

SIXTY NINTH ANNUAL REPORT : 2000 - 2001

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 bonafied 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. During the above period, following were the activities of the library:

Acquisition

In all 475 books were added to the stock - 267 purchased from Indian Statistical Institute funds, 104 from NBHM grant, 20 from the various projects fund undertaken by Indian Statistical Institute and received 84 publications as gift from various sources. Thus total collection of the library, as on March 31,2001 was 37,848.

Periodicals

Library subscribed to 231 titles of journals, both foreign as well as Indian. 700 sets of loose issues of journals duly bound have been added to the stock. During the period under review, Delhi Centre Library, renewed the Consortium Agreement for MathSciNet with American Mathematical Society, and Academic membership with Society For Industrial and Applied Mathematics (SIAM)

Circulation Services

174 members, availed the lending facilities as permanent members of the library during the period April,2000 to March 31,2001. 670 members, availed reference facilities as temporary members of the library. More than 7360 publications were circulated among the members. 25 publications were borrowed on Inter-Library-Loan from neighbouring Institute libraries. 10 books were lent out to other Institute under the same program.

Reprographic Services

Xerox copies of 46,680 pages were made and provided to both the permanent and temporary members of the library. Xerox facilities were also extended to research scholars of neighbouring Institutes on a nominal charge of Rs. 0.50p per exposure.

Other Activities

Indian Statistical Institute, Delhi Centre Library being the regional library to serve the Northern Region, got an additional grant of Rs. 15,00,000 from National Board for Higher Mathematics, Department of 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 journals in Mathematics and Statistics, a monthly issue of "Current Contents", by photocopying the contents page of each journal received at Indian Statistical Institute, Delhi Centre Library, was prepared and distributed to the Department of Mathematics of each university in the northern region.

Indian Statistical Institute, Delhi Library hosted the 78th monthly meeting of the Ranganathan Research Circle on November 25,2000 on the theme "Achieving Excellence in Library and Information Services". Professor B. Majumdar of SQC & OR unit delivered a talk on "Quality-Path for Achieving Excellence in Library and Information Science". In all there was a gathering of 30 participants.

Again, on February 10,2001, Indian Statistical Institute, Delhi Centre, hosted the Eighth Annual Convention of Ranganathan Research Circle on the topic, "LibSys Automation Problems and Prospects : Experiences of Using LibSys Software". More than 150 library professional, students, teachers, and computer

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scientists attended the convention. Dr. Rahul Roy of Indian Statistical Institute, Delhi Centre, delivered key note address.

Library (Bangalore)

Acquisition

During the above period, 636 books were purchased and 260 books were received on gratis. 840 journal volumes were bound and added to the stock.

Technical Processing

About 600 books were classified and catalogued. Currently, the source of catalogue is OPAC on Libsys software.

Library Services

Circulation Service

The library circulation facility was enjoyed by 189 members during the above period. Total number of books circulated was 5986. Circulation facility was availed by 9 visiting scientists also. The inhouse use of books and periodicals was recorded to be 4678.

Inter Library Loan

Around 90 Inter Library transactions were recorded during the above period.

Reprographic Service

During the above period, 99,100 xerox copies were provided to the members of the library.

Documentation Service

Following publications were regularly brought out as a part of documentation activity (i) Current Contents of Periodicals (Monthly), (ii) Recent additions of books (Monthly).

Journal Exchange Program

Under this program selected journals in Mathematics were exchanged and displayed at TIFR Library once in every 2 months. Similarly, journals procured by TIFR were displayed at Indian Statistical Institute Library for 15 days.

Web Based Library Services

Access to e-journals were developed and a location of access has been maintained at the Indian Statistical Institute home page. Indian Statistical Institute Bangalore Centre Library holdings is also made available for ready reference on the home page. Union catalogue of local libraries (Bangalore) is the latest addition to this site. In addition to the above, Internet surfing and web based information retrieval services are provided to the users on demand.

Computer and Statistical Services Centre

The computer and Statistical Service Center (CSSC) manages the central computing facilities of the Institute at Calcutta. 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, Six SUN ULTRA 30 workstations, DEC Alpha 4100 server, IBM AS-400 server and 55 PCs. The softwares available in SUN E 3000 server are SAS, BMDP, NAG, IMSL, SHAZAM, TSP, Matlab and Mathematica.

Campuswide Network is properly working under the supervision of CSSC. Statistical and Computational services are provided by CSSC. Twelve external scientists were provided statistical services by CSSC during this year.

Like all other years, the staff members of CSSC serve as faculty in various regular courses of the Institute and supervise dissertation carried out by the students. The CSSC staff members also supervise the summer training of MCA, and B. Tech. students of other Universities/Institutes. The staff members of CSSC are also involved in research covering the areas like database and knowledge base, image processing, computational geometry, VLSI and cryptology.

4. EXTERNALLY FUNDED PROJECTS

Ongoing Projects

- 1. Name of the Project :** Martingale Problems, Markov Process and Their Applications to Filtering and Control Theory.
Principal Investigator : R.L.Karandikar
Unit involved : Statistics-Mathematics, Delhi
Funded by : Department of Science and Technology, Govt. of India
- 2. Name of the Project :** Geometric Invariants of Quotients of Hilbert Modules
Project Coordinator : Gadadhar Misra
Unit involved : Statistics Mathematics, Bangalore
Funded by : National Board for Higher Mathematics
- 3. Name of the Project :** Audit Sampling Project
Project Leader : A. Chaudhuri
Unit involved : Applied Statistics
Funded by : Finance Department, Government of West Bengal
- 4. Name of the Project :** Compilation and Optimization for Reconfigurable Co-Processors (CORCoP)
Principal Investigators : B. B. Bhattacharya and S. Rajopadhye (IRISA, France)
Co-Investigators : B. P. Sinha and S. Sur-Kolay
Unit involved : Advanced Computing & Microelectronics
Funded by : Indo-French Centre for the Promotion of Advanced Research
- 5. 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 & Microelectronics and Machine Intelligence
Funded by : Intel Corporation, USA
- 6. Name of the Project:** Resource Centre for Indian Language Technology Solutions – Bengali
Principal Investigator: B.B. Chaudhuri
Unit involved : Computer Vision & Pattern Recognition
Funded by : Ministry of Information Technology, Govt. of India.
- 7. Name of the Project :** Speech Synthesis in South Indian Languages for Application to the Blind and Speech Output for Machine Translation
Principal Investigator : B.B. Chaudhuri and V.J. Subramonian (ISDL)
Unit involved : Computer Vision & Pattern Recognition
Funded by : Department of Science and Technology, New Delhi.

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8. Name of the Project : Depositional motifs of the Satpura Gondwana succession : their spatial and temporal variability in relation to basin tectonics.
Project Coordinators : T. Chakraborty, C. Chakraborty, and P.K. Maulik
Unit involved : Geological Studies Unit.
Funded by : Department of Science and Technology, Govt. of India
9. Name of the Project : Interaction of water waves and structures
Project Leader : B.N. Mandal
Unit involved : Physics and Applied Mathematics
Funded by : Council of Scientific and Industrial Research, Govt. of India
10. Name of the Project : Water waves scattering by obstacles and surface discontinuities
Project Leader : B.N. Mandal
Unit involved : Physics and Applied Mathematics
Funded by : National Board for Higher Mathematics, Department of Atomic Energy, Govt. of India
11. Name of the Project : Pattern-forming Instabilities and Interface Waves
Project Leader : K. Kumar
Unit involved : Physics and Applied Mathematics
Funded by : Department of Science and Technology, Govt. of India
12. Name of the Project : Researchable constraints to the use of forest and tree resources by poor urban and peri-urban households in developing countries
Project Leader : D.K. Bagchi
Unit involved : Agricultural Sciences and the University of Reading, U.K.
Funded by : Department of Foreign International Development (DFID)
13. Name of the Project : Rice based cropping system studies in rainfed regions of eastern Indian plateau
Project Leader : D. K. Bagchi
Unit involved : Agricultural Research and the International Rice Research Institute (IRRI), Manila, Philippines
Funded by : International Rice Research Institute (IRRI), Manila, Philippines
14. Name of the Project : Glutathione-s-transferase (GSTM1 and GSTT1) and incidences of tobacco related oral cavity precancer and cancer in India.
Principal Investigator : Bidyut Roy
Co-Principal Investigator : P.P. Majumder and R. R. Paul
Unit involved : Anthropology and Human Genetics
Funded by : Department of Science and Technology, Govt. of India
15. Name of the Project: Human Genome Diversity Interlink
Principal Investigator : P. P. Majumder
Unit involved : Anthropology and Human Genetics
Funded by: Department of Biotechnology, Govt. of India
16. Name of the Project : Human Genome 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

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17. **Name of the Project :** Uterine Cervical Cancer Prevention : A Low Cost Screening Program in West Bengal
Project Leader : C. Duttagupta
Unit involved : Biochemistry
Funded by : West Bengal Department of Science and Technology and NES
18. **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
19. **Name of the Project :** Sustainable Development Framework for India
Project Leader : R. Mukherjee
Unit involved : Economic Research
Funded by : Institute of Advanced Studies, United Nations University, Tokyo, Japan
20. **Name of the Project :** ISI-HLL Collaborative Project on Business Research
Principal Investigator : R. Mukherjee
Co-Principal Investigator : P. Maiti
Unit involved : Economic research
Funded by : Hindustan Lever Limited (HLL)
21. **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
22. **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, Brussels
23. **Name of the Project :** Gender Study of District Primary Education Programme (DPEP)
Project Coordinators : A. Ghosh, A. Dasgupta and S. Bandyopadhyay
Unit involved : Psychology Research and Sociological Research
Funded by : Paschim Banga Rajya Prathamik Shiksha Unnayan Sanstha, Govt. of West bengal
24. **Name of the Project :** Guidance and Consultancy Services in Data-Processing
Project Coordinator : A. Maiti
Unit involved : Sociological Research
Funded by : Indian Council of Social Sciences Research (ICSSR), Govt. of India
25. **Name of the Project :** 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

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26. **Name of the Project : Labour-related Probleme of Tea Gardens in North Bengal**
Project Coordinator : A. Dasgupta
Unit involved : Sociological Research, Economic Research, Psychological Research and Statistics
Mathematics
Funded by : Labaour Department, Govt. of West Bengal
27. **Name of the Project : Physical Verification of Foodgrain in FCI**
Project Leaders : B. Majumdar and S. S. Handa
Units involved : Statistical Quality Control, Statistics and Mathematics , Kolkata and
Delhi, Computer and Statistical Services Centre, and Applied Statistics
Funded by : Food Corporation of India
28. **Name of the Project : Analysis of Proficiency Testing data : National Accreditation
Board For Testing and Calibration**
Project Leader, Arvind Seth
Unit involved : Statistical Quality Control and Operation Research, Delhi
Funded by : NABL, DST
29. **Name of the Project : Estimation of Warranty Costs**
Project Leader : Arvind Seth
Unit involved : Statistical Quality Control and Operation Research, Delhi
Funded by : Hero Motors

Completed Projects

1. **Name of the Project : INSA – Young Scientist Project**
Principal investigator : B. V. Rajarama Bhat
Unit involved : Stat-Math
Funded by : Indian National Science Academy
2. **Name of the Project : Software Development for Cryptoanalysis**
Project Leader : B. K. Roy
Unit involved : Applied Statistics
Funded by : Defence Research and Development Organisation (DRDO)
3. **Name of the Project : Bilingual (Bangla and Devnagari) OCR System Development**
Principal investigator : B. B. Chaudhuri
Co-investigator : S.K. Parui
Unit involved : Computer Vision and Pattern Recognition
Funded by : Department of Science and Technology, Govt. of India.
4. **Name of the Project : Application of fractal and multi-fractal technique in the processing of
atmospheric data images.**
Principal Investigator : Jyotirmay Das
Co Investigators : Arun K. De and Dipti Prasad Mukherjee.
Unit involved : Electronics and Communications Sciences
Funded by : Department of Science and Technology, Govt. of India

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5. **Name of the Project : Cancer management in soft computing paradigm**
Project Coordinator : S. K. Pal
Unit involved : Machine Intelligence
Funded by : Council of Scientific and Industrial Research, Govt. of India

6. **Name of the Project : Environmental Conservation and Valuation of East Calcutta Wetlands.**
Principal Investigator : Kunal Chattopadhyay
Co-Principal Investigator : Krishna Mazumdar
Unit involved : Economic Research
Funded by : World Bank

7. **Name of the Project : Selection test for admission of students to the B.Lib. and Information Science Course for the period 2000-2001 for Rabindra Bharati University, Kolkata.**
Project Coordinator : S.N. Banerjee
Unit involved : Psychology Research
Funded by : Rabindra Bharati University, Kolkata.

**5. SYMPOSIA, CONFERENCES, WORKSHOPS, LECTURES AND SEMINARS
ORGANISED**

SYMPOSIA, CONFERENCES AND WORKSHOPS

Conference on "Stochastic Processes" was organised by Stat Math Unit, Kolkata during December 18-23, 2000 at ISI, Kolkata.

International Conference on "Statistics and Probability" was organised by Stat Math Unit, Kolkata during December 29 - 31, 2000 at ISI, Kolkata.

Nurture Programme for the 1998 "Indian National Mathematical Olympiad (INMO)" was organised by Stat Math Unit, Bangalore in June 2000 at ISI, Bangalore.

Mini Workshop on "Analysis" was organised by Stat.Math. Unit, Bangalore during January 18-19, 2001 at ISI, Bangalore.

Conference on "Recent Developments in Bayesian Inference and its Applications" was organised by Stat. Math. Unit, Bangalore during March 12-16, 2001 at ISI, Bangalore.

Conference on "Cryptography Indocrypt 2000" was organised by Applied Statistics Unit, Kolkata at ISI, Kolkata.

Winter School on "Exploration of Patterns in Spatial and other types of large data" was organised by Applied Statistics Unit, Kolkata at ISI, Kolkata.

National Workshop on "Mobile Computing" was organised by Advanced Computing and Microelectronics Unit, Kolkata during January 11 - 12, 2000 at Tezpur University, Assam.

International Workshop on "Technology Development in Indian Languages (IWTDL 2001)" was organised by Computer Vision and Pattern Recognition Unit, Kolkata during March 26-30, 2001 at ISI, Kolkata.

INSA Symposium on "Recent Trends in Machine Intelligence and Information Technology : Multidisciplinary Approach" was organised by Machine Intelligence Unit, Kolkata on April 17, 2000 at ISI, Kolkata.

Spring School on "Soft Computing, Image Processing and Data Mining." was organised by Machine Intelligence Unit, Kolkata during March 12-16, 2001, at Gauhati University, Guwahati.

Workshop on "Strongly Correlated Electron Systems" was organised by Physics and Applied Mathematics Unit, Kolkata during February 6-9, 2001 at ISI, Kolkata.

Workshop on "Agriculture, Environment and Health : Strategies of Development in North East India" was organised by Anthropology and Human Genetics Unit, Kolkata during March 23-24, 2001 at Department of Anthropology, Gauhati University, Guwahati, Assam.

Conference on "Applied Bayesian Methods in Econometrics & Forecasting" was organised by Economic Analysis Unit, Bangalore during March 7-10, 2001 at ISI, Bangalore.

Conference on "Recent Advances in Quantitative Economics" was organised by Economic Analysis Unit, Bangalore on March 09, 2001 at ISI, Bangalore.

Winter school on "The methods of core linguistics" was organised by Linguistic Research Unit, Kolkata during December 6 - 15, 2000 at ISI, Kolkata.

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A two-day National Symposium on "Language Movements in India" was organised by Linguistic Research Unit, Kolkata during February 21-22, 2001 at ISI, Kolkata.

International Conference on "Bankruptcy and Debt Recovery" was organised by Planning and Policy Research Unit, Delhi and ICICI Bank during January 15-16, 2001 at ISI, Delhi.

Workshop on "Matrices and Statistics" was organised by SQC & OR Unit, Hyderabad during December 09-13, 2000.

Ninth International Workshop on "Matrices and Statistics" was organised by SQC & OR Unit, ISI, Hyderabad in collaboration with Society for Development of Statistics, Birla Science Centre, University of Hyderabad and Osmania University in honour of Prof. C.R.Rao's 80th birthday during December 9-13, 2000 at Indian Statistical Institute, Hyderabad.

A three day training programme on "Understanding & Implementation of Six Sigma" was organised by SQC & OR Unit, Bangalore during July 10-12, 2000 at Hotel Taj Residency.

A two day training programme on "ISO 9001:2000 Quality Management System" was organised by SQC & OR Unit, Bangalore during November 10-11, 2000 at Hotel Atria.

A three day training programme on "Understanding and Implementation of Six Sigma" was organised by SQC & OR Unit, Bangalore during December 13-15, 2000 at Hotel Taj Residency.

A one-day preparatory programme on "EMS" was organised by SQC & OR Unit, Coimbatore in March 2001 at Tirupur under the co-sponsorship of UNIDO and Dyers Association of Tirupur (DAT).

Seminar on "Process Optimization" was organised by SQC & OR Unit, Chennai on March 14, 2001.

Seminar on "Warranty Cost Analysis" was organised by SQC & OR Unit, Chennai on March 19, 2001.

A half-day seminar on "Quality Case Studies 2001" was organised by SQC & OR Unit, Baroda on March 27, 2001 at Baroda.

LECTURES AND SEMINARS

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

Theoretical Statistics and Mathematics Division

Stat Math Unit Calcutta

Bandyopadhyay, Aantar., University of California, Berkeley, U.S.A (18.01.2001): Characterization of probability distributions as fixed points of max type operators.

Banerjee Moulinath, University of Washington, U.S.A (25.9.2000) : On Likelihood Ratio Tests for Monotone Functions.

Bhattacharjee, Manish C., Center for Applied Mathematics & Statistics New Jersey Institute of Technology, USA (22.3.2001) : New Order Preserving Properties of Geometric Compounds.

Bhowmik Gautami, Universite De Lille 1, France (11.9.2000 and 20.9.2000) : (i) On Matrix Arithmetic And Applications, (ii) On Zeta Functions of Abelian Groups.

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- Chakraborty, Santanu, RBI, Calcutta (15.11.2000): Random Iterations and Dynamical Systems.
- Chakraborty, Shyam Sundar, Senior Fellow, Academy of Finland (01.12.2000) : Recent Developments in Adaptive ARQ Systems.
- Dasgupta, Somesh, Visiting Professor, Indian Statistical Institute, Kolkata (26.3.2001) : Model-preserving Parametric Constraints and Local Identifiability of Parameters.
- Dasgupta Abhijit, ANS, Michigan, USA (8.5.2000) : On Infinitary Boolean Operations.
- Deb Roy, Saikat., University of Wisconsin-Madison, U.S.A (12.01.2001 and 19.01.2001) : Using open source software in statistics and Algorithms in Mixed-Effects Models.
- Dharmadhikari Avinash, Advance Study Center of Statistics, University of Pune (17.8.2000) : On An Algorithm for the Estimation of Minimal Cut and Path Sets From Field Failure Data.
- Ghosal Subhashis, University of Minnesota, U.S.A (21.6.2000) : On Rates of Convergence For Bayes and Maximum Likelihood Estimation for Mixtures of Normal Densities.
- Guivarch, Yves, University of Rennes, France (8.11.2000,14.11.2000 and 16.11.2000) : (i) Branching Processes in Random Environment and Local Limit Theorem on Affine Groups, (ii) Branching Processes in Random Environment and Local Limit Theorem on Affine Groups (Part-II) and (iii) Properties of Stationary Measures for Markov Chains Defined by Projective Transformations.
- Jones David Vere, University of Wellington, Newzealand (19.10.2000) : The Conditional Interning approach to point process modelling: Examples and software for earthquake occurrence.
- Kallianpur, G., University of North Carolina, Chapel Hill , U.S.A (9.1.2001) :Feynman Integral
- Maulik, Krishanu., Cornell University, U.S.A (11.01.2001): Estimation of indices of heavy tailed distributions.
- Mohanty, Parasar, Visiting Scientist (05.03.2001) : Extensions of L^p -multipliers from Π to \mathbb{R} .
- Mohari Anilesh, S.N. Bose National Centre for Basic Sciences (19.4.2000) : On Quantum Dynamical Entropy From Araki's Relative Entropy.
- Mukherjee, Amiya, Visiting Scientist (12.03.2001) : Topology of 4-Manifolds.
- Parthasarathy, K.R., INSA Fellow : Quantum Computing and Coding, (A series of 4 lectures, first one on 27.02.2001).
- Peter Mc Cullagh, Ralph and Mary Otis Isham Professor, Department of Statistics University of Chicago, U.S.A (15.03.2001, 16.03.2001, 19.03.2001) : (i) (iv) What is a Statistical Model ?, (ii) Generalized Linear Models in Practice, (iii) Monte-Carlo Estimation of Normalizing Constants.
- Peter Zvengrowski, University of Calgary, Canada (19.02.2001, 20.02.2001) : (i) Applications of topology to colouring of graphs, (ii) Vector Fields on Manifolds : Specifics.
- Ramamoorthi R.V, Michigan State University, East Lansing, U.S.A (2.5.2000 and 3.5.2000): On Some Aspects of Neutral to Right Priors & Consistency of Dykstra-Laud Priors.
- Roushon, S.K, Tata Institute for Fundamental Research, Mumbai(15.02.2001):K-theory of Braid groups.
- Shah, Riddhi, Tata Institute for Fundamental Research, Mumbai (9.11.2000): Self-decomposable Measures and Levy's Measures on Unipotent Groups.

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Terdik, Gy., University of Debrecen, Hungary (26.02.2001) : Superposition of Diffusions with Linear Generator and its Multifractal Limit Process. A working model for High-Speed Network Data.

Stat Math Unit, Delhi

Ball, John, University of Oxford, U.K (29.08.2000) : Quasiconvexity, singularities and computation.

Bhattacharjee, Manich C., New Jersey Institute of Technology, U.S.A (13.03.2001) : New-order preserving properties of geometric compounds.

Booth, Lorna, University of Utrecht, The Netherlands (21.03.2001) : Covering and Percolation.

Dias da Silva, Jose, University of Lisbon, Portugal (27.09.2000, 04.10.2000, and 11.10.2000) : (i) Young tableaux-Part I., (ii) Young Tableaux-Part II., (iii) Young Tableaux-Part III.

Kirland, Steve, University of Regina, Canada (07.12.2000) : Conditioning for Markov chains whose transition matrix has large exponent

McCullagh, Peter, University of Chicago, U.S.A (12.03.2001) : What is a Statistical model?.

Parthasarthy, K.R., INSA Fellow (14.02.2001) : What is Quantum Computing?.

Rajput, Bairam S., University of Tennessee, U.S.A (31.01.2001) : Proofs of some lower and upper tail inequalities for stable and semistable random vectors.

Rao, Suhasini Subba, University of Bristol, U.K (02.03.2001, and 14.03.2001) : (i) Wavelets and adaptive filters, (ii) A tour of Wavelets.

Sengupta, Amber, Louisiana State University, U.S.A (02.02.2001) : Pricing interest rate derivatives.

Serra, S., University of Como, Italy (29.01.2001) : Spectral properties of matrix sequences.

Thompson, Steven K., Pennsylvania State University, U.S.A (22.12.2000) : Adaptive Sampling.

Tiwari, Ram, C., UNC Charlotte, U.S.A (10.08.2000) : Two-samples problems with censored data.

Volanfova, Julia, Pennington Biomedical Research Centre (14.12.2000) : Some estimation and testing problems in multistage linear models.

Stat Math Unit, Bangalore

Athreya ,K.B., Iowa State University & Cornell University, U.S.A (11-01-2001) : The invariant measure for random logistic maps.

Athreya,Siva, University of British Columbia, Canada (15-06-2000) : Duality method for martingale problems.

Balakrishnan, R., Bharathidasan University (14-09-2000) : Silver Matrices.

Chanillo, Sagun, Rutgers University, U.S.A (11-08-2000) : Prescribing Gauss Curvature using Statistical Mechanics.

Das, Shubhabrata, Indian Institute of Management, Bangalore (31-05-2000) : Fuzzyness in human response to Scale, Respondent and Attribute.

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- Dimitrov, Mladen, University of Paris, France (24-08-2000) : Wonders of Numbers.
- Elsner, Ludwig, University of Bielefeld, Germany (23-03-2001) : Convergent infinite products of matrices.
- Givare'h, Y., Universite de Rennes – I, France (23-11-2000, 28-11-2000 and 29-11-2000) : (i) On some singular distribution functions on the line (defined by a functional equation), (ii) Questions on random walk and potential theory, (iii) Positivity of the top Liapunov exponent for products of random matrices.
- Holbrook, John, University of Guelph, Canada (22-11-2000) :: Schur norms computation and applications.
- McCullagh, Peter, University of Chicago, U.S.A (20-03-2001) : What is a Statistical Model?.
- McDonald, David, University of Ottawa, Canada (25-01-2001) : Join the shortest queue: Stability and exact asymptotics.
- Raghubar .A., University of Toronto, Canada (12-19.7. 2000) : Kirillov models for representations of GL_2
- Ramamoorthi, R.V., Michigan State University, U.S.A (05-05-2000) : Some aspects of neutral to right priors.
- Rao, M.R., Indian Institute of Management, Bangalore (22-11-2000) : Balanced Matrices.
- Ratnakumar, P.K., Poornaprajna Institute for Science Research (04-05-2000) : Spherical maximal operator on constant curvature spaces.
- Samuel, Joseph, Raman Research Institute (14-03-2001) : Group theory and Physics.
- Sin, Peter, University of Florida, U.S.A (05-07-2000 and 18-07-2000) : (i) Invariant factors of Incidence Matrices and Representation theory, (ii) The Permutation module for the Symplectic Groups acting on Vectors.
- Stempak, K., Wrocklaw Polytechnika, Poland (29-03-2001) : A vector valued transference of Fourier-Bessel multipliers onto Hankel multipliers.

Applied Statistics Division

Applied Statistics Unit

- Debroy, Saikat, University of Wisconsin-Madison, U.S.A (16.01.2001) : Algorithms in mixed-Effects Models.
- Maitra, Ranjan, University of Maryland, USA (27.03.2000) : Optimal Bayesian Decisions on Collecting Coin-Boxes.
- Raha, Soumyendu, Electronic Design Automation, IBM Microelectronics Division, USA (20.12.2000) : Constraint Partitioning for Solution of Dynamic Optimization Problems.
- Roy Choudhury, Kingshuk, UCC, Cork, Ireland (19.12.2000) : Analysis of Coherent Patterns in Wave Tank Data.
- Seberry, Jennifer, University of Wollongong, Australia (15.12.2000) : Combinatorics in Cryptography.

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Computer & Communication Sciences Division

Advanced Computing & Microelectronics Unit

- Dey, Suhrit K., Eastern Illinois University, Illinois, USA (04.12.2000 and 08.12.2000) : (i) Massively Parallel Computation with Shared Memory, (ii) Massively Parallel Computation with Non-Shared Memory.
- Ghosh, Subir K., TIFR, Mumbai (02.11.2000) : Understanding Visibility Graphs Applications.
- Majumdar, Shikharesh, University of Carleton, Ottawa, Canada (26.12.2000) : Achieving High Performance on Middle-ware-based Systems.
- Mukherjee, Amar, University of Central Florida, Orlando, Florida, USA (07.03.2000) : Text Compression : A Key to Archival Storage and Internet Tr.
- Risset, Tanguy, IRISA, Rennes, France (21.03.2001) : MMAAlpha : A Toolbox for Silicon Compilation.

Computer Vision and Pattern Recognition Unit

- Bhattacharya, Tanmoy, Dept. of Linguistics, Leipzig University, Germany, (August 2000) : Aspects of Bangla Syntax.
- McEnergy, Tony Head, Dept. of Linguistics, Lancaster University, UK (July, 2000) : Corpus-based Natural Language Engineering.

Electronics and Communication Sciences Unit

- Saha, Punam, Medical Image Processing Group University of Pennsylv-Philadelphia, Venia, U.S.A (21.12.2000) : Uncertainty-homogeneity-based image thresholding : A new theory.
- Sen, Sandip, Dept. of Computer Science, University of Tulsa, Oklahoma, U.S.A (19.10.2000) : Intelligent agents : Theory and application.

Machine Intelligence Unit

- Dasgupta, D., Mathematical Sciences Department, University of Memphis, USA. (24.05.2000) : Immune gene architecture for intrusion detection.

Physics and Earth Sciences Division

Geological Studies Unit

- Beukes, N J., Rand Afrikaans University, Johannesburg, South Africa (22.02.2001) : Oxygen and CO₂ levels in the Proterozoic Atmosphere : evidence from Palaeosols.
- Ray, A. B., Department of Geology, Mohanlal Sukhadia University, Udaipur (3.7.2000) : Geological Evolution of Rajasthan.
- Sengupta, Supriya, CSIR Emeritus Scientist, Department of Naval Architecture, IIT, Kharagpur (27.06.2000) : Some aspects of Stratigraphic Classification and Correlation of Gondwana Succession.
- Tandon, S. K., Department of Geology, University of Delhi (09.05.2000) : Issues related to Palaeosols.

Thakur, Vikram C., Wadia Institute of Himalayan Geology, Dehradun (08.05.2000) : Evolution of Himalaya-Closing of Tethys and Continent-Continent Collision.

Physics and Applied Mathematics Unit

Debnath, L., University of South Florida, USA (12-14.07.2000) : Wavelet Transforms and Applications in Turbulence.

Dey, Subhasis, Department of Civil Engineering, I.I.T., Kharagpur (16.01.2001) : Sediment Threshold in a Generalized Sloping Bed.

Khare, A., Institute of Physics, Bhubaneswar, Orissa (09.05.2000) : An Exactly Solvable N-Body Problem.

Makhijani, Arjun, IEER, Maryland, USA (22.01.2001) : Nuclear Energy, Past and Prospect.

Rahman, M., Dalhousie University, Halifax, Canada (07.12.2000) : Waves and Hydrodynamic Loading.

Sen, Diptiman, Centre for Theoretical Studies, Indian Institute of Science, Bangalore (26.05.2000) : Quantum Spin Systems.

Varma, Mahendra, Physics Department, I.I.T., Kanpur (20.09.2000 and 17.10.2000) : (i) Renormalization Group Treatment of Magnetohydrodynamic Turbulence, (ii) Self Consistent Dynamical Renormalization Group.

Yanase, Shinichiro, Okayama University, Okayama, Japan (16.02.2001) : The Linear Stability Analysis of Rotating non-MHD and MHD Free-shear Flows.

Social Sciences Division

Economic Research Unit

Bandopadhyay, Swapnendu, Jadavpur University (05.07.2000): Sequence of Trade Liberalization and Quality Innovation.

Dam, Kanishka, Universitat Autònoma de Barcelona, Spain (27.07.2000): Wealth Difference and Interlinkage in Village Economies.

Dasgupta, Aml, Yale University (23.03.2001): Equilibrium Selection in Dynamic Coordination Games and Social Learning.

Mallick, Rajlakshmi, Loreto College, Calcutta (24.10.2000): Deregulation in the Formal Credit Market and its Impact on Informal Credit.

Marjit, Sugata, CSSSC, Calcutta (27.06.2000): Economic Reform and Informalization: Some General Equilibrium Results.

Mukherjee, Arijit, Technische Universiteit Eindhoven, Netherlands (24.07.2000): Imitation, Patent Protection and Welfare.

Sengupta, J.K., University of California, Santa Barbara, U.S.A (02.08.2000): Efficiency in Hypercompetition: The Case of Computer Industry.

Sinha, Uday Bhanu, CESP, JNU, New Delhi (15.05.2000): Buyout, Control and Entry in International Joint Ventures.

INDIAN STATISTICAL INSTITUTE

Economic Analysis Unit

Iyengar, N.S., (23.01.2001 and 24.01.2001) : Data Base and Data Gaps for Indian Economy.

Krishna Kumar, T., (15.02.2001) : Capital Output Ratio and Input-Output Analysis.

Linguistic Research Unit

Bandyopadhyay, Debaprasad, Rabindrabharati University (13.03.2001) : Quine-Davidson-Chomsky Debate.

Chakroborti, Nirmalya Narayan, Rabindrabharati University (13.03.2001) : Quine-Davidson-Chomsky Debate.

Nagraj, A.S., University of Pune (11.06.2000) : The Languages of Northeast India.

Sen, Madhuchanda, Rabindrabharati University (13.03.2001) : Quine-Davidson-Chomsky Debate.

Planning Unit

Carter, Michael, Canterbury University, New Zealand (06.12.2000) : Cricket Interruptions: A New Rain Rule Proposal.

Ghate, Chetan, The Colorado College, USA (09.03.2001) : Endogenous Distribution, Politics and Growth.

Goyal, Sanjeev, Erasmus University, The Netherlands (19.01.2001) : A Theory of Network Formation.

Hochman, Oded, Ben Gurion University, Israel (13.10.2000) : Optimality of Equilibrium in a Model with Clubs

John, Kose, Stern School of Management, New York University, USA (17.01.2001) : Theories of Corporate Governance.

Klemperer, Paul, Edgeworth Professor of Economics, Oxford University, UK (08.01.2001) : Public Lecture: What Really Matters in Auction Design.

Korwal, Ashok, University of British Columbia, Canada (10.11.2000 and 17.11.2000) : (i) The Role of the Service Sector in Industrialization, (ii) Quality Enhancing Trade Liberalization.

Krishna, Kala, Pennsylvania State University, USA (02.03.2001) : Lumpy Consumer Durables, Market Power and Endogenous Business Cycles.

Maniquet, Francois, University of Namur, Belgium (12.01.2001) : Fair Social Orderings in Division Economies.

Pauzner, Ady, Tel Aviv University, Israel (06.10.2000) : A Theory of Bank Runs.

Sareen, Samita, Bank of Canada (01.02.2001 and 02.02.2001) : (i) Economics of Timber Auctions, (ii) Auctioning Bank of Canada securities.

Sengupta, Sarbjit, Viswa Bharati University (20.10.2000) : A theory of Managerial Delegation.

Shah, Sudhir, Delhi School of Economics (23.03.2001) : An Economic Theory of Emission Caps.

Toman, Michael, Resources for the Future (12.03.2001) : Optimal Investment in Clean Production Capacity.

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Population Studies Unit

Bhuiya ,Keshab Chandra, North-Eastern, Libya (25.09.2000) : Differential in Child Mortality by Fertility

Statistical Quality Control and Operations Research Division

Statistical Quality Control and Operations Research Unit

Dasgupta, T., Federation of Small Scale Industries, Baroda (03.03.2001) : Total Quality Management.

Menon, Dilip, Reader, University of Hyderabad, (29.01.2001) : 10th Daniel Thorner Memorial Lecture.

6. PUBLICATION OF SANKHYA

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

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December 2000	:	Volume 62, Series B, Part 3
February 2001	:	Volume 63, Series A, Part 1

7. SCIENTIFIC PAPERS AND PUBLICATIONS

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- Prasad, A.R.D. : Creation of digital libraries in Indian languages using unicode, *Digital Libraries*, A.R.D. Prasad and Shalini R Urs (eds.), Indian Statistical Institute, Bangalore, 1-10, 2001.
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- Rao, I.K. Ravichandra : Quantitative techniques for content analysis, *Seminar on Content organization in the new millennium*, SRELs and Institute of Information Studies, Bangalore, B 1-16, 2000.
- Rao, I.K. Ravichandra : Cyber laws, electronic commerce and the Indian IT : an overview, *National seminar on Information Policies and Cyber laws*, Institute of Information Studies, Bangalore, G1-10, 2000.

Library, (Bangalore)

- Meera, B.M. : Comparative study of site license agreements of commercial publishers in electronic publishing environment, *National Seminar on Information Policies and Cyber Laws*, V1-8, 2000.
- Meera, B.M. : Design and development of Virtual Library in Mathematics, *XIX National Seminar of IASLIC*, 105-112, 2000.

Computer and Statistical Services Centre

- Maitra, S. : Highly Nonlinear Balanced Boolean Functions with very Good Autocorrelation Property, *Workshop on Coding and Cryptography, Electronic Notes in Discrete Mathematics*, Elsevier, 2001.
- Nandy, S.C. : An efficient algorithm for finding k nearest neighbors for a query line, *7th. Int. Conf. on Computing and Combinatorics (COCOON-2000)*, LNCS - 1858, 281-290, 2000.
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- Sarkar, P. and Maitra, S. : Construction of nonlinear boolean functions with important cryptographic properties, *Advances in Cryptology - EUROCRYPT 2000*, LNCS-1807, 485-506, 2000.
- Sarkar, P. and Maitra, S. : Nonlinearity bounds and constructions of resilient boolean functions, *Advances in Cryptology - CRYPTO 2000*, LNCS-1880, 515-532, 2000.

Papers Published in Books

Theoretical Statistics and Mathematics Division

Stat Math Unit, Delhi

- Dewan, J. and Rao, B.L.S.P. : Associated sequences and related inference problems, *Handbook of Statistics*, 19, D.N.Shanbhag and C.R.Rao (eds.), Elsevier Science, B.V., Amsterdam, 693-731, 2001.
- Rao, B.L.S.P. : Characterization and identifiability for Stochastic Process, *Handbook of Statistics*, 19, D. N. Shanbhag and C. R. Rao (eds.), Elsevier Science B.V., Amsterdam, 643-691, 2001.
- Roy, R. : Percolation on Trees, *Percolation Theory and Particle Systems*, R. Roy (ed.), *Indian Academy of Sciences*, Universities Press, Bangalore, 28-33.

INDIAN STATISTICAL INSTITUTE

Sarkar, A: Continuum Percolation, Percolation Theory and Particle Systems, R.Roy (ed.), *Indian Academy of Sciences, Universities Press Bangalore*, 36-58.

Applied Statistics Division

Applied Statistics Unit

Choudhuri, A. : Mean square error estimation in multi-stage and randomized response surveys. *Current Developments in survey Sampling*. A.K.P.C. Swain (ed.), The Modern Book Depot, Bhubaneswar, 9-20.

Chaudhuri, A. and Adhikary, A. K. : Variance estimation in a specific three-stage survey sampling strategy, *Perspectives in Statistical Sciences*, A.K. Basu, J.K. Ghosh, P.K. Sen and Bimal K. Sinha (eds.), Oxford University Press, 102-109.

Mishra, Sanjeev K. and Sarkar, P. : Symetrically private information retrieval, *Progress in Cryptology — Indocrypt 2000, Lecture Notes in Computer Science 1977*, Bimal Roy and Eiji Okamoto (eds.), Springer, Berlin, 225-236.

Computer and Communication Sciences Division

Computer Vision and Pattern Recognition Unit

Pal, U. and Chaudhuri, B.B. : Automatic recognition of unconstrained off-line Bangla hand-written numerals, *Advances in Multimodal Interfaces*, Springer Verlag Lecture Notes on Computer Science (LNCS-1948), 371-378, T. Tan, Y. Shi and W. Gao (eds.), 2000.

Electronics and Communication Sciences Unit

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Pal, N.R. and Chakraborty, D.: Simultaneous Feature Analysis and System Identification in a Neuro-Fuzzy Framework, *Neuro-fuzzy Pattern Recognition*, H. Bunke and A. Kandel (eds.), World Scientific, 3-22, 2000.

Pal, N. R. and Sarkar, A. : Extraction of Fuzzy Rules from Numerical Data for Classifiers, *Pattern Recognition in Soft Computing Paradigm*, World Scientific, N. R. Pal (ed.), 249-274, 2001.

Machine Intelligence Unit

De, R. K. and Pal, S. K. : Case-based systems: A neuro-fuzzy method for selecting cases, *Soft Computing for Case-based Reasoning*, Pal, S. K., Dillon, T. S. and Yeung, D. S., (eds.), Springer Verlag, London, 241–257, 2000.

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Physics and Earth Sciences Division

Geological Studies Unit

- Saha, D., Deb, G.K., and Dutta, S. : Granite-greenstone relationship in the Sonakhan Belt, Raipur district, Central India, *Precambrian crust in eastern and central India*, IGCP 368, Geol. Surv. India Spec. Publication No. 57, 67-78, 2000.

Physics and Applied Mathematics unit

- Das, P. K. : Phase distribution in a deformed Hilbert space, trends in contemporary infinite dimensional Analysis and Quantum Probability, *Essays in Honour of Professor T. Hida for his 70th Birthday*, L. Accardi et. Al (eds.), Kyoto, 137-145, 2000.

Biological Sciences Division

Anthropology and Human Genetics Unit

- Banerjee, J., Saha, S., Dasgupta, I., Bhattacharya, D. K. and Dasgupta, P. : Growth in length and weight of Thalassaemic children in West Bengal, India : A mixed- longitudinal study, *Perspectives in Human Growth, Development and Maturation*, P. Dasgupta and R. C. Hauspie (eds.), Kluwer Academic Publishers, 341-350, 2001.
- Ghosh, R., Bharati, P. and Vasulu, T.S. : Consumption pattern of food and non-food items: Regional variation in rural and urban sectors in India. *Contemporary Research in Anthropology*, R. Khongsier (ed.), Commonwealth Publishers, New Delhi, 163-169, 2000.
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- Hemam, N.S. and Reddy, B.M. : Maintenance of village reserve forest : A dying traditional conservation practice among the Gange tribe of Manipur, India, *Man-Environment Relationship*, M.K. Bhasin and V. Bhasin (eds.), Kamala-Raj Enterprises, New Delhi, 297-308, 2000.
- Mukhopadhyay, B. : Demographic characteristics and rural/urban residence among the Lepchas of Sikkim, *Tribes of the Eastern Himalayas*, S.Sengupta (ed.), Mittal Publications, New Delhi, 33-45, 2000.
- Rebato, E., Rosique, J., Pietrobelli, A., Chatterjee, M., Chatterjee S., Saha, R. and Dasgupta P. : Subcutaneous adipose tissue distribution in 7 to 16 years old, boys of Calcutta in relation to socioeconomic level, *Perspectives in Human Growth, Development and Maturation : A tribute to Professor Sudhir Ranjan Das*, P. Dasgupta and R.C. Hauspie (eds.), Kluwer Academic Publishers, 91-108, 2001.
- Vasulu, T.S. and Ghosh, B.N. : Indicators of socio-economic status among tribal populations of India, *Socio-Economic development in India*, B. Roy (ed.), Mohit Publications, New Delhi, 420-484, 2001.

Social Sciences Division

Economic Research Unit

- Ghosh, B. and De, P. : Impact of EOC and SOC facilities on economic development : An investigation with major Indian States, *India Rural Infrastructure Report*, Sir Ratan Tata Trust and National Council of Applied Economic Research, New Delhi, 2000.

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- Coondoo, D., Majumder, A. and Bhattacharya, K. : Employment, level of living and utilization of PDS, *Public Support for Food Security*, N. Krishnaji and T.N. Krishnan (eds.), Sage Publications, New Delhi/Thousand Oaks/London, 216-245, 2000.
- Coondoo, D. Majumder, A. and Neogi, C. : Taxable capacity functions : A note on specification, estimation and application, *Fiscal Federalism in India: Contemporary Challenges : Issues before the Eleventh Finance Commission*, D.K. Srivastava (ed.), Har-Anand Publications Pvt. Ltd., New Delhi, 166-167, 2000.
- Dasgupta, D. : New Growth Theory : A supply demand view, *Contemporary Macroeconomics*, A. Bose, D. Ray, and A. Sarkar(eds.), Oxford University Press, Delhi, 151-205, 2001.
- Kabiraj, T. and Chaudhuri, M. : An input joint venture : Some new results, *Industry and Trade : Essays by NIPFP - Ford Foundation Fellows*, A. Guha, A. Lahiri and K.L. Krishna (eds.), Vikash Publishing House, New Delhi.
- Kabiraj, T. and Marjit, S. : On the welfare implication of International Joint Venture, *Trade, Industry and Environment*, R. Acharya and B. Moitra (eds.), Lancer Publishing, New Delhi.
- Mazumdar, K. : Service sector and economic development, *Socio-Economic Development in the 21st Century*, R.K. Sen (ed.), Deep & Deep Publications Ltd., New Delhi, 2000.
- Mazumdar, K. : Structural changes in selected agricultural economics of South and South-East Asia 1960-1990, *Socio-Economic Development in India*, B. Ray (ed.), Mohit Publications, New Delhi, 2000.
- Mazumdar, K. : Measuring human well-being of the countries, *Welfare, Choice and Development*, B. Ray (ed.), Kanishka Publishers, New Delhi, 56-85, 2000.
- Mitra, S. and Sarkar, A. : Migration and land fragmentation : A theoretical note, *Themes on Development Economics*, J. Roy and M. R. Gupta (eds.), Allied Publishers, Calcutta, 28-34, 2000.

Economic Analysis Unit

- Narayana, N.S.S. : Introduction on economic policy and state intervention, *Selected papers of T.N. Srinivasan Economic Policy and State Intervention*, Oxford University Press, New Delhi, 1-44, 2001.

Planning Unit

- Sarma, A. : India's export prospects in the EU market, *European Indian Business*, N. Raghavan and W.H. Robinson (eds.), London, 2000.
- Sarma, A. : Tax reform and structural adjustment in the Indian Federation, *Fiscal Reform and Structural Change in Developing Countries*, G. Pery, J. Whalley and G. MacMahon (eds.), MacMillan Press, London, 2000.

Population Studies Unit

- Barman, S., Majumdar, P.K. and Bhattacharya, B.N. : Child labour in India and its determinants, *Dynamics of Population Change : Emerging Issues of 21st Century*, R.C. Yadav, K.N.S. Yadav and K.K. Singh (eds.), Shipra Publications, 115 – A, Vikash Marg, Shakarpura, Delhi, 174 – 191, 2001.
- Dasgupta, P. : International migration in India, *Socio-economic Development in India*, B. Ray (ed.), Mohit Publications, New Delhi, 34 – 44, 2001.

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- Datta, P. : Demographic indicators of economic development, *Welfare, Choice and Development : Essays in honour of Prof. Amartya Sen*. B. Ray (ed.), Kanishka Publication, New Delhi, 233 – 253, 2001.
- De, P. and Bhattacharya, B. N. : A study on child immunisation in selected States in India - Analysis of NFHS Data : 1992 - 1993. *Dynamics of Population Change : Emerging issues of 21st Century*. R.C. Yadav, K.N.S. Yadav and K.K. Singh (eds.), Shipra Publication, Vikash Marg, Shakarpura, Delhi, 207 – 221, 2001.
- De, P. : Importance of net profitability and net return in response behaviour of primary producers : A case study, *Socio-Economic Development in India*, I. B. Ray (ed.), Mohit Publication, New Delhi, 207 – 218, 2001.

Sociological Research Unit

- Dasgupta, A. : Contribution of Surya Sen in India's freedom struggle, *The selected collection of Surya Sen memorial lectures*. Calcutta University, 2001.
- Ghosh, B. N. : Words and actions : Leadership and development in the dusty rear, *Welfare, Choice and Development (Essays in Honour of Professor Amartya Sen)*, Kanishka Publishers, Distributors, New Delhi, 113-128, 2001.
- Ghosh, B. N. and Bandyopadhyay, K. : Need for transfer of technology through Panchayati Raj System: An observation, *Welfare, Choice and Development (Essays in Honour of Professor Amartya Sen)*, Kanishka Publishers, Distributors, New Delhi, 129-139, 2001.
- Sen, D. and Mitra, S. : Socio-economic aspects of organised crime : A study on illegal coal mining, *Crime, Corruption and Development*, N. R. Reddy (ed.), Deep and Deep Publisher, New Delhi, 2001.

Part II. 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 others 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.

1. Angers, J.F., University of Montreal, Canada May 29, 2000 - June 8, 2000 *Applied Statistics Unit, Kolkata.*
2. Ardreya, Shiva, University of British Columbia, Canada June 26 - 30, 2000 *Stat Math Unit, Delhi.*
3. Athreya, K.B., Iowa State University and Cornell University, U.S.A January 11, 2001 *Stat Math Unit, Bangalore.*
4. Athreya, Shiva, University of British Columbia, Canada June 12-16, 2000 *Stat Math Unit, Bangalore.*
5. Balakrishnan, R., Bharathidasan University, September 14, 2000 *Stat Math Unit, Bangalore.*
6. Ball, John, Mathematics Institute, University of Oxford, U.K., August 28 - 2 September, 2000 *Stat Math Unit, Delhi.*
7. Bandopadhyay, Sripama, CSIR fellow from April 2000 - March 2001 *Statistical Quality Control and Operations Research Unit, Delhi.*
8. Barnes, Bruce, University of Oregon, USA., January 1, 2001 - June 6, 2001 *Stat Math Unit, Kolkata.*
9. Basu, Sujit Kumar, National Institute of Management, Kolkata April 01, 2000 - March 31, 2001 *Stat Math Unit, Kolkata.*
10. Belaid, Abdel, LORIA, France, March 2001 *Computer Vision and Pattern Recognition Unit, Kolkata.*
11. Beukes, N. J., Rand Afrikaans University, Johannesburg, South Africa, February 22, 2001-March 2, 2001 *Geological Studies Unit, Kolkata.*
12. Bhat, S.K., University of Manitoba, Canada, December 2000 - January 2001, *Statistical Quality Control and Operations Research Unit, Delhi.*
13. Bhattacharja, Shishir, Dhaka University, Bangladesh, May 2000 *Computer Vision and Pattern Recognition Unit, Kolkata.*
14. Bhattacharyya, Tanmoy, Dept. of Linguistics, Leipzig University, Germany, August 2000 *Computer Vision and Pattern Recognition Unit, Kolkata.*
15. Bhowmik, Guulmi, University de Lille, France, September 2000 *Stat Math Unit, Kolkata.*
16. Bhuiya, Keshub Chandra, Department of Statistics, Garyounis University, Libya, September 01-30, 2000 *Population Studies Unit, Kolkata.*
17. Booth, Loma, Dept. of Mathematics, University of Utrecht, The Netherlands, March 16 - March 31, 2001 *Stat Math Unit, Delhi.*

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18. Carter, Michael, University of Canterbury, New Zealand, October 1-December 15, 2000 *Planning Unit, Bangalore.*
19. Chanillo, Sagun, Rutgers University, U.S.A August 1, 2000 *Stat Math Unit, Bangalore.*
20. Chatterjee, Kashinath, Asutosh College, Kolkata , June 3-12, 2000 *Stat Math Unit, Delhi.*
21. Chaudhuri, Gopal, Visiting Scientist, February 23, 2000 – May 7, 2000 *Statistical Quality Control and Operations Research Unit, Delhi.*
22. Chaudhuri, Gopal, June 14- 27, 2000 *Applied Statistics Unit, Kolkata.*
23. Coelho, Carlos Agra, Lisbon University of Technology, Portugal, December 25, 2000 – January 24, 2001 *Applied Statistics Unit, Kolkata.*
24. Dus, Shubhbrata, Indian Institute of Management, Bangalore, May 31, 2000 *Stat Math Unit, Bangalore.*
25. Dasgupta, Amitesh, School of ORIE, 206 Rhodes Hall, Cornell University, Ithaca, USA., September 19-30, 2000 *Stat Math Unit, Kolkata.*
26. Dasgupta, Abhijit, ANS, Michigan, USA., April 18 – May 11, 2000 *Stat Math Unit, Kolkata.*
27. Dasgupta, D., Mathematical Sciences Department, University of Memphis, USA, May 24, 2000 *Machine Intelligence Unit, Kolkata.*
28. Debnath, L., University of Central Florida, USA, July 12-14, 2000 *Physics and Applied Mathematics Unit, Kolkata.*
29. Dey, S. K., Eastern Illinois University, USA, December 2000 *Advanced Computing and Microelectronics Unit, Kolkata.*
30. Dimitrov, Mladen, University of Paris XIII, August 24, 2000 *Stat Math Unit, Bangalore.*
31. Dubey, Pradeep, SUNY, Stony Brook, August 21, 2000 - January 20, 2001 *Planning Unit, Bangalore.*
32. Dutta, Joydeep, NBHM fellow July 1, 1999 – June 30, 2000 *Statistical Quality Control and Operations Research Unit, Delhi.*
33. Elsner, Ludwig, University Bielefeld, Germany, February 19 – March 17, 2001 *Stat Math Unit, Delhi.*
34. Elsner, Ludwig, University of Bielefeld, March 23, 2001 *Stat Math Unit, Bangalore.*
35. Gangopadhyay, Sreela, Visiting Scientist, November 1999- November 2000 *Stat Math Unit, Kolkata.*
36. Ghate, Chetan, The Colorado College, USA, January 5 – March 30, 2000 *Planning Unit, Bangalore.*
37. Ghosh, Subir, K., Tata Institute for Fundamental Research, Mumbai, November 2000 *Advanced Computing and Microelectronics Unit, Kolkata.*
38. Goswami, Debushish, Visiting Scientist, May 01 – July 31, 2000 *Stat Math Unit, Delhi.*
39. Goyal, Sanjeev, Erasmus University, Rotterdam, The Netherlands, January 15-22, 2001 *Planning Unit, Bangalore.*
40. Guivarc'h, Y., Université de Rennes-I, November 22-30, 2000 *Stat Math Unit, Bangalore.*

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41. Guivarch ,Y., University of Rennes-I, France, November 5, 2000 - November 20, 2000 *Stat Math Unit, Kolkata.*
42. Gy, Terdik, University of Debrecen, Hungary, February '2001 – March' 2001 *Stat Math Unit, Kolkata.*
43. Habib, Amber, Visiting Scientist, July 2000 *Stat Math Unit, Bangalore.*
44. Harris, John, University of East Anglia, July 28, 2000 *Sociological Research Unit, Kolkata.*
45. Hochman, Oded, Ben Gurion University, Israel, September 25, October 15, 2000 *Planning Unit, Bangalore.*
46. Holbrook, John, A., University of Guelph, Canada, November 23 – 23 December, 2000 *Stat Math Unit, Delhi.*
47. Holbrook, John, University of Guelph, Canada November 22, 2000 *Stat Math Unit, Bangalore.*
48. Holt, Georgina, University of Reading, UK May 6 - 8, 2000 *Agricultural Sciences Unit, Kolkata.*
49. Jahan, Begum Ara, Dhaka University, Bangladesh, March' 2001 *Computer Vision and Pattern Recognition Unit, Kolkata.*
50. Kam, Suen Phen, International Rice Research Institute, Philippines, March 14 - 19, 2001 *Agricultural Sciences Unit, Kolkata.*
51. Kirkland, Steve, University of Regina, Canada, December 3, 2000 – January 23, 2001 *Stat Math Unit, Delhi.*
52. Korwal, Ashok, University of British Columbia, November 1 -21, 2000 *Planning Unit, Bangalore.*
53. Krishnamurthy, Ramesh, Birmingham University, UK, March' 2001 *Computer Vision and Pattern Recognition Unit, Kolkata.*
54. Kulkarni, Manisha, '2000' July, *Stat Math Unit, Bangalore.*
55. Lensink, Robert, University of Groningen, The Netherlands, February 13-20, 2001 *Planning Unit, Bangalore.*
56. Majumdar, Shikharesh, University of Carleton, Ottawa, Canada, December 26, 2000. *Advanced Computing and Microelectronics Unit, Kolkata.*
57. Marmaloukas, Christos, Aristotle University of Thessaloniki, School of Technology, Greece, February