Statistical Science.
- Sinha, B.K., Lin, Lawrence, Hedayat, A.S. and Yan, Min: Statistical methods in assessing agreements: models, issues and tools, Journal of the American Statistical Association, 97, 257-270, 2002.
- Sinha, B.K., Adhikari, S. and Ghosh, J.K.: Group testing for identification of defective components: An application of Orthogonal arrays, Statistics and Applications, 3, 89-96, 2001.
- Sinha, B.K., Luoma, A. and Mandal, N.K.: A-optimal cubic and quartic regression designs in asymmetric factor spaces, Statistics and Applications, 3, 147-153, 2001.
- Sinha, B.K., Rao, T.J. and Srivenkataramana, T.: On order relations between selection and inclusion probabilities in RHC sampling scheme, Journal of Applied Statistical Science.
- Sinha, K.B.: Spectra of Anderson type models with decaying randomness, Proceedings of the Indian Academy of Sciences (Mathemaical Sciences), 111, 179-201, 2001.
- Sinha, K.B.: A Semigroup Criterion for the Completeness of Scattering Systems, Operator Theory, Advances and Applications, 126, 93-102, 2001.
- Sikdar, K. and Mishra, S.: On the hardness of approximating some NP-optimization problems related to Linear ordering problems. Theoretical Informatics and Applications, 35, 287-309, 2001.
- Tripathi, T.P., Bhal, S. and Tuteja, R.K.: Use of multivariate information in estimating population parameters in two stage designs, Current Trends in Information Theory, Statistics and O.R. (Ed. Om Prakash): 161-172; GND University, Amristor.

Stat-Math Unit, Delhi

- Bapat R.B., Kirkland, S.J. and Pati, S.: Perturbed Laplacian matrix of a graph, Linear and Multilinear Algebra, 49, 3, 219-242, 2001.
- Bapat R.B.: Existence of generalized inverse: Ten proofs and some remarks, Resonance, Volume 6, 12, 19-28, 2001.
- Bhatia, R.: Linear Algebra to quantum cohomology: The story of Alfred Horn's inequalities. American Mathematical Monthly, 108, 289-318, 2001.
- Bhatia, R. and Zhan, X.: Compact operators whose real and imaginary parts are positive, Proceedings of the American Mathematical Society, 129, 2277-2281, 2001.
- Bhatia, R. and Dias da Silva, J.A.: Variation of induced linear operators, Linear Algebra and Applications, 341, 391-402, 2002.
- Bhatia, R. and Elsner. L.: Positivity and the Lyapunov equation, Operator Theory: Advances and Applicanous. 130, 107-120, 2001.
- Biswas, A.K., Parthasarathy, T. and Ravindran, G.: Stability and largeness of the core, Games and Economic Behaviour, 34, 227-237, 2001.
- Chal, F.S., Das, A. and Dey, A.: A-Optimal block designs for parallel line assays, Journal of Statistical Planning and Inference, 96, 403-414, 2001.
- Chai, F.S. and Das, A.: Nearly ∠-Designs for symmetric parallel line assays, Statistics and Applications (Special Issue), 3, 11-23, 2001.

- Das, M.N. and Das, A.; All magic squares as sums of two magic squares, Utilitas Mathematica, 60, 193-208.
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- Dey, A. and Midha, C.K.: Construction of asymmetric orthogonal arrays. Proceedings of A.P. Akademi of Sciences. (Special issue in honour of C.R.Rao), 5, 39-42, 2001.
- Dey, A. and Suen, C.: Further asymmetric orthogonal arrays, Statistics and Applications (Special issue in honour of M.N. Das), 3, 61-64, 2001.
- Deshpande, J.V. and Dewan, I.: Testing bivanate symmetry against dispersive asymmetry, Journal of Indian Statistical Association, 38, 227-249, 2001.
- Dewan, I. and Rao, B.L.S.P.: Asymptotic normality for U-statistics of associated random variables, Journal of Statistical Planning and Inference, 91, 201-225, 2001.
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- Banerjee, S.N.: A study on the vernacular competencies of the Primary school dropouts in the line of Minimum level of learning, Proceedings of the 89th Indian Science Congress, B.Roy (ed.), Indian Science Congress Association, Kolkata, 1, 2002.
- Banerjee, S.N.: A comparative study on the Assessment of Minimum Levels of Learning in Mathematical competencies of the normal and sub-normal pupils, Proceedings of ^{the} West Bengal Science & Technological Congress, S. Mukherjee (ed.), Viswabharati University, Santiniketan, 39, 2002.
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- Bhatacharya, H.: A study on infra-structural facilities available for the learning centres of total literacy campaign in North 24-parganas of West Bengal, Proceedings of the 9th State Science & Technology Congress (Society & Environment), S. Mukherjee (ed.), Viswabharati University, Santiniketan, 19, 2002.

- Chattopadhyay, R.: Socio-psychological Approach for predicting entrepreneurial success: a A study based on the selected entrepreneurs of West Bengal & Tipuna, Proceedings of the 89th Island Science Congress (Pan-III), B. Roy (ed.), Indian Science Congress Association, Kolkata, 64, 2002.
- Dutta Roy, D., Paul, M. and Kar, R.: Some intrinsic and extrinsic factors of reading motivations: A qualitative data analysis, Proceedings of the 89th session of the Indian Science Congress, B. Roy (ed.), Indian Science Congress Association, Kolkaus, 8-9, 2002.
- Dutta Roy, D., and Maitra, M.: A study of digit replacement errors in short time memory span assessment, Proceedings of the 89th session of the Indian Science Congress, B. Roy (ed.), Indian Science Congress Association, Kolkata, 14 - 15, 2002.
- Dutta Roy, D.: Hierarchical Cluster Analysis of Months Using State Anxiety data in the Aniarctic Expedition, International Conference on Statistics, Combinatorics and Related Areas and the Eight International Conference of Forum for Interdisciplinary Mathematics, University of Wollongong, Australia, 252, December 19-21, 2001.
- Dutta Roy, D.: Assessment of Short-term visual memory span, Third International Conference on Cognitive Sciences, Beijing, August 27-31, 2001
- Ghosh, A.: Diverse Individualist-Collectivist orientations and Achievement value in College students, Proceedings of the Fifth European Regional Congress of IACCP, 33, 2001.
- Ghosh, A.: Entrepreneurial Behaviour: A study of Socio-Psychological variables in Entrepreneurs of one North-Eastern State of India, Proceedings of the Seminar on Rural Development, Small Industries and People's participation in North-East India, 3-4, 2001.
- Ghosh, A.: Correlates of Entrepreneurial Success: A study based on small-scale Entrepreneurs of West Bengal and Tripura. Proceedings of the South East Asia Regional Conference on Scientific and Applied Psychology, 60, 2001.
- Gupta, R.: Physical facilities available in primary schools and scholastic achievement. 24th International School Psychology Colloquium, France, 58, 2001.
- Mukhopadhyay, S.: A study of organizational health and its relative importance in discriminating the high and low job satisfied people in the rural banks, Proceedings of the 89th action of the Indian Science Congress, Roy, B. (ed.), Indian Science Congress Association, Kolkata, 63 - 64, 2002.

Sociological Research Unit

Chakraborty, A.: Interface between Human Population in Sunderbans and the Mangrove Ecology: Problems and Prospects, Marine and Coastal Ecosystems: Coral and Mangrove-Problem and Management Strategies, S.D. Marine Research Institute, Tuticoin, Tamil Nadu, 2001.

Library, Documentation and information Sciences Division

Documentation Research and Training Centre

- Madalli, Devika P.: Multilingual representation and retrieval on the Net, Proceedings of the IASLIC Conference, University of Trivandrum, December 2001.
- Madalli, Devika P.: What we can and cannot do: strategies for manpower development in LIS. Proceedings of the NACLIN Conference, University of Hyderabad, November 2001.
- Madalli, Devika P.: An overview of information resource management, Proceedings of the DRTC Workshop on Information Resource Management, Devika P Madalli (ed.), March 2002.

Prasad, A.R.D.: A Z3950 client for retrieving MARC21 records in batch mode. Paper EA, Proceedings of the DRTC Workshop on Information Resource Management, Devika P. Madalli (ed.), March 2002.

Papers Published in Books

Stat-Math Unit, Delhi

Rao, B.L.S.P.: Nonparametric estimation of partial derivatives of a multivariate probability density by the method of wavelets, Asymptotics in Statistics and Probability, Festschrift for G.G.Roussaa (ed.) M.L.Puri, V.S.P. The Netherlands, 321-330, 2000.

Stat-Math Unit, Bangalore

- Delampady, M.: P-values, Encyclopedia of Environmetrics, El-Shaarawi, A. and Piegorsch, W.W. (eds.), John Wiley & Sons, New York, 2002.
- Siturum, A.: The mathematical uncertainty principle, Encyclopedia of Mathematics, Supplement III, 2001.

Computer and Communication Sciences Division

Computer Vision and Pattern Recognition Unit

- Bhattacharya, U., Das, T.K., Datta, A., Parui, S.K. and Chaudhuri, B.B.: Recognition of handprinted Bangla numerals using neural network models, Lecture Notes in Artificial Intelligence (LNAI-2275), N.R. Pal and M. Sugeno (eds.), 228-235, 2002.
- Garain, U. and Chaudhuri, B.B.: On OCR of degraded documents using fuzzy multifactorial analysis, Lecture Notes in Artificial Intelligence (LNAI-2275), N.R. Pal and M. Sugeno (eds.), 388-394, 2002.

Electronics and Communications Sciences Unit

- Chakraborty, D. and Pal, N.R.: Designing rule based classifiers with online feature selection: a neuro-fuzzy approach, Advances in Soft Computing, AFSS 2002, Springer, Pal and Sugeno (eds.), 251-259, 2002.
- Dutta Majumder, D., Roy, P.R. and Miller, J.P.: A control analysis of neuronal information processing: a study of electrophysiological experimentation and non-equilibrium information theory, Springer Lecture Notes in Artificial Intelligence, Bettin, 2275, 191-203, 2002.
- Mandal, D.P. and Pal, N.R.: Non-Shannon entropies for image thresholding, Current Trends in Information theory, Statistics and O.R., Om Prakash (ed.), Guru Nanak Dev University Press, 32-46, 2001.
- Mitra, S. and Mukherjee, D.P.: Spatial domain digital watermarking with buyer authentication, Lecture notes in Computer Science, Springer Verlag, 2247, 149-161, 2001.
- Pal, K. and Pal, N.R.: Fuzzy rule extraction for classifier design, Current Trends in Information Theory, Statistics and O.R., Om Prakash, (ed.), Guru Nanak Dev University Press, 47-59, 2001.

Machine Intelligence Unit

- Acharyya, M. and Kundu, M.K.: Multiscale segmentation of document images using M-band wavelets. Computer analysis of images and patterns, W. Skarbek (ed.), Lectures Notes in Computer Science Series, LNCS-2124, Springer-Verlag, Berlin, 510-517, 2001.
- Bandyopadhyay, S., Murthy, C.A, and Pal, S.K.: Genetic algorithms, pattern classification and neural networks design, Pattern Recognition: From Classical to Modern Approaches, S. K. Pal and A. Pal (eds.), World Scientific, 347-384, 2001.

- De, R.K. and Pal, S.K.: Neuro-fuzzy models for feature selection and classification, Pattern Recognition: From Classical to Modern Approaches, S. K. Pal and A. Pal (eds.), World Scientific, Singapore, 415-305, 2001.
- Mitra, S.K., Murthy, C.A. and Kundu M.K.: Fractal edge extraction, Current Trends in Information Theory, Statistics and O.R., Om Prakash (ed), Guru Nanak Dev University Press, Amritsar, 136-142, 2001
- Pal, A. and Pal, S.K.: Pattern recognition: evolution of methodologies and data mining. Pattern Recognition: From Classical to Modern Approaches, S.K. Pal and A. Pal (eds.), World Scientific, Singapore, 1-32, 2001.
- Pal, S.K.: Soft computing pattern recognition: principles, integrations and data mining. Lecture Notes is Artificial Intelligence (New Frontiers in Artificial Intelligence). T. Terano, T. Nishida, A. Namatan, S. Tsumoto, Y. Ohsawa and T. Washio (eds.), Springer-Verlag, Berlin. 2233, 261-268, 2001.

Physics and Earth Sciences Division

Physics and Applied Mathematics Unit

Roy, S.: Frequency dependent speed of light and stochastic background, Contemporary Optics ad Electrodynamics, (Second edition of Modern Non-linear Optics of Advances in Chemical Physics), L Pripogine and S. A. Rice (eds.), Wiley, NY, 85, 571–621.

Biological Sciences Division

Anthropology and Human Genetics Unit

Rao, D.C. and Majumder, P.P.: Genetics of complex traits with particular attention to fat patterning. Perspectives in Human Growth, Development and Maturation, P. Dasgupta and R. Hauspie (eds.), 79-89, 2001.

Social Sciences Division

Economic Research Unit

- Kabiraj, T. and Chaudhuri, M.: An input joint venture: Some new results in Trade and Industry: Essays by NIPFP - Ford Foundation Fellows, A. Guha, K.L. Krishna and A. Lahiri (eds.) Vikash Publishing House Pvt. Ltd., New Delhi, 65:86, 2001.
- Kabiraj, T. and Marjit, S.: On the welfare implication of international joint venture. Effects of Globalization on Industry and Environment, R. Acharya and B. Moitra (eds.), Lancer's Books, New Delhi, 73-86, 2001.
- Sarkar, A.: Some reflections on India's economic reforms, India at the end of 20th Century. S. Banerjee and Bhattacharya (eds.), Lancer's Books, New Delhi, 175-188, 2001.

Linguistic Research Unit

- Bandyopadhyay, D.: (M)Other tongue syndrome: from breast to bottle, Studies in Sociolinguistics and Applied Linguistics, R. Kumar (ed.), Hyderabad: booklinks, 87-106, 2001.
- Bandyopadhyay, D.: Final sound and initial sound: A note on playing antyaksari, Studies in Phonenics and Phonology, K.N. Reddy and A.R. Fatchi (Ed.), Delhi: Ess Publication, 110-113, 2001.
- Bandyopadhyay, D.: Folklore: searching for logistics. Culturalism (Jawaharlal Handoo felicitation volume). U.N. Singh (ed.), Central Institute of Indian Languages, Mysore, 2001.
- Bandyopadhyay, D. : Understanding semantics of language development, Perspectives in Economic Development in India, B. Ray (ed.), Delhi.

Choudhry, A. : Linguistic minorities in India., The other languages of Europe Clevedon, Guus Extra and Durk Gorter (eds.), Multilingual Matters, 2001.

Planning Unit

- Chander, P. and Tulkens, H.: Strategically stable cost sharing in an economic-ecological negotiations process. Environmental Policy, International Agreements and International Trade. Alistair Ulph (ed.), Oxford University Press, New 70xt, 66-80, 2001.
- Chander, P.: The Kyoto protocol and developing countries: strategy and equity issues, Climate Change Economics and Policy, Mike Toman (ed), Resources for the future, Washington D.C., 2001.

Sociological Research Unit

- Dasgupta, U.: Indian Statistical Institute, Encyclopaedia of Bangladesh, Asiatic Society of Bangladesh, Dhaka, 2001.
- Ghosh, B.N.: Emergence of rural leadership: some observations, Socio-economic Development in India. B Roy (ed.), Vol.1, Mohit Publications, New Delhi, 219-242, 2001.
- Ghosh, B.N.: Biswayan O Bharatiya Nari (in Bengali), Biswayan, Ganatantra O Thitiya Biswa, Vol 2, Jadavpur University, Indian Academy of Social Science, West Bengal Branch, Kolkata, 236-248, 2001.
- Ghosh, B.N. and Vasulu, T.S.: Indicators of Socio-economic Status of Tribal Populations in India, Socio-economic Development in India, Mohit Publication, New Delhi, 420-484, 2001.
- Sen, D.: The socio-economic aspects of Organised Crime: a study on Illegal Coal Mining, Crime, Corruption and Development, Narashima Reddy (ed.), Deep and Deep, New Delhi, 2001.
- Swaminathan, M. and Ramachandran, V.K.: Agricultural workers in Rural Tamil Nadu: A field report, Agrarian Studies, V.K. Ramachandran and Madhura Swaminathan (eds.), Tulika Books, New Delhi, 2002

Part IL VISITING SCIENTISTS, HONOURS AND AWARDS, ASSIGNMENTS

8. VISITING SCIENTISTS

A number of distinguished scientists from abroad and India participated in the research, training and other scientific activities of the Institute during the year. Some of them came to the Institute on invitation and spent fairly long periods in the Institute to assist in the regular research and teaching programmes, while other came for short periods and gave lectures and seminars. Most of them were available for consultation by the faculty members of the Institute. Names of the visiting scientists are given below:

- Adhikari, S.D., Harish-Chandra Research Institute, Allahabad, March 18 April 6, 2002, Stat-Math Unit, Bangalore.
- 2. Aithal, R., University of Mumbai, February 2002, Stat-Math Unit, Kolkata.
- 3. Anish, M., California Digital Corporation, January March 2002, Applied Statistics Unit, Kolkata.
- Arthanari, T. S., University of Auckland, New Zealand, June 22 -29, 2001, Statistical Quality Control
 & Operations Research Unit, Bangalore.
- Arunachalam, S., M.S. Swaminathan Research Foundation, Chennai, February 11-14, 2002, Documentation Research and Training Centre, Bangalore.
- Asano, T., Japan Institute of Science and Technology, March 12-19, 2002, Advanced Computing and Microelectronics Unit. Kolkata.
- 7. Asundi, A.Y., Bangalore University, Documentation Research and Training Centre, Bangalore.
- Athreya, K.B., Cornell University, USA, July 12, 2001 and August 02, 2001, Stat-Math Unit Bangalore.
- 9. Barnes, Bruce, University of Oregon, USA, January 2001 June 2002, Stat-Math Unit, Kolkaja.
- Barreto, Stephen Dias, University of Goa, August 30 September 9, 2001, Stat-Math Unit, Bangalore.
- Behera, Biswaranjan, Indian Institute of Technology, Kanpur, September 2001 August 2002, State Math Unit, Kolkata.
- Beukes, Nicholas J., Rand Afrikaans University, Johannesburg, Sourth Africa, February 2002, Geological Studies Unit, Kolkata.
- Bhattacharya, Amitava, Tata Institute of Fundamental Research, June 03 29, 2001, Stat-Math Unit, Delhi
- 14. Bing, Zheng, Govt. of China Scholarship, July 2001 June 2002, Stat-Math Unit, Delhi.
- Biswas, Indranil, Tata Institute of Fundamental Research, Mumbai, July 2001, Stat-Math Unit. Bangalore.
- 16. Boarini, Romina, Ecole Polytechnique, Paris, January 09 February 26, 2002, Planning Unit, Delhi,
- 17. Bora, B., Tezpur University, January and February 2002, Machine Intelligence Unit, Kolkata.
- 18. Borkar, V.S., Tata Institute of Fundamental Research, March 25 29, 2002, Stat-Math Unit, Delhi.

- Carter, Michael, University of Canterbury, New Zealand, October 15 December 15, 2001, Planning Unit, Delhi.
- Chai, Feng Shun, Institute of Statistical Science, P.R. of China, December 26 January 3, 2002, Stat-Math Unit, Delhi,
- Chaintreau, Augustin, Ecole Normale Superieure, Paris, September 3 4, 2001, Stat-Math Unit, Bangalore.
- Chakrabarti, A., Indian Institute of Science, Bangalore, December 22, 2001 January 5, 2002, Physics and Applied Mathematics Unit, Kolkata.
- Chakraborry, Bandana M., University of Cincinnati, USA, March 27, 2002, Anthropology and Human Genetics Unit. Folkata.
- Chakraborty, Basabi, Iwate Prefectural University, Japan, December 2001, Machine Intelligence Unit, Kolkata.
- Chakraborty, Goutam, Iwate Prefectural University, Japan, December 2001, Machine Intelligence Unit. Kalkata.
- 26. Chatterjee, Kashinath, Asutosh College, Kolkata, June 04-11, 2001, Stat-Math Unit, Delhi.
- 27. Chaudhury, Basudeb, University of Caen, July 16 August 06, 2001, Planning Unit, Delhi.
- 28. Choi, M.D., University of Toronto, Canada, November 2001, Stat-Math Unit, Delhi.
- Daitoh, Ichiroh, Tohoku University, Japan, February 25 March 31, 2002, Economic Research Unit, Kalkata.
- 30. Das, Manay, University of Louisville, Canada, August 31, 2001 July 2002, Stat-Math Unit, Delhi,
- Dasgupta, Indraneel, University of Nottingham, United Kingdom, January 01 July 31, 2002, Planning Unit, Delhi.
- 32. Daval, Gautam, Chennai Mathematical Institute, May June 2001, Stat-Math Unit, Bangalore,
- 33. Deka, S., Tezpur University, January and February 2002, Machine Intelligence Unit, Kolkata.
- Dey, Rukmini, University of Texas at Austin, USA, May September 15, 2001, Stat-Math Unit, Kulkata
- Doumenc, Thomas, Ecole Normale Superieure, Paris, September 3 4, 2001, Stat-Math Unit, Bangalore.
- 36. Dutta, Manjira, Arizona State University, USA, January 2002, Planning Unit, Delhi.
- 37. Feichtinger, Hans G., University of Vienna, Austria, January 9, 2001, Stat-Math Unit, Bangalore.
- 38. Fidaleo, F., University of Rome, Italy, September 2001, Stat-Math Unit, Bangalore.
- 39. Folland, G.B., University of Washington, USA, October 2001, Stat-Math Unit, Bangalore.
- 40. Gautam, Visvajit, Mat Science, Chennai, February 25 March 08, 2002, Stat-Math Unit, Delhi.

- Gesu, V. de, University of Palermo, Italy, February 1 9, 2002, Physics and Applied Mathematics Unit, Kolkata.
- 42. Ghate, Chetan, Colorado College, USA, January 10 March 10, 2002, Planning Unit, Delhi..
- Gillette, David D., Museum of Northern Arizona Flagstaff, Arizona, USA, November 2001, Geologkei Studies Unit, Kolkata.
- Goswami, Debashis, University of Boan, Germany, November 2001 December 2001, Stat-Math Unit Kalkata.
- Govindaraju, V., CEDAR, State University of New York, Buffalo, USA, March 2002 September 2002, Computer Vision and Pattern Recognition Unit, Kolkata.
- Gowda, M. S., University of Maryland Baltimore County, USA, June 17 July 31, 2001, Statistical Outlity Control & Operations Research Unit, Bangalore.
- Groechenig, K., Institute of Mathematics, Vienna, Austria, January 9 11, 2002, Stat-Math Unit, Bangalore
- 48. Habib, Amber, July 2000 June 2001, Stat-Math Unit, Bangalore.
- Hartley, James E., Mount Holyoke College, Massachussets, USA, July 2001 January 2002, Economic Research Unit. Kolkota.
- 50. Hauray, Maxime, Ecole Normale Superieure, Paris, January 29, 2002, Stat-Math Unit, Bangalore.
- Kafatos, M., George Mason University, USA, February 9 12, 2002, Physics and Applied Mathematics Unit. Kolkata.
- Kato, G., California University, USA, February 5 12, 2002, Physics and Applied Mathematics Unit, Kolkata.
- 53. Kemparaj, Bangalore University, Documentation Research and Training Centre, Bangalore.
- 54. Khaledi, Baha-Eldin, Razi University, Iran, March 08 April 15, 2002, Stat-Math Unit, Delhi.
- 55. Kodiyalam, V., IMSc, Chennai, March 2002, Stat-Math Unit, Kolkata.
- Korwar, Ramesh, University of Massachusetts, USA, June 11 December 31, 2001, Stat-Math Unit. Bangalore
- Krishnan, T., Systat Software Asia Pacific, Bangalore, December 1, 2001 November 30, 2002, Sul-Math Unit, Bangalore.
- 58. Kumar, Ganesh, IGIDR, Mumbai, August 16 28, 2001, Economic Analysis Unit, Bangalore.
- Liebscher, V., Institute of Biomathematics and Biometry, Germany, September 2001, Stat-Math Unit. Bangalore.
- Lokajicek, M., Academy of Sciences, Czech Republic, February 4 11, 2002, Physics and Applied Mathematics Unit, Kolkata.
- Maclean, Catriona, Ecole Normale Superieure, Paris, September 3 4, 2001, Stat-Math Unit. Bangalore.
- 62. Marche, Juliean, Ecole Normale Superieure, Paris, January 29, 2002, Stat-Math Unit, Bangalore.

- 63. Martinson, Peter, Gothenburg University, January 26 February 26, 2002, Planning Unit, Delhi.
- Mhaskar, Hrushikesh N., California State University, USA, December 2 6, 2001, Stat-Math. Unit, Bangalore.
- Mitra, Manipushpak, University of Bonn, Germany, November 20 28, 2001, Planning Unit, Delhi.
- Mohanty, Parasar, Indian Institute of Technology, Kanpur, February 2001 July 2001, Stat-Math Unit, Kolkata.
- 67. Mohanty, Sara, March 2000, Stat-Math Unit, Bangalore.
- 68. Mukerjee, Rahul, IIM, Kolkata, April 2001 March 2002, Stat-Math Unit, Kolkata.
- Mukherjee, Avijit, S.I.S.S.A-International School for Advanced Studies, Trieste, Italy, May October, 2001. Stat-Math Unit, Kolkata.
- Mukerjee, Rahul, Indian Institute of Management, Kolkata, December 24 26, 2001, Stat-Math Unit, Delhi.
- Mumin, B. F., Wallchand College of Engineering, Maharastra, October 2001, Machine Intelligence Unit, Kolkata.
- 72. Nadkami, M.G., University of Bombay, Mumbai, June July, 2001, Stat-Math Unit, Bangalore.
- Naganagoudar, I.R., NAL, Bangalore, March 19-21, 2002, Documentation Research and Training Centre, Bangalore.
- 74. Nandi, Swagata, I.I.T., Kanpur, December 6 7, 2001, Stat-Math Unit, Delhi.
- Nath, Swapan K., Oklahoma Medical Research Foundation, USA, July 9, 2001, Anthropology and Human Genetics Unit, Kolkata.
- Pais, Jesim, Indira Gandhi Institute of Development Research, Mumbai, September 2001 March 2002, Sociological Research Unit, Kolkata.
- Pal (Deb Ray), Tandra, Regional Engineering College, Durgapur, April 2001 March 2002, Electronics and Communication Sciences Unit. Kolkata.
- 78. Piquard, F. Lust, Pondicherry University, September 11 14, 2001, Stat-Math Unit, Bangalore
- Pujari, A.K., OCAC, Bhubaneshwar, September 2002, Computer Vision and Pattern Recognition Unit, Kolkata.
- Raghuram, A., Tata Institute of Fundamental Research, Mumbai, September 5, 2001, Star-Math Unit, Bangalore.
- 81. Ramakrishnan, Radha, Anna University, Chennai, May 13 May 19, 2001, Stat-Math Unit, Bangalore.
- Ratnakumar, P.K., University of Hyderabad, May 28, 2001 June 15, 2001, Stat-Math Unit, Bangalore.
- 83. Ravallion, Martin, World Bank, December 07-19, 2001, Planning Unit, Delhi.
- Revzen, M., Department of Physics, Institute of Tech., Haifa, Israel, October 3 December 3, 2001, Physics and Applied Mathematics Unit, Kolkata.

- Rosieri, Carlos A., Centro de Pesquissa Prof. Manoel T. da Costa Instituto de Geociencias Universida: Federal
- 86. De Minas Gerais, Brazil, February 2002, Geological Studies Unit, Kolkata.
- Roy, Madhusudan, Mizoram University, February and March 2002, Machine Intelligence University
 Kolkata.
- Roy, Rajarshi, Columbia University, New York, December 2001 March 2002, Applled Statistics Unit. Kolkata.
- 89. Roy, Satyajit, ITT, Madras, June 18 23, 2001, Physics and Applied Mathematics Unit, Kolkala.
- Roy, Suman, Laboratoire Specification et Verification (LSU), France, July 1 December 2001.
 Applied Statistics Unit, Kolkata.
- Samarov, Alexander, University of Massachusetts & Massachusetts Institute of Technology, USA October 14 – 19, 2001, Stat-Math Unit, Kolkata.
- 92. Sarin, Rajiv, Texas A & M University, USA, April 09 May 01, 2001, Planning Unit, Delhi,
- Sen, Arunabha, Arizona State University, Tempe, USA, June 4 –29, 2001, Advanced Computing and Microelectronics Unit, Kolkata.
- Sen, Saunak, The Jackson Laboratory, USA, November 5, 2001, Anthropology and Human Geneics Unit, Kolkata.
- Sengupta, Ambar, Lousiana State University, USA, February 2001 April 2001, Stat-Math Unit Kolkata.
- 96. Shah, K.R., University of Waterloo, Canada, April 1-15, 2001, Stat-Math Unit, Delhi.
- Shah, Riddhi, Tata Institute of Fundamental Research, Mumbai, May 4, 2001. Stat-Math Unix Bangalore.
- 98. Shankar, Shiva, Chennai Mathematical Institute, June 3 9, 2001, Stat-Math Unit, Bangalore.
- Sharma, Bhaba Kumar, Indian Institute of Technology, Guwahati, December 11 14, 2001, Stat-Mah Unit, Bangalore.
- 100. Sharma, N.K., IIT, Kanpur, October 17-18, 2001, Psychology Research Unit, Kolkata.
- Shastri, A.R., Indian Institute of Technology, Mumbai, February 2002, Stat-Math Unit. Kolkata.
- Shepherd, Michael, Dalhousie Univ., Halifax, Canada, December 13, 2001, Documentation Research and Training Centre, Bangalore.
- Singh, V. P., Louisiana State University, USA, December 31, 2001 and January 1 2002, Physics and Applied Mathematics Unit, Kolkata.
- 104. Skeide, M., Technical University, Germany, September 2001, Stat-Math. Unit, Bangalore.
- Sreekantan, Ramesh, Tata Institute of Fundamental Research, Mumbai, October 24, 2001, Stat. Manh. Unit, Bangalore.
- 106. Srinivasa Rao, Ami SR., IIPS, Mumbai, April 2001 March 2002, Stat-Math Unit, Kolkasa.
- 107. Suen, Chung-yi, Cleveland State University, USA, December 19 26, 2001, Stat-Math Unit, Delhi.

- Sunder, V.S., The Institute for Mathematical Sciences, Chennai, May 2, 2001, Stat-Math Unit. Bangalore.
- Takamiya, Koji, Hokkaido University, Japan, November 18 December 18, 2001, Planning Unit, Delhi.
- Thangedurai, S., Institute of Mathematical Sciences, Chennai, April 2001 March 2002, Stat-Math Unit, Kolkata.
- Tripathy, P.K., OCAC, Bhubaneshwar, September 2002, Computer Vision and Pattern Recognition Unit, Kolkata.
- Tsai, Shu-En, Asia Pacific Library Services, March 15-16, 2002, Documentation Research and Training Centre, Bungalore.
- 113. Tsutsui, Shigeyoshi, Hannan University, Japan, August, 2001, Machine Intelligence Unit, Kolkuta.
- 114. Tulkens, Henry, Belgium, April 08 14, 2001, Planning Unit, Delhi.
- Ugwuow, Fidelis Ifeanyi, University of Nigeria, February 1 April 2002, Applied Statistics Unit, Kalkuta
- 116. Vaman, H.J., Bangalore University, June 2001 March 2002 Stat-Math Unit, Bangalore.
- 117. Varma, Mahendra, IIT, Kanpur, June 3 July 6, 2001, Physics and Applied Mathematics Unit, Kolkuta.
- 118. Verma, D.N., Tata Institute of Fundamental Research, March 09 19, 2002, Stat-Math Unit, Delhi,
- 119. Wadhwa, Wilima, SERFA, August 01 December 15, 2001, Planning Unit, Delhi.
- Wang, Andrew H., Executive Director, OCLC Asia Pacific Library Services, March 15-16, 2002, Documentation Research and Training Centre. Bangalore.
- Weiskopf, Thomas P., University of Michigan, USA. September 17-25, 2001. Economic Research Unit. Kolkula.
- Williams, Sharon R., Ohio State University, USA, April 1 November 17, 2001, Economic Analysis Unit, Bangalure.
- 123. Williams, Sharon, R., Ohio State University, USA, April 1- November 17, 2001, Anthropology and Human Genetics Unit, Kolkata.
- 124. Zvonkine, Dimitri, Ecole Normale Superieure, Paris, September 3 4, 2001, Stat-Math Unit. Bangalore.

9. HONOURS AND AWARDS

Theoretical Statistics and Mathematics Division

Stat-Math Unit, Kolkata

Sinha, B.K., was elected President of the Section of Statistics of Indian Science Congress Association for 2001-2002.

Stat-Math Unit, Delhi

Bapat, R.B., was elected to the Board of Directors of the International Linear Algebra Society for a princi
of three years beginning from March 2002.

Karandikar, R.L., received National Award in honour of Professor C.R.Rao.

Stat-Math Unit, Bangalore

Mishra, Gadadhur, received Shanti Swarup Bhatnagar Award.

Rajarama Bhat, B.V., received B.M. Birla Award.

Computer and Communication Sciences Division

Advanced Computing and Microelectronics Unit

Sinha, Bhabani P., was elected a Fellow of the Institute of Electrical and Electronic Engineers (LEEE)

Electronics and Communication Sciences Unit

Pal, N. R., received Fellowship of the Indian National Academy of Engineering (FNAE).

Machine Intelligence Unit

Pal, S.K., received the Syed Husain Zaheer Medal from Indian National Science Academy, 2001 and FICO Award 2000-2001 from the Federation of Indian Chambers of Commerce & Industry in Engineering and Technology.

Biological Sciences Division

Anthropology and Human Genetics Unit

Majumder, Partha, P., received the Ranbaxy Science Foundation Award in Applied Medical Sciences.

Embryology Unit

Sarkar, Ram Rup, Senior Research Fellow received Young Scientist Award in Mathematics from Indian Science Congress Association at the 89th Session of Indian Science Congress, Lucknow during January 3-7, 2002.

Social Sciences Division

Planning Unit

Sen, Arunava, was awarded Mahalanobis Memorial Award by Indian Econometeric Society.

Psychology Research Unit

Chattopadhyay, Ruchana, was awarded "ISCA Young Scientist Award" by the Indian Science Coopes Association in January 2002.

10. EDITORIAL AND OTHER SCIENTIFIC ASSIGNMENTS

The faculty of the Institute have undertaken various scientific and other assignments in different organizations including Central and State Governments, like: working as Edutor of a journal, teaching on Summert/Winter Schools and Refresher courses organized by various organizations, organizing and chairing sessions in Conferences, setting question papers, evaluating answer scripts and theses, working in Selection Committees and as judges for academic competitions and awards, working as members of Executive committees/Councils of various national bodies, etc. A few such activities are reported here.

EDITORIAL ASSIGNMENTS

Theoretical Statistics and Mathematics Division

Stat-Math Unit, Kolkata

Bose, Arup, was Managing Editor, Sankhya and Co-editor of Sankhya, Series B.

Rao, T.J., served as (i) Managing Editor of Sankhya and Co-editor of Sankhya, Series B. (ii) Coeditor of CSA Bulletin, Survey Methodology of Statistics, Canada, and (iii) Guest Co-editor of JSPI Special ussue in honour of Prof. P.V. Sukhame, Vol. 102, March 2002.

Sinha, K.B., was member, Editorial Boards of Infinite Dimensional Analysis and Quantum Probability, Reviews in Mathematical Physics and Proceedings of Indian Academy of Sciences (Mathematical Science).

Stat-Math Unit. Delhi

Bhatia, R., served on the editorial boards of the International journals: Linear Algebra and its Applications, and the Society for Industrial and Applied Mathematics Journal on Matrix Analysis.

Stat-Math Unit, Bangalore

Bagchi, B., acted as a member of Editorial Board, Proceedings of Indian Academy of Sciences (Mathematical Sciences).

Delampady, Mohan, acted as a Co-Editor of Sankhya and a member of the Editorial Board, Resonance.

Misra, G., acted as a member of Editorial Board, Proceedings of Indian Academy of Sciences (Mathematical Sciences).

Ramasubramanian, S., acted as a Co-Editor of Sankhya.

Sitarum, A., acted as an Editor of the Proceedings of the Indian Academy of Sciences (Mathematical Sciences) and a member of the Editorial Board, Resonance.

Sury, B., acted as a member of the Editorial Board, Resonance.

Applied Statistics Division

Applied Statistics Unit

Chaudhuri, Arijit, continued as Editor of Calcutta Statistical Association Bulletin and an Associate Editor of Journal of Statistical Planning and Inference.

SenGupta A., continued as Guest Editor of Journal of Indian Society for Probability and Statistics and an Associate Editor of (i) Journal of Statistical Planning and Inference, (ii) Stochastic Modelling and Applications and (iii) Journal of Indian Statistical Association.

Computer and Communications Sciences Division

Electronics and Communication Sciences Unit

Pal, N. R., continued as an (i) Associate Editor of IEEE Transactions on Fuzzy Systems and IEEE Transactions on Systems, (ii) Associate Editor, Man and Cybernetics-B. International Journal of Approunted Reasoning, International Journal of Fuzzy Systems, (iii) Area Editor of Fuzzy Sets and Systems, He bid continued as a (i) Streeting Committee Member of the Journal of Applied Soft Computing, Springer, (ii) Governing Board member of the Asia Pacific Neural Networks Assembly and an Independent Theme Chair of the World Federation of Soft Computing and (iii) Co-Guest Editor of special issues of the International Journal of Intelligence System and International Journal of Pattern Recognition and Artificial Intelligence.

Pal, S., acted as a Co-Guest Editor of a special issue of the International Journal of Pattern Recognition and Artificial Intelligence.

Machine Intelligence Unit

Bandyoapdhyay, S., acted as a Co-Guest Editor of Special Issue on Evolutionary Computation a Engineering Sciences. IETE Journal of Research.

Ghosh, A., acted as a Co-Editor of a special issue of Information Sciences on Soft Computing and Day Mining.

Pal, S.K., served as a Guest Editor of special issues on (i) Pattern Recognition, Image Processing asd Computer Vision for the journal Proceedings INSA-A, (ii) Rough-Neural Computing for the journal Neuro-Computing (North Holland). (iii) Rough Sess, Pattern Recognition and Data Mining for the journal Pattern Recognition Letters, and (iv) Soft Case Based Reasoning for the journal Applied Intelligence. He also continued to serve as (i) an Associate Editor of the journals - Pattern Recognition Letters, International Journal of Paten Recognition and Artificial Intelligence, Neurocomputing, Information Sciences, Applied Intelligence, Fuzzy Ses and Systems, Fundamenta Informaticae, International Journal Computational Intelligence and Applications (and Executive Advisory Editor of IEEE Trans. on Fuzzy Systems, International Journal of Approximate Reasoning and International Journal of Image and Graphics and (iii) a member of the Reviewing Boards of Mathematical Reviews (American Mathematical Society) and IEEE Computer.

SCIENTIFIC ASSIGNMENTS ABROAD

Theoretical Statistics and Mathematics Division

Stat-Math Unit, Kolkata

Basu, Srabashi visited the Department of Statistics, Pennsylvania State University, USA during January, 01 - May 31, 2001.

Bose, Arup visited University of California, San Diego during March-June 2002 for research as teaching. He also visited and gave lectures at (i) Stanford University, Dept. of Statistics on May 15, 2001. It University of California, Riverside, Dept. of Statistics on May 22, 2001 and (iii) University of California, Das Dept. of Statistics on June 5, 2001.

Bose, Smarajit visited Department of Statistics, University of California, Santa Barbara during January 01- June 15, 2001.

Choudhuri, Probal visited Liberec, Czech Republic as an invited speaker in the workshop on Quant Regression during July 17 - 20, 2001.

Ghosh, J. K. visited Statistics Department, Purdue University, USA during July-December, 2001.

Goswami, Alok visited the Mathematics Department of Indiana University at Bloomington, USA during August 25, 2001 - August 24, 2002.

Mukherjee, Goutam visited National University of Singapore during July 2-6, 2001 and gave a talk in he International Conference on Geometry and Topology. He also attended NUS-JPS workshop on algebra and topology at the National University of Singapore during July 8-13, 2001.

Naolekar, Anirudha attended the International Conference on Topology and Geometry at the National University of Singapore during July 2-6, 2001 and gave a talk entitled "Equivariant Euler Characteristics". He also attended the NUS-JPS workshop on algebra and topology during July 8-13, 2001.

Rao, T.J., attended the 53rd session of the International Statistical Institute during 22-29 August 2001 in Seoul, Korea and gave a talk on "Some Problems in Stratified Sampling".

Saha Ray, Rita visited (i) The Australian National University, Centre for Mathematics and its
population units November 26-28, 2001 and delivered a talk on "DS-uptimal designs in one way ANOVA",
(in Enversity of Wollongong, Australia, School of Mathematics and Applied Statistics during November 30 -
December 20, 2001 and delivered an invited talk titled "DS-optimal Designs in one-way ANOVA" in the
Optimal Design Session of the "International Conference on Statistics, Combinatorics and Related Areas and
Eighth International Conference of the Forum for Interdisciplinary Mathematics" (iii) University of Wollongong,
Australia, School ol Information Technology and Computer Science during December 1-28, 2001 for research
collaboration and delivered a talk titled "optimal Row-Column Designs with negural row-column sizes"

Sinha, K.B. visited University of Geneva, Switzerland during June-July 2002.

Sinha, Bikas Kumar visited (i) University of Tampere, Finland during May-June, 2001 and February 2002, (ii) University of Florida at Gainesville, USA for two weeks in June 2001, (iii) National University of Singapore for one week in December 2001 and (iv) University of Wollongong, Australia for one week in December 2001.

Stat-Math Unit, Delhi

Bapot, R.B. visited (j) Technion, Haifa, Israel and attended the Conference of the International Linear Algebra Society during June 25-29. 2001 and gave an invited talk on "The Jacobi formula for outer inverses", (iii) INRIA, France for joint research during July 1-14, 2001 and gave a seminar. (iii) University of Lisbon dunng March 18-22, 2002, (iv) University of Lisbon, Portugal during March 24-26, 2002 as invited speaker in the workshop on "Multilinear Algebra and Matroid Theory" and gave seminars at University of Coimbra. Portugal and University of Dornaud, Germanud, Germanum, Carthony Common C

Bhatia, R. visited the (i) University of Lisbon, Portugal during May-June 2001 for research and gave seven talks, (ii) University of Coimbra, Portugal, (iii) University of Nottingham and the Bristol Research Institute in Mathematical Sciences in the United Kingdom and gave research talks and also participated in an International Conference on Multilinear Algebra and Matroid Theory held at CELC, Lisbon during March 24-26, 2002.

Das, Ashish visited Institute of Statistical Science, Taiwan during April - May 2001 for collaborative research work.

Kochar, S.C. visited (i) Center for Complex Statistical Systems, Seoul National University, Korea during lan 23 - Feb 3, 2002 and gave two invited talks and did collaborative research work, (ii) University of Hong Kong, during Feb 3-10, 2002 for collaborative research work.

Parthasarathy, T. visited the University of Maryland Baltimore county, USA during May 7-June 8, 2001 to do collaborative research on Semidefinite Linear Complementarity problem.

Stat-Math Unit, Bangalore

Misra, G. visited University Joseph Fourier, Grenoble and University of Paris during May-June 2001 for research. He also visited City University of New York and Texas A&M University. College Station in February 2002 for research.

Raja, C.R.E. visited (i) Erwin Schrodinger International Institute for Mathematical Physics, Vienna during June 18 – July 13, 2001 and attended Workshop on Random walks and Geometry. (ii) CIRM, Juniny, France during July 14-21, 2001 and attended Conference on Probabilities on Geometrical Structures.

Rajeev, B. visited Michigan State University during August 2000 - May 2002, for research.

Rao, K.P.S.B. visited Southwestern College, Kansas, USA during September - December 2001 for research work

Rao, T.S.S.R.K. visited Southern Illinois University, Edwardsville in July 2001 for project related work

Thangavelu, S. visited (i) University of Milano in June 2001 and attended Workshop on Fourier Analysis and Convexity, (ii) University of Bergamo, Italy during June 3 - July 3, 2001 for research.

Applied Statistics Division

Applied Statistics Unit

Biswas, Atanu visited Indiana University, Purdue University Indianapolis for one week in July 2001 and presented an invited talk in the Statistics Canada 2001 Conference at the Concordia University. He also participated in the NSF-CBMS conference at the University of Washington at Seattle in June 2001.

Bose, Mausumi visited (i) University of California, San Diego, USA, during March 2001-lune 2001 for seearch and training, (ii) University of California, Riverside, USA, in May 2001 for giving a talk, (iii) Seoul, South Korea during, August 21-30, 2001 for giving a talk at the International Statistical Institute Conference.

Chaudhuri, Arijit visited the Utrecht University, Mannheim University, Southampton University and the Central Bureau of Statistics, Jerusalem (Israel) during, June 01 – October 17, 2001.

Dewanji, Anup visited Fred Hutchinson Cancer Research Center, Seattle, USA, during July 2 - August 3, 2001.

SenGupta, Ashis presented a paper at the International Congress on Engineering Geology and Natural Disasters, Nepal Geology Society, Kathmandu, in October 2001 and in a seminar at Australian National University in December 2001. He was the Chairman of an Invited session, Organizer of two Invited sessions and Speaker in the invited session on Directional Data Analysis at the International Conference on Statistics. Combinatorics and Related Areas of the Forum for Interdisciplinary Mathematics, University of Wollongoog, Australia, in December 2001.

Computer and Communication Sciences Division

Advanced Computing & Microelectronics Unit

Sinha, Bhabani P. has been visiting the Department of Computer Science, Clemson University. Clemson, USA since August 2001 as a visiting professor.

Bhattacharya, B.B. has been visiting the Department of Computer Science and Engineering, University of Nebraska, Lincoln, USA since January 2001 as a visiting professor.

Sur-Kolay, S. visited (i) University of New South Wales, Kensington, Australia and (ii) Nairoad University of Singapore during May 5-12, 2001 and gave seminars. She also presented a technical paper at the 34th International Symposium of Circuits and Systems, Sydney, Australia.

Computer Vision and Pattern Recognition Unit

Chaudhuri, B.B. visited GSF, Munich, Germany, during September 9-30, 2001 as a part of the ongoing collaboration between ISI and GSF.

Pal, U. visited LORIA, France during October 2000 - September 2001.

Palit, S. visited University of California, Santa Barbara and Stanford University in December 2001 for scussions on a collaborative project on functional magnetic resonance imaging.

Electronics and Communication Sciences Unit

Mukherjee, D. P. visited Department of Electrical and Computer Engineering, University of Virginia, SA during January - July, 2002 for research in Video Image Analysis.

Machine Intelligence Unit

Bandyopadhyay, S. visited the (i) University of Texas at Arlington, USA, and taught a graduate level course on Genetic Algorithms in the Computer Science Department during the summer of 2001. She collaborated with the Al group there to work in a Knowledge Discovery project funded by DARPA, USA and delivered seminars in the department. She also visited University of Illinois, Chicago, USA and the Imperial College, ondon and delivered a seminar in October 2001.

Biswas, S. N. visited (i) the State Key Laboratory of CAD and CG at the Zhejiang University of langzhou in China during June 2001 under a collaborating scheme of the Govt. of India and delivered a talk and took part in the discussions of various problems of the Ph.D. students, (ii) different Computer Science Labs at we Nanjing and Shanhai University and (iii) the Shaoxing Textile Science and Technology Center in China ettile City to examine various University/ Industrial collaborations.

De, R.K. served as a Program Committee member of the Workshop on Soft Computing and Case-based Reasoning in conjunction with International Conference on Case-based Reasoning (ICCBR'01) during July 30 -August 2, 2001. Vancouver, Canada.

Ghosh, A. acted as a (i) Technical Committee Member of International Workshop on Intelligent Knowledge Management Techniques (I-KOMAT2002), Podere d'Ombriano, Crema, Italy during September 16-08, 2002, (ii) Program Committee Member for the International Conference on Data Warehousing and Knowledge Discovery (DaWaK 2002), Aix-en-Province, France during September 2-6, 2002, (iii) Program Committee Member for the International Conference on Parallel Problem Solving from Nature (PPSN VII), Granada, Spain in September 2002.

Mitra, S. served as a member of the International Program Committee of the Second International ICSC Congress on Computational Intelligence, Methods & Applications (CIMA 2001), Bangor, UK, during June 19-22, 2001 and the Fourth International Conference on Data Warehousing and Knowledge Discovery (DaWaK 2002).

Murthy, C. A. served in the Program Committee of the Fourth International Conference on Data Warehousing and Knowledge Discovery (DAWAK 2002).

Pal, S.K. visited and delivered talks at the (i) Shaoxing Textile Science and Technology Center, China on June 2, 2001, (ii) State Key Laboratory of CAD and CG, Zhejiang University, Hangzhou, China on June 4, 2001, (iii) Tongji University, China on June 5, 2001, (iv) Hangzhou Institute of Computer Application Technology Research Center, China on June 6, 2001, (v) Dept. of Computer Science and Technology, Nanjing University, China on June 6, 2001, and (vii) Jianghu University of Science and Technology, Zhenjiang, Jiangsu, China on June 6, 2001, and (viii) Jianghu University of Science and Technology, Zhenjiang, Jiangsu, China on June 8, 2001. These visits were organized under the PEEP program of the Dept. of Science & Technology, Govt. of India. He delivered a keynote speech in the Rough Sets Theory and Granular Computing (RSTGC-2001), the ISAI International Workshop during May 20-22, 2001, Matsue, Japan and an invited talk at the International Conference on Case-Based Reasoning (ICCBR'01), in Vancouver, Canada during July 30 - August 2, 2001. He has organized and chaired a session in this conference, the also served as a member of the (i) Program Committee of the 3th International Conference on Data Warehousing and Knowledge Discovery (DAWAK 01) during

September 5-7, 2001 at Munich, Germany and (ii) JSAI International Workshop on Rough Set Theory and Granular Computing, Shimane Prefectural Assemssbly Hall, Matsue Shimane, Japan during May 20-22, 2001.

Physics and Earth Sciences Division

Geological Studies Unit

Chaudhuri, Asru K. visited Osaka City University, Osaka to participate in an International Symposium and Hiroshima-Higashi University, Japan for scientific discussions during October 23 - November 6, 2001.

Saha, Dilip visited (i) Osaka City University, and Department of Earth and Planetary Science, Hokkaudo University, Japan during October 19 – November 10, 2001 and (ii) Hokkaudo University, for EPMA laboratory work on chlonte-mica aggregates related to anchizone metamorphism. He also participated in a liekl workshop on Geotraverse across the major geologic units of Southwest Japan and in the International Symposium on the Assembly and Breakup of Rodinia and Gondwana, and Growth of Asia (ISRGA) and chaund an ISRGA session on Magamatism and crustal Evolution of Gondwana.

Physics and Applied Mathematics Unit

Das, P.K. visited Trieste and Rome, Italy during March 27 - April 11, 2001 for academic collaboration and research.

Dandapat, B.S. visited Canada and USA during August 7 - September 19, 2001 for academic collaboration and research.

Mazumder, H.P. visited Veterans General Hospital, Taipei, Taiwan during September 01 – November 30, 2001 to collaborate in research programme on Pulsatile and Turbulent blood flows.

Roy, S. visited George Mason University, USA during February 16 - July 29, 2001 for scientific collaboration and research

Biological Sciences Division

Agricultural Sciences Unit

Banik, Pabitra visited International Rice Research Institute, Philippines during September 15 - October 19, 2001 for collaboration.

Ghose, M. attended the 2st International Symposium and Workshop on Arid Zone Environmens. Research and Management Options for Mangrove and Salt Marsh Ecosystems, at Abu Dhubi, UAE during December 22 – 24, 2001 and presented a research paper.

Sasmal, Tapan Kumar attended International Training on Multi-Agents Systems for Natural Resources Management, Thailand during October 8-9, 2001.

Anthropology and Human Genetics Unit

Majumder, Partha. P. visited the University of Pittsburgh during September 8-13, 2001 and delivered a talk on Non-parametric methods for gene mapping. He participated in (i) a conference of the International Genetic Epidemiology Society, Garmisch (Germany) during September 2-4, 2001 and delivered an invited tax on "Recent study designs and statistical methods in gene mapping, (ii) Conference on Stigma and global brably developing a research agenda, organised by the U.S National Institute of Health in Bethesda during September 5-7, and delivered an invited talk on group stigma in population genetics. He also participated as an expert in a meeting of the UNESCO, for drafting an international declaration for collection, storage and use of genetic 432, held in Pairs during February 11-12, 2002.

Mukhopadhyay, Barun participated in the International Conference on Detecting environmental change science and society, in the Senate House, University College, London, U.K. during July 17-20, 2001 and presented a paper titled "People's perception of the changing environmental scenario in the Sikkim himalaya: a micro-level anthropological study"

Roy, Bidyut visited the Laboratory of Moleculer Genetics, Faculty of Science, Kansi Gakuen University, Osaka, Japan during April-October 2001.

Biochemistry Unit

Sengupta, Sharmila visited University of Pittsburgh, School of Medicine, Department of Molecular Genetics & Biochemistry. Pittsburgh, PA, USA for 3 months in connection with advanced research on Molecular Biology and Recombinant DNA Technology under the sponsorship of the Department of Biotechnology (Overseas Associateship award), India for the year 2001-2002.

Social Sciences Division

Economic Research Unit

Dasgupta, D., visited Kobe University, Japan, in July 2001, to attend a conference on Trade and Dynamics.

Kabiraj, T., visited the School of Management and Business, University of Wales, Aberystwyth, UK during the first week of September 2001, to give seminars. He also visited the Department of Economics, Keele University, Keele, UK during the second week of September 2001, to give seminars.

Economic Analysis Unit

Surekha Rao, K. visited Wichita State University, Kansas, USA during September-December 2001 for joint research and completion of a monograph on Forecasting for Business and Industry.

Linguistic Research Unit

Choudhry, Amitav, visited South Africa during July/August 2001 and November 2001-January 10, 2002 to deliver lectures at the University of Capetown on critical issues in Indian education and quantitative linguistic research in the Indian Statistical Institute. Exploratory research was also done in Johannesburg to look at the prospects of a sociolinguistic study on transplanted communities from the Indian sub-continent.

Planning Unit

Das, Sanghamitra visited (i) University of Michigan Business School in September 2001, (ii) Penn State University in September 2001 and (iii) Catholic University of Louvain during June-July 2001 for research.

Das, Satya P. visited (i) Tilburg University, The Netherlands in July 2001 to attend a conference and (ii) Catholic University of Louvain during June-July, 2001 for research.

Dutta, Bhaskar visited (i) California Institute of Technology, USA during October-December, 2001 for teaching and research, (ii) Warwick University, UK during January-March, 2001 for teaching and research.

Gangopadhyay, Subhashis visited London Business School in November 2001 for research.

Jalan, Jyotsna visited World Bank during May-July 2001 for research and to attend a conference.

Ramaswami, Bharat visited (i) Chicago University in August 2001 to attend a conference and (ii) University of Minnesota in 2002 for research work.

Sen, Arunava visited University of Namur, Belgium during May-June, 2001 for research.

Population Studies Unit

Majumdar, Prasanta Kumar visited (i) Brazilian Association of Population at Salvador, Bahia, Brazil, participated in the 24th IUSSP General Population Conference during August 18-24, 2001 and presented papers in scientific sessions - S 39 & S 81. (ii) Salvador, Bahia, Brazil on August 21, 2001 to attend General Assembly

of CICRE and (iii) Korea Institute of Population Problems, Seoul, Korea during November 22 - 24, 2001 to attend International Conference on "The present status and future of population problems of Asia".

Psychology Research Unit

Ghosh, Anjali presented a paper at the IACCP Regional Congress at King Alfred's College, Wincheuer, UK during July 7-11, 2001. She also participated in two workshops. She has been elected a council member of the South Asian Association of Psychologists, Bangladesh.

Gupta, Rumki presented a paper at the 24th ISPA Colloquium at Dinan, France during July 25-29, 2001. She also participated in a workshop.

Sociological Research Unit

Swaminathan, Madhura visited (i) the Institute of Social Sciences, Hochi Minh City, Vietnam and gave a lecture on poverty and economic mobility. She presented a paper at the conference of the International Association of Feminist Economics, Oslo, Norway and attended the meeting of Board of Trustees of the International Potato Centre, Lima, Peru.

Library, Documentation and Information Sciences Division

Documentation Research and Training Centre (DRTC)

Rao, I. K. Ravichandra visited (i) Limburgs University. Diepenbeek. Belgium during March 01-Ms; 18, 2001 to pursue research in Scientometrics and Informetrics, (ii) University of South Wales, Australia during July 15-20, 2001, attended the 8th International Conference on Informetrics and Scientometrics and presented a paper and chaired a Technical Session.

Statistical Quality Control and Operations Research Division

Biawas, A.K. visited Department of Mathematics, Statistics and Computer Science, University of Illinois at Chicago, USA during January 6 - May 21, 2001 for teaching and collaborative research in Gaze Theory.

Chaudhuri, A.K. visited (i) Mexico for training program on Design of Experiments (ii) Iran for training and consultancy on Six Sigma, QS-9000 during May-June, 2001 (iii) Thailand for consultancy on Six Sigma and OS-9000 audit.

Majumdar, S.K. visited Dhaka, Bangladesh during September 15-16, 2001 and conducted a training programme on "Quality Improvement Techniques" organised under the aegis of Management Systems and Services. He also conducted a training programme on "SPC Techniques" at M/s Opsonin Chemical Industries. Barisal, Bangladesh during September 18-19, 2001.

Majumdar, Anup visited Bangladesh in August 2001 in connection with ISO 9001:1994 Implementation at Shinepukur Ceramics Ltd., Dhaka. Subsequent to the certification obtained for ISO 9001:1994, the organisation wanted to upgrade their system with built-in element of customer focus and continual improvement Necessary inputs for this were provided by Anup Majumdar and Prasun Das.

Perumallu, P.K. visited (i) Istanbul, Turkey during June 25-29, 2001 for QS-9000 audits on behalfol AQA (ii) Seramban, Malaysia during May 21-25, 2001, Penang, Malaysia during July 9-13, 2001 aul Surabaya, Indonesia during September 10-14, 2001, for QS-9000 audits on behalf of KEMA-NYTQC.

Ravindran, G. visited Department of Mathematics, University of Maryland Baltimore County dunit April 5 - June 2, 2001 for collaborative work on semi-definite linear complementarity problems.

Computer and Statistical Services Centre

Bagchi, Aditya visited the Super Computer Centre, University of California, San Diego during November 01- December 18, 2001 as a Visiting Scientist.

SCIENTIFIC ASSIGNMENTS IN INDIA

Theoretical Statistics and Mathematics Division

Stat-Math Unit, Kolkata

Bandyopadhyay, Pradipta, gave a talk on "Rotund points in Banach Spaces" at the Workshop on Recent Advances in Operator Theory and Operator Algebras — II, Indian Statistical Institute, Bangalore, during December 24, 2001 – January 4, 2002. He also acted as an Instructor in the JBNSTS workshop on Mathematics at RKM Residential College, Narendrapur during March 1-3, 2002.

Dastupta, Ratan, participated in the Indian Science Congress at Lucknow in January 2002 and delivered an invited talk in the Statistics Section, entitled "A Statistical Study of south pole ozone profile"

Duta, Amarya Kumar, participated in the International Conference on Algebra and Geometry at the University of Hyderabd during December 7-14, 2001 and delivered an invited talk on "Some results on Affine Fibrations" at the conference on December 11, 2001.

Purkayastha. Sumitra, attended (i) 2nd International Network Meeting of National Brain Research Centre, and Neuroscience Centres of India and Indo-15 Symposium on Brain Research organized by National Bran Research Centre, India during January 10-12, 2002, (ii) International Symposium on "Neurodegeneration and Neuroprotection, followed by XIX Annual Meeting of the Indian Academy of Neuroscience at Indian Institute of Chemical Biology, Kolkata during March 18-70, 2002. It also presented a poster based on work done in collaboration with Applied Statistics Unit and Computer Vision and Pattern Recognition Unit.

Raha, A.B., was (i) invited speaker at the conference on "Algebraic & Geometric Topology" at University of Delhi during December 31, 2001 – January 4, 2002 and (ii) resource person in Topology for the "DRS Programme in the Development of Mathematics" at R.D. University, Jabalpur, M.P. during March 10-16, 2002.

Rao, T. J., attended the 89th Session of the Indian Science Congress during January 3-5, 2002 in Lucknow and gave a talk on "Horvitz-Thompson Estimator: An overview" and chaired a session. He visited IASRI, New Delhi on December 26, 2001 and gave a talk on "Allocation problems in Stratified Sampling". He also lectured at NSSO on Issues relating to fixation of sample size on January 15 and 17, 2002 and on "Some developments in Survey Techniques" on February 11, 2002. He was Indian Statistical Institute nominee in the Expert Technical Group of the Reserve Bank of India to suggest appropriate methodology for determining the cost of conducting Government Business.

Saha, G.M., delivered invited lectures entitled (i) "Combinatorial Designs for Group Tests: Review and Some Recent Retuils" in the Statistics Section of the 89th Session of the Indian Science Congress at the University of Lucknow during January 3-7, 2002 and (ii) "Designs & Analysis for Biosassays" on March 25, 2002 in the Workshop on Statistical Techniques in Health Sciences jointly organized by the Stat-Math Unit of the Indian Statistical Institute, Kolkata and the Department of Statistics, Gauhati University, at Guwahati during March 23-25, 2002.

Sikdar, K., attended the School on Quantum Physics and Information Processing, QDIP-2002 at TIFR, Mumbai during February 18-27, 2002.

Stat-Math Unit. Delhi

Bapat, R.B., participated as resource person, in the International Mathematics Olympiad Training Camp, Homi Bhabha Centre for Science Edutation, Mumbai, during May 15 - 25, 2001. He also delivered an invaled talk at 67th Annual Conference of Indian Academy of Sciences, Sri Venkateswara University, Tirupati, on "The pleasures of Counting Trees" on November 11, 2001.

Bhatia, R., was an organiser of a two-week course on Linear Algebra for college and university teachers sponsored by the Indian Academy of Sciences at the Harish-Chandra Research Institute, Allahabad in December 2001. He gave a course of ten lectures in this program. He also conducted several Mathematics awareness

programmes in Delhi Colleges on behalf of the National Board for Higher Mathematics and the Managing Editor of the series Texts and Readings in Mathematics published by Hindustan Book Agency, New Delhi.

Dewan, Isha, presented papers on (i) U-statistics for associated random variables at Seminar of Reliability Theory and its Applications, Pune in June 2001 and (ii) Testing independence between T and Deta via conditional probability at International Conference in honour of Prof. J.V. Deshpande held at Puiçà University during December 21-24, 2001. She also gave two lectures at IASRI on "Nonparametric statistics and its applications in agriculture" in December 2001.

Kochar, S.C., chaired a session and gave an invited talk in the National Conference on Sutissical Inference and Reliability held at Punjab University in November 2001.

Stat-Math Unit, Bangalore

Bagchi, S., delivered an invited lecture at the international conference on Design of experiments - Recent trends and future directions during December 27 - 30, 2001.

Biswas, Jishnu, attended an international conference on Commutative Algebra and Algebraic Geonety at The University of Hyderabad, during December 06 – 13, 2001.

Delampady, Mohan, delivered lectures in the workshop on Analysis, Probability and Statistics at CMS College, Kottayam in December 2001.

Inamdar, S.P., attended an international conference on Commutative Algebra and Algebraic Geometry at University of Hyderabad, during December 6 - 13, 2001.

Misra, G., delivered lectures in the workshop on Analysis, Probability and Statistics at CMS College, Kottayam in December 2001.

Rajarama Bhat, B.V., delivered invited lectures at the (i) workshop on Functional Analysis and is applications during June 13–15, 2001, (iii) international workshop on Linear Algebra, Numerical Funcioud Analysis and Wavelet Analysis at Cochin University of Science and Technology, during August 6–15, 200, (iii) International workshop and Mini-conference on Banach algebras, Operators and Harmonic Analysis a Sardar Patel University, Coijarat during January 09–13, 2002 and (iv) Stat-Math Conference at Indian Statistical Institute, New Delhti during 19-21, 2002.

Ramasubramanian, S., delivered lectures in the workshop on Analysis, Probability and Stanints & CMS College, Kottayam in December 2001. He gave (i) a talk at a conference organized by the Stat-Mah Unit at Indian Statistical Institute, Delhi in January 2002 and (ii) a series of lectures on "Brownian motion" x Pondicherry University in February 2002.

Sitaram, A., delivered a series of lectures on Harmonic Analysis and visited Indian Institute of Technology, Kanpur in November 2001 for collaboration.

Sury, B., delivered lectures in the UGC Refresher course for college and university teachers at Bharathiar University in September 2001.

Thangavelu, S., served in the organizing committee of International conference and instructional workshop on wavelets and their applications at Anna University, Chennai during January 4 – 8, 2002.

Applied Statistics Division

Applied Statistics Unit

Adhikary, Arun Kumar, acted as an invited speaker in the Section of Statistics in the 89th Session of the Indian Science Congress held at Lucknow during January 3-7, 2002. He also presented a paper onlitled To optimality of Horvitz-Thompson Troe estimators in double sampling with varying probabilities in a 1-

symposium entitled "50 Years of Horvitz-Thompson Estimator" specially arranged at University of Delhi during December 26-31, 2001.

Bandyopadhyay, Shibdas, worked as a member of the Technical Committee for Co-ordination and Improvement of Statistical System in the State of West Bengal, constituted by the Government of West Bengal. He also delivered lectures on (i) Estimation and Management of Non-response in a Refresher Course, (ii) 'Sample Surveys' Organized by SDRD, NSSO for Senior and Middle Level ISS Officers during January 14-25, 2002, (iii) 'Computer Techniques Used in Management of Non-response in Surveys—the EM Algorithm and Two-way Tables' in a Refresher Course and (iv) 'Computer Intensive Techniques in Survey Sampling' organized by DPD, NSSO for Senior ISS Officers during February 11-15, 2002.

Bose, Mausumi, delivered an invited talk at the International Conference on Design of Experiments - Recent Trends & Future Directions held at Delhi University during December 27-29, 2001.

Chaudhuri, Arijht, continued conducting training and workshop programmes on Crop estimation for the officers of the Govt. of Tripura under a scheme for the development of North Eastern India in collaboration with the Biological Sciences Division. He provided guidance for a Project undertaken by the Industrial Statistics (SS) wing of CSO, Govt. of India to explore methods of improved estimation at the district level employing modelrelated techniques. He also worked as chairman of the Standing Technical Committee (STC), Govt. of West Bengal for improvements in the state's crop estimation methods.

Dewanji, Anup, presented a paper entitled "On optimal design for simple illness-death model" at ITT Kanpur on October 18, 2001. He also attended the International Conference on Design of Experiments held in Delhi University during December 27-29, 2001.

SenGupta, Ashis, delivered lectures on Statistical Inference for Directional Data in the UGC Refresher Course at Shivaji University, Kolhapur during October - November 2001 as a resouce person and as an invited speaker at the Meeting of the Indian Science Congress Association in January 2002. He also acted as a member of the Sectional Committee of Statistics, Indian Science Congress Association during 2001-2002 and Executive Council, Indian Society for Probability and Statistics during 2000-2002.

Computer and Communication Sciences Division

Advanced Computing and Microelectronics Unit

Das, N., acted as a member of the Program Committee, Tutorial Chair and Session Chair in 9th ADCOM-2001, Bhubaneswar, during December 16-19, 2001 and as a member of the Program Committee and Session Chair in International Workshop on Distributed Computing, IWDC 2001, Kolkata during December 27-29, 2001.

Das, S., visited TIFR, Mumbai during August 9-17, 2001 for collaborative research.

Dattagupta, J., acted as an external expert of the Board of Studies of the Department of Computing Science and Engineering, Jadavpur University.

Mukhopadhyaya, K., acted as a member of the Program Committee and session chair in the 9th International Conference on Advanced Computing and Communications (ADCOM – 2001). Bhubaneswar. during December 19-21, 2001.

Nandy, S. C., visited TIFR, Mumbai during August 6-14, 2001 for collaborative research.

Sinha, B. P., acted as the Program Co-Chair of the 9th International Conference on Advanced Computing and Communications (ADCOM - 2001), Bhubaneswar in December 2001.

Sur-Kolay, S., acted as a member of Program Committee and Session Chair in the International Conference on VLSI Design at Bangalore in January 2002 and Session Chair in International Workshop on Distributed Compounting. IWPG 2001 at Kolksta during December 27:-99, 2001.

Computer Vision and Pattern Recognition Unit

Chaudhuri, B.B., attended the European Workshop on Natural Language Processing held at Munthal during April 23–25, 2001 and the Global Wordnet Conference and NLP meeting held at CIIL, Mysore during January 21–22, 2002. He delivered the keynote address at the Indian Language OCR Workshop, University of Hyderabad, during February 1–3, 2002 and Workshop on Vision, Graphics and Image Processing held at Madural during February 15-16, 2002. He delivered an invited talk at the Urdu Council Meeting for Language held at the IBM Research Centre. New Delhi on March 1, 2002. He also chaired a session at the 2002 AFSS International Conference on Fuzzy Systems, held at Kolkata during February 4-6, 2002.

Mitra, M., delivered an invited lecture on Web Mining at the Indian Institute of Management, Joka on January 5, 2002.

Palit, S., delivered invited talks at the XIX Annual Meeting of Indian Academy of Neuroscience and International Symposium on Neurodegeneration and Neuroprotection held at IICB, Kolkata during March 18-20, 2002

Electronics and Communication Sciences Unit

Pal, N. R., served as the General Chair of the 5th Int. Conference on Fuzzy Systems, AFSS 2002 and a a member of the Special Committee of the School of Computer & Systems Sciences, Jawaharlal Nehv University. He also delivered a series of lectures in a workshop at ISRO, Bangalore.

Machine Intelligence Unit

Bandyopadhyay, S., delivered a tutorial on Genetic Algorithms at the International Conference on Information Technology, Gopalpur-on-sea, 2001. She also presented two research papers.

De, R.K., served as the Program Coordinator of the Winter School on Soft Computing, Pattern Recognition, Image Processing and Data Mining during November 20-22, 2001 at Aizawl and as an Organiag Committee member of 2002 AFSS International Conference on Fuzzy Systems during February 3-6, 2002 at Kolkata. He also delivered lectures at the National Workshop on Soft Data Mining & Intelligent Systems Tezpur University, Tezpur, Assam on "Data Mining using Neural Networks" in September 2001 and at the Winter School on Soft Computing, Pattern Recognition, Image Processing and Data Mining, Mizoraa University, Aizawl on "Neural Networks" and "Data Mining using Neural Networks" in November 2001.

Ghosh, A., served as (i) an Organizing Committee member of 2002 AFSS International Conference or Pazzy Systems during February 3-6, 2002, Kolkata, (ii) a Corporate Secretary, Indian Unit for Paten Recognition and Artificial Intelligence (IUPRAI) from 2001, (iii) the Co-ordinator, CIMPA-UNESCO-INDIA School on Soft Computing tools for Pattern Recognition and Image Processing, Kolkata, during December 2-13, 2002. He also delivered a series of lectures (i) at the National Workshop on Soft Data Mining & Intelligent Systems. Texpur University, Assam in September 2001, (ii) at Ulkal University, Bhubaneswar during Quote-November, 2001, (iii) at the Winter School on Soft Computing, Pattern Recognition, Image Processing and Data Mining, Mizoram University, Aizawl in November 2001 and (iv) in the Symposium on Information and Optimization, Dept. of Applied Mathematics, University of Calcutura Inanuary 2002.

Kundu, M. K., delivered invited lectures on "Digital Imaging: Processing, storage and secured Access' in the seminar on "Information Technology' organized by the Bengal Engineering College, Howrah, held during January 11-12, 2002 and on "Digital Image Processing: Fundamentals & Applications" in the Winter School and "Soft Computing, Pattern recognition, Image Processing and Data Mining" organized jointly by Machine Intelligence Unit, Indian Statistical Institute and Mizoram University, at Aizuwl during November 12-16, 2001.

Mitra, S., delivered a series of lectures at the (i) National Workshop on Soft Data Mining & Intelligent Systems, Tezpur University, Tezpur, Assam on "Soft Computing Tools for Rule Generation" in September 201. (ii) Winter School on Soft Computing, Pattern Recognition, Image Processing and Data Mining, Mixoau University, Aizawl on "Hybrid Approaches to Data Mining" in November 2001, (iii) CSI 2001 Annual Convention, Science City, Kolkata on "Data Mining" in November 2001 and (iv) Symposium on Information and Optimization, Dept. of Applied Mathematics, University of Calcutta on "Modular Evolutionary Rough Neuro-Fuzzy Hybridization" in January 2002.

Murthy, C. A., delivered lectures in the Winter School at Aizawi, Mizoram during November 20-22, 2001, at Tezpur University, Tezpur, during September 24-28, 2001 on Genetic Algorithms and in the Conference on Information and Optimization during December 31, 2001 - January 1, 2002 at the University of Calcutta. He also delivered an invited talk at the First National Conference on Advancement in Information Technology and Management, beld at Dehradul uning February 8-9, 2002.

Pal. S. K., served as a member of many Expert Committees of DST and CSIR, India. He delivered (i) a special lecture on Soft Computing. Machine Intelligence and Data Mining at the Venkatewaru University. Tunquai on November 11, 2001 organized by Indian Academy of Sciences (IAS-C), (ii) a series of lectures at the Natonal Workshop on Soft Data Mining & Intelligent Systems, Tezpur University. Assam in September 2001, (iii) the theme lecture and acted as Program Director in the Winter School at Azizal, Mizoram during November 29-22, 2001, (iv) invited lecture on Soft Computing on November 24. 2001 during the 36° CSI Annual Convention in the Science City Auditorium, Calcutta, (v) plenary lecture in the International Conference on Control. Instrumentation and Information Communication on December 13, 2001 at Science City, Caucuta, (vi) a series of lectures at Tezpur University during December 24-26, 2001, (vii) expository lectures on Information and Optimization during December 31, 2001 - January 1, 2002 in Calcutta University and (viii) a lecture on Human Brain and Computers" at the Institute of Computer Engineers (Vidyasagar College Computer Centre), Kolkata on March 9, 2002. He also chaired a Session for the 1° National Conference on "Advancement in Information Technology & Management" during February 8-9, 2002 at Dehradun and gave keynote address in the All India Seminar on "Application of Evolutionary Strategies to Power, Signal Processing and Control" on February 14, 2002 at Regional Engineering College, Rourkella, Orissa.

Physics and Earth Sciences Division

Physics and Applied Mathematics Unit

Dandapat, B. S., delivered a course of lectures and had academic interaction at Berhampur University during March 15-18, 2002.

Gangopadhyay, S., delivered a series of lectures at the Department of Radio Physics & Electronics, Cakuta University during July - September, 2001.

Mandal, B. N., visited (i) Indian Institute of Science, Bangalore during July 08-23, 2001 and October 14-20, 2001 for academic interaction. He attended the Annual session of the National Academy of Sciences, Pune University during October 04-07, 2001 and the workshop on Celestual Mechanics & Dynamical System, Inter University Centre for Astronomy & Astrophysics, Pune during October 08-12, 2001. He also delivered a course of lectures and had academic interaction at Bangalore University during February 3. Our Astrophysics, Ramataka on February 27, 2002.

Roychoudhury, R., visited Institute of Advanced Study in Science & Technology, Guwahati during December 16-20, 2001 for collaborative research work. He also attended National Conference on Mathematical Modelling during March 14-16, 2002.

Biological Sciences Division

Anthropology and Human Genetics Unit

Majumdar, Partha P., delivered (i) a public lecture on Human Footprints in the Sands of Time on April 20, 2001 in Bangalore organized by the National Centre for Biological Sciences and the Centre for the Study of Culture & Society, (ii) a lecture on Human Genome and Evolutionary History on April 21, 2001 in Hyderabad organized by the L. V. Praxad Eye Institute and Dr. Reddy's Laboratories, (iv) the CSIR Foundation Day lecture on Evolutionary Perspectives on Ethnic India at Institute of Microbial Technology, Chandigarh on September 26, 2001, (v) the Pating Gentenary Lecture organized by the Kolkata Citizens Forum on November 23, 2001 at the Calcuta University, (vi) the Inaugural Lecture on Peopling of India: A Genomic View, and (vii) an invited talk on Some Statistical Methods and Challenges in Genomics in the Symposium on Biology Inspired Physics organized by the S. N. Bose Centre in Kolkata on March 19, 2002. He also participated in (i) a Discussion Meeting on Genomics with Gene Mysers, Vice-President, Celera Genomics on May 1, 2001 in Delhi organized by FICCI & the Shriram Institute and (iii) a Symposium on Functional Genomics during March 2-5, 2002 in Delhi. Cellivation of Science, Kolkata and (iii) a Symposium on Functional Genomics during March 2-5, 2002 in Delhi. 2002 in Pelhi.

Vasulu, T. S., delivered an invited lecture on An enquiry into scientific research at the DNA Typing Lab, Central Forensic Science Laboratory, Kolkata.

Biochemistry Unit

Duttagupta, C., delivered a lecture on HPV and its Methodology at a DBT-sponsored program a Department of Biophysics and Molecular Genetics, Calcutta University and a lecture on Biology of Cancer to the M.Sc. class (1st & 2nd years) at Department of Biochemistry, Manipur University, Imphal.

Embryology Unit

Chattopadhyay, Joydev, delivered (i) an invited talk in the Indo-French Workshop on Climate and Environment at C-MMACS, Bangalore during April 9-14, 2001, (ii) a series of invited teatures in de International conference on the use of technology in teaching and learning of mathematics and bin-mathematics at University of Delhi South Campus during December 15-19, 2001, (iii) an invited talk in a Colloquium on Complex Systems Theory in the Department of Applied Mathematics, University of Calcutta, Kolkata danage February 14-15, 2002 and (iv) an invited talk at the National Conference on Recent Trends in Mathematics, Sciences in the Department of Mathematics, Jadavpur University, Kolkata during March 22-23, 2002.

Plant Chemistry Unit

Chanda, Sunanda, delivered talks on "Screening characterization and biodegradation potential of two streptomyces, cellulolytic representatives from a compost" at Department of Botany, Calcuta University dusing January 18-19, 2002 and "Cellulolytic organism and cellulolytic enzymes on saccharification and biodegradation" at Indian Institute of Technology, New Delhi during July 9-18, 2001.

Majumdar, Priyanka, delivered talks on "Morphological and Biochemical Characterization of two Cellulolytic Streptomyces, screened from compost" at Y.C. College of Science, Karad Mahazashia durag December 28-00, 2001, "Screening characterization and biodegradation potential of two streptomycaellulolytic representatives from a compost" at Department of Botany, Calcutta University during January 18-19, 2004 and "Cellulolytic organism and cellulolytic enzymes on saccharification and biodegradation" at India Institute of Technology, New Delhi during July 9-18, 2001.

Mukhopadhyay, Goutam, delivered a talk on Aquatic plants as pond water quality indicators a National Botanical Research Institute during February 4 - 9, 2002.

Social Sciences Division

Linguistic Research Unit

Bandyopadhyay, D., participated in (i) Workshop on Developing an Academic Program a Communication organized by CIIL and Indian Statistical Institute during June 25-26, 2001, (ii) "On Visua Literacy," at Ashutosh Centenary Hall, Indian Museum, Kolkata on September 22, 2001, (iii) "Linguissics in Bangla" Seminar on the Problems of publishing Books on Language and Linguistics in Bangla organized by CIIL at Institute of English, Kolkata on February 7, 2002, (iv) "Post-Modernism and Marxism" at Department of Poblicial Science at Calcutta University on April 2, 2002 and (v) "Defining Fundamentalism" Semina or "Different voices of Fundamentalism" at Jibanananda Sabhaghar, Paschimbango Bangla Akademy, Kolkator May 2, 2002.

Planning Unit

Sen, Aunava, delivered guest lectures at Indian Institute of Management, Kozhikode during January II-25, 2002.

Population Studies Unit

Bhattacharya, B.N., acted as a member of the (i) Task Force in Statistics of Indian Council of Medical Research (ICMR), New Delhi. (ii) Scientific Advisory Committee (SAC), Indian Council of Medical Research

New Delhi, (iii) Academic Council of International Institute for Population Sciences (IIPS), Mumbai and (iv) National Advisory Committee of the 19th Annual conference of Indian Society for Medical Statistics and chaired the Scientific Session: Medical Demography at Department of Biostatistics, Sanjay Gandhi Post-Graduate Institute of Medical Sciences, Lucktuow; Indian Society for Medical Statistics, New Delhi during December 1-3, 2001. He also visited Indian Association for the Study of Population (IASP), New Delhi during 2001-02 as an Editor of the Durmal: Demography India.

Majumdar, P.K., presented papers enhilled (i) "Reproductive Morbidity among women in Calcuta Memophino Area" in Scientific Session: Clinical Epidemiology, at Department of Biosatistics, Sanjoy Gandhi Post Gradouse Institute of Medical Sciences, Lucknow and Indian Society for Medical Statistics, New Delhi during December 1-3, 2001 and (ii) "Demand for child labour in agriculture" at the International Conference on the Issues of Population Stabilization and Development at Council of Cultural Growth and Cultural Relations, Cunack, during February 8-10, 2002.

Pathak, Prasanta, delivered two lectures on Health Aspects in Development in the UGC sponsored Refresher Course in Economics at Academic Staff College, University of Calcutta on March 12, 2002. He presented papers entitled (i) "Socio-economic, Cultural, Demographic and Health Issues on the Stabilisation of Population in the North East" at the International conference on the Issues of Population Stabilisation and Development held at Council of Cultural Growth and Cultural Relations, Cuttack during February 8-10, 2002, (ii) "Demographic Profile of Meghalaya on the Perspectives of its Socio-Economic. Cultural and Health Development" at the Eastern Regional Workshop on Emerging Issues on Population and Health Towards Achieving National Population Policy (NPP)-2000 Goals held at Population Research Centre, Department of Sutistics, Gauhati University, Guwahati, Assam and Eastern Chapter of the Indian Associotion for the Study of Population (IASP), New Delhi during November 26-28, 2001 and (iii) "Population Dynamics and Economic Development Pattern in West Bengal, Bihar and Uttar Pradesh" at the UGC sponsored Seminar on River Basin, Tradition, Economy and Structure: The Ganges viewed in the last hundred years, at P.N. Das Collage, Palta, West Bengal during October 5-6, 2001. He continued as an Editional Board Member of Journal of Regional Science.

Saha, Anuj Kumar, gave a lecture on Basic concept of Demography, Demographic Transition and Determinants of Demographic measures for Population Education and Extension at A C E F C, Jadavpur University during December 10-12, 2001.

Psychology Research Unit

Banerjee, Surendranath delivered a lecture on quality of life, on the occasion of the platinum jubilee of the Institute at Ewing Christian College, Allahabad on January 8, 2002.

Dutta Roy, Debdulal, delivered a talk on 'Work Motivation' at the The Indian Institute of Metals (Ghatshila chapter) and the Hindustan Copper Limited, Ghatshila, on November 17, 2001.

Ghosh, Anjali, was invited to give lectures at Entrepreneurship Development Programme at Raidighi on April 23, 2001, and Narendrapur on October 4, 2001, organized by Ramkrishna Mission Lokshiksha Parishad. She also gave an invited talk in UGC Refresher course at the Department of Education, Kalyani University on November 21, 2001. She served as an expert in Ph.D. evaluation programme at the Department of Psychology, Utkal University in November 2001.

Mitra, Subir Kumar was invited to give a lecture on "Educational Testing: Theory and Practices" in UGC Refresher course in Education, at the Department of Education, Kalyani University on December 3, 2001.

Sociological Research Uni

Dasgupta, Atis, was nominated as a member of (i) the Heritage Commission, Govt. of West Bengal, to extend his expertise on places of historical importance connected with India's freedom movement, (ii) Expert Committee constituted by North Bengal Planning Board, Govt. of West Bengal, and (iii) Advisory Committee formed by the Higher Education Department of Government of West Bengal to formulate the constitution of a Centre of Excellence in Social Sciences in West Bengal.

Statistical Quality Control and Operations Research Division

Anis, Md. Z, visited the Regional Testing Centre (E.R) of Department of SSI, Agro & Rural Industries, Govt. of India during September 19-20, 2001.

Bhimasankaram, P., visited Department of Statistics, Calcutta University as a Fellow under UGC Fellowship scheme during September 4-10, 2001 and delivered lectures to students and faculty on regression analysis.

Chakraborty, S.C., visited Uranium Corporation of India Ltd., Jadugura Mines, Jharkhand during March 13-14, 2002 to explore the possibility of improving the yield of the uranium extraction process. A proposal to that effect has been submitted to the organisation.

Chakraborty, Rina, anended a conference on "Design of Experiments - Recent Trends and Future Trends" during December 27-30, 2001 and a seminar on ISO-9000:2000 version at India Habitat Centre, New Delhi, organized by Quality Council of India during February 7, 2002.

Das, N., visited M/s Kross Manufacturers (I) Pvt. Ltd., Jamshedpur and sent proposals for a 3 day training programme on SPC tools, and a six month association for follow-up projects.

Dasgupta, T., delivered invited lectures in a Refresher programme for college teachers on Industrial Statistics at Gauhati University during August 6-8, 2002.

Dutta, T.K., visited Uranium Corporation of India Ltd., Jadugura Mines, Jharkhand during March 13-14, 2002 to explore the possibility of improving the yield of the uranium extraction process. A proposal has been submitted to the organisation.

Handa, S.S., attended a conference on "Design of Experiments - Recent Trends and Future Trends" during December 27-30, 2001 and a seminar on ISO-9000:2000 version at India Habitat Centre, New Delhi, organized by Ouality Council of India on February 7, 2002.

Rajgopal, A., delivered lectures on (i) "Role of SPC in Modern Industries" at the invitation of Institution of Standard Engineers on December 19, 2001, (ii) "Role of Statistics in Modern Era" to the student of Statistics of SPC after the Statistics of SPC after the Statistics of SPC after the Arts and Science College and (iv) "ISO Certification in Educational Institutions" at Ramakrishna Vidyalaya in March 2002. He also organised a dissemination programme of "Waste Minimisation through QMS Approach" joinely with UNIDO. Members presented the benefits of SPC approach and system approach in the areas of Design development, cutting waste reduction, elimination of rework in finished garments and delivery schedule adherence for preparing the industry to face the challenges of non-quota era in open-economy market. Thary participants from 15 composities conditionated.

Majumdar, B., attended (i) a conference on "Design of Experiments – Recent Trends and Funze Trends' during December 27-30, 2001, (ii) three day programme on "Capability Maturity Model" and (iii) a seminar on ISO-9000:2000 by Nigel H. Croft organized by Quality Council of India on April 27, 2001. He also presented a paper titled "Industrial Experimentations for Quality Improvement" at the International Conference on Growth through Technology upgradation organised by ALUCAST during December 3-4, 2001.

Majumdar, S.K., helped in the CSSC training programme on computer package for Statistical Analysis techniques (North East Project) for officers of Govt. of Tripura at Agartala during December 3-8, 2001. Its delivered an invited talk on ISO 9000 standard – 2000 revision for the officers at Regional Testing Contr. Kolkata on April 22, 2002. He also presented an invited paper on "Survival Analysis of Recovery Data of Patients of Rheumatoid Arthritis by Magnetic Pulse therapy" in the National Conference on Reliability Theory & Its Applications, organised by Pune University during June 21-23, 2001. He visited Vikram Sarabhai Space Centre (ISRO), Thumba on invitation from their Reliability Centre to identify projects in which ISI could collaborate gainfully. Projects like Improvement of Reliability of Satellite launching system, Modelling and assessment of reliability of softwares for satellite, wind modelling, etc. were identified. He also gave them or request from their scientists, proposals on training programmes for their scientists on Taguch's robust design.

Life Testing, Regression analysis & diagnostics, Data Reduction techniques, Nonparametric analysis, Bayesian Analysis, etc. (with training models).

Mohan, S.R., delivered tectures in Summer School on Operations Research in June 2001. He also attended and presented an invited talk on "Positive sub-definite matrices and generalized monotonicity in variational inequality and complementarity problems" at the International Conference on Optimization Techniques and its Applications in Engineering and Technology, R.B.S. College, (F.E.T.) Bichpuri. Agra, during September 22-23, 2001.

Murali, G., gave an invited talk to Pharmaceutical Enterprenuers on Six Sigma Quality at Indian Pharmaceutical Association, Hyderabad on September 2, 2001.

Murthy, A.L.N., gave an invited talk to Pharmaceutical Enterprenuers on Six Sigma Quality at Indian Pharmaceutical Association, Hyderabad on September 2, 2001.

Neogy, S.K., delivered lectures in Summer School on Operations Research in June 2001. He also attended and delivered a talk on "Generalization of Nash equilibrium concept, its applications and computations" at the International Conference on Optimization Techniques and its Applications in Engineering and Technology, R.B.S. College, (F.E.T.) Bichouri, Agra, during September 22-23, 2001.

Pradhan, B., helped the Regional Testing Centre (E.R.) of Department of SSI, Agro & Rural Industries. Govt. of India during September 19-20, 2001 and Enterpreneurship Development Programme of Calcutta Youth Self-employment Centre on December 13, 2002. He also visited M/s Kross Manufacturers (I) Pvt. Ltd., Lamshedpur and submitted proposals for a 3-day training programme on SPC tools, and a six month association for follow-up projects.

Seth. Arvind, attended (i) "National Workshop on Inter-Laboratory Comparison for Testing and Calibration Laboratores" organized by Confederation of Indian Industry (CII) and presented a paper during August 39-31, 2001, (ii) a conference on "Design of Experiments – Recent Trends and Future Trends" during December 27-30, 2001 and (iii) a seminar on ISO-9000:2000 by Nigel H. Croft organized by Quality Council of India on April 27, 2001.

Subhani, S.M., visited Nagarjuna University during February 13-14, 2002 and delivered lectures for M.Sc. Il year students and also guided projects of several students of MCA and M.Sc. computer science of different universities during April - July 2001.

Documentation and Information Sciences Division

Documentation Research and Training Centre (DRTC)

Madalli, Devika P., delivered invited lectures on (i) Library Networking and standards for data exchange at Chandigarh Library Association on September 11, 2001, (ii) application of Knowledge Representation Techniques for Management of analytico-synthetic scheme at Institute of Information Studies on September 72, 2001, (iii) Manpower Resources in LICs and Unicode at NACLIN, University of Hyderabod, (iv) Subject Access to Digital Libraries at 11T, Delhi during December 18-20, 2001, (v) Subject based Information Retrieval, Internet Search Engines at Osmania University, Hyderabad, Academic Staff Training College during January 21-22, 2002, (vi) Internet and Multimedia applications at Osmania University, Hyderabad during January 24-26, 2002, (vii) Internet and Academic Staff Training College, Mysore University on February 21, 2002 and (viii) Internet Information Retrieval and Web Page Design at Kamataka University, Dharwad. She was invited to InFLIBNET Workshop on Library Automation during March 4-5, 2002. She also attended the meeting of PGDLAN Course content writers by IONOU during November 19-20, 2001.

Prasad A.R.D. delivered invited lectures on (i) WWWNSIS at Goa University during April 3-4, 2001, (ii) WINISIS at Kuvempu University during October 22-23, 2001, (iii) A Brief Introduction of 239-50 at NACLIN, University of Hyderabad during November 6-9, 2001, (iv) Metadata: Cataloguing of Web Resources Using Dublin Core and Marc21 at 11T, Delhi during December 18-20, 2001, (v) WWWISIS, Greenstone,

UNICODE at Osmania University, Hyderabad during January 24-26, 2002, (vi) Artificial Intelligence at Mysore University on February 20, 2002 and in INFLIBNET Workshop on Library Automation at Karnataka University, Dharwad during March 4-5, 2002. He also natended the (i) Board of studies meeting of Dept. of Library and Information Science, Goa University on August 8, 2001, (ii) meeting of PGDLAN Course content writers of IGNOU during November 19-20, 2001 and (iii) the IASLIC Seminar at University of Kerala, Trivandrum and chaired a Technical Session during December 3-7, 2001.

Rao, I.K, Ravichandra, participated as an External Member in the Board of Studies Meeting of Mysore University, Mysore on September 7, 2001. He delivered special fectures on Library Automation and Information Management at IIsc/NCSI on September 12, 2001. Library Automation and Information Management at INSDOC, Chennai on October 20, 2002 and Library Automation and Information Management at University of Mysore, Mysore on February 19, 2002. He also attended (i) ICADL-2001 meeting in his capacity as Member, Advisory Committee at IIIT, Bangalore on November 9, 2001. (ii) Board of Studies meeting of Dept. of Library and Information Science (UG/PG), Madurai Kamaraj University on November 19, 2001 as an external expert, (iii) the special meeting on the Diploma Programme in Medical Librarianship at Rajiv Gandhi University of Health Sciences, Kamatak in October, 2001 as an external expert, He was invited by the Department of Library and Information Science, University of Mysore, Mysore to Expert committee meeting on Vidyavashini Project on October 3, 2001. He attended and chaired a session on ICADL-2001 held at Bangalore during December 10-12, 2001. He also presented an invited paper and chaired a Technical Session at the Conference on Information Management in the Libraries, held at IIT, Kharaggur during February 26-27, 2002.

PART III. ADMINISTRATION AND OFFICE BEARERS

11. GENERAL ADMINISTRATION

Administrative Services Division

The Administrative Services Division at the headquarters caters to the various needs of the scientific workers in the 22 scientific units of the Institute engaged in various scientific, research and academic activities and provides them with necessary infrastructural facilities in their pursuit of excellence. The centres at Delhi and Bangalore, each having a number of science units are, by and large, self-sufficient in providing administrative support to the scientific workers there. The division has different units in Kolkata as mentioned below:

Accounts Section: The Accounts Section keeps the accounts of all financial transactions made by the Institute and admits claims including personal claims preferred by workers and outsiders after proper check. This section is responsible for final closure of accounts and preparation of Income and Expenditure Account and Balance Sheet for each financial year. They are also to interact with the Statutory Auditors in the course of audit of final accounts. The Provident Fund Unit (PF) under this section maintains the accounts of provident fund of individual workers of the Institute and deals with PF loans and withdrawal and final payment of PF balance.

The Internal Audit Unit, in addition to routine jobs, undertakes various audit assignments by visiting different Service Units of the Institute at Kolkata and outlying Centres. The Unit plays an important role in ensuring financial and accounting disciplines and statutory compliances; maintaining system and procedures and bringing out audit observations and suggesting audit recommendation thereon.

Council Section: The Institute is a registered society with a large number of Ordinary and Life members. The Section maintains liaison with the members and satisfies their requirements including sending of Sankhya, the Indian Journal of Statistics published by the Institute, to the members of the Institute. The Section arranges holding of meetings of General Body, the Council, Finance Committee, Section 8(1) Committee etc.

This section is attached to CAO's Office.

Director's Office and CAO's Office: Director is the Principal Executive Officer of the Institute and the head of all its academic and administrative activities whereas Chief Administrative Officer (CAO) is in over-all charge of General Administration and Financial and Personnel Management in respect of Administrative Services Division. Both the offices are entrusted with the task of providing all help and support to these two very important functionaries of the Institute. They are required to maintain confidential records, issue circulars, interact with various research and administrative divisions and maintain liaiston with outside centres and branches of the Institute as well as with other organizations and the Government of India.

Engineering Unit: The Unit is responsible for day to day maintenance of the offices/staff quarters and supply of water in the buildings housing various divisions and staff quarters. The Unit also looks after all new constructions.

Electrical Maintenance Unit: The Unit is responsible for supply of electricity to all buildings including staff quarters and day to day maintenance of the electrical equipments in these buildings.

Estate Office: The Institute has a very big campus comprising buildings, ponds and vacant space. The Estate Office looks after all the estates and properties of the Institute and also maintains regular conservancy services.

Medical Welfare and Reimbursement Unit: The workers of the Institute are entitled to medical claims as per CSMA rules of the Government of India. Besides, there is a small dispensary with facilities for consulting general physicians and specialists for the campus residents and also for the workers residing nearby. The medicines are supplied free. At present there are two regular doctors and several part-time specialist doctors.

attached to the dispensary. The Medical Reimbursement Unit is entrusted with the payment of all medical claims submitted by workers as per CSMA rules and the Medical Welfare Unit looks after the functioning of the dispensary with all attendant activities,

Personnel Unit: The Personnel Unit deals with all service matters like appointments, promotions, transfers, disciplinary action, redressal of grievances, retirements etc. in respect of all the workers of the Institute and maintains all records in connection thereto. The Retirement Benefit Cell attached to the Unit deals with the payment of retirement benefits to workers like pension, death-cum-retirement gratuity etc.

Public Relations Unit: All types of public relations activities are being carried out by the Unit on behalf of the Institute. During the year, the Unit arranged elaborate media coverage of (i) Seminar on "Present Political Instability and Relevance of Dr. B. R. Ambedkar's Political Philosophy" held on May 18, 2001. (ii) Conference on "Functional Analysis and its applications" held during June 13-15, 2001. (iii) Seminar on "Health Setur Reforms in India" held during October 4-5, 2001. (iv) International Symposium on "Human Growth ad Development" held during January 18-19, 2002. (v) Annual Convocation of the Institute held on January 15, 2002. (vi) International Conference on "Fuzzy Systems - AFSS 2002" held during February 4-6, 2002 and (vii) Annual Convocation of ISEC held on March 27, 2002.

Another important job of the Unit is to prepare and publish the Annual Report of the Institute each yet under the guidance of an Editorial Board and arrange for its distribution to different universities in India ad abroad and also to the Government departments.

Publication and Printing Unit: The Unit was formed in August 1991 when Statistical Publishing Society was formally taken over by the Institute according to a Govt. of India order. It undertakes printing/binding work of the Institute and outside agencies. It also looks after the distribution of the journal Sankhya throughout the world. With the modernisation of the Offset printing press, the Unit has also stated printing the journal Sankhya.

Another important activity of the Unit is to prepare and maintain it's separate accounts beside monthly disbursement of salary, payments of DA, Bonus etc. The Unit is also responsible for final closure of Acoust and preparation of Income and Expenditure Statement and Balance sheet for each financial year. The Unit has cells for sales and despatch of the iournal Sankhya and other publications of the Institute.

Binding Unit: The Institute has a large library with books and journals which are required to be board regularly. Besides, various research divisions bring out research proposals and the administrative division bring out booklets on budget for presentation to the Ministry. All such and many other documents are board throughout the year in the Binding Unit.

Central Office: The Central Office is in charge of receipts and despatch/distribution of all official correspondence, circulars/office orders etc. relating to Scientific and Non-scientific matters as well as financial transactions. Maintenance and service of all typewriters and duplicators of the Institute are done by the lut through Annual Maintenance Contract (AMC) with respective authorised agency. Another important job of Central Office is to arrange condolence meetings at the demise of Institute workers and send resolutions of the meetings to their bereaved families. The Unit also receives letters for Parliament and Assembly elections: day and issues the same to the concerned workers. The Unit keeps old records, deeds, agreement papers etc. of the Institute. Despatch Section of Central Office is now well equipped with the latest electronic franking machines for prompt mailing of all kinds of communications of the Institute.

Central Stores Unit: All stationery and articles including furniture required for use in various divisions of the Institute are procured through Central Stores Unit. They also procure and store materials required for day to day maintenance of buildings and for the water and power supplies. A small Tailoring Unit is attached to it.

Security Unit: Security Unit is entrusted with the important task of maintaining security of the vas campus of the Institute and its properties.

Telephone Unit: The EPABX Unit has three electronic telephone exchanges installed by Crompton Genese Ltd. in the Institute's campus at Kolkata. The main exchange (NE-1100) is housed at 202, B.T. Road and two other small exchanges (NE-20M and NE-30) are located at 205, B.T. Road campus. These three exchanges are interconnected. The main exchange (NE-1100) and a small exchange (NE-30) are manned by Telephone Operators during working hours and work in automatic mode after office hours and on holidays (in night-mode connection). The NE-20M exchange operates in the automatic mode with hunting groups.

Transport Unit: Besides a fleet of vehicles, the Institute has four buses and an ambulance. The vehicles are for use by the visiting scientists and dignitaries and by the workers in carrying out the activities of the lastitute. The buses are used for transporting workers to and from eastern and southern parts of Kolkata and its suburbs. The ambulance is used to carry ailing workers or members of their families to and from hospital for emergency treatment on recommendation of the doctors attached to Medical Welfare Unit. The Transport Unit tooks after the use and maintenance of the vehicles.

Guest House: The New Guest House of the Institute started functioning in December 1997. It has 6 AC suites, 8 A/C single rooms, 6 Non-A/C double rooms, and 21 Non-A/C single rooms. There are also an A/C Villounge, a nicely decorated conference room with a modern public address system and overhead projector on the 1st Floor of the Guest House and an A/C dining hall on the ground floor of the Guest House. All the rooms are well furnished. Internet and 24 hr.- telephone facilities are available.

Besides the Institute guests and visitors, scientists and representatives from Institutes/ Organisations like NSSO, NIOH, SSI, Rabindra Bharati University, Calcutta University, etc. are being provided Guest House facilities on payment. Guest House service during the year 2001-2002 went on in full swing.

Apart from the Units mentioned above, there are some small cells dealing with Budget, Import, Travel and House Building Advances, etc. to take care of the specific needs of the Institute. The Administrative Services Division also looks after the running of hostels for students, research scholars and International Statistical Education Centre (ISEC) trainees and also the running of Canteen for the workers and students of the Institute. The other outlying Units numbering eight are controlled directly by the headquarters at Kolkata. The Administrative Services Division takes the responsibility for all new construction activities of the Institute at its headquarters and also at outlying centres/branches. A brief report on the construction activity in the current year is given later.

The activities of the Administrative Services in the two Centres, namely Delhi and Bangalore, and in other outlying branches of the Institute including Gridih are more or less similar but on a much smaller scale. Depending on the needs of the branches/centres the units have been truncated and merged into fewer units.

Staff of the Institute

The Government of India agreed that ISI might continue with the staff strength, the various posts, scales of pay, promotional policies and other service conditions as were existing in the past before imposing embargo. They also allowed revision of the payscales as approved by the Council for all categories including categories of posts for non faculty workers where certain anomalies existed. As a result of the clearance from the Government, the Institute has undertaken measures to recruit workers in various categories where there are acute shortages. The following senior members of the staff worked in the posts indicated against their names during the year.

Director: K.B. Sinha

Dean of Studies: P.S.S.N.V.P. Rao

Head, Delhi Centre: Aloke Dey

Head, Bangalore Centre: Gadadhar Misra

Chief Administrative Officer: D.C. Bandyopadhyay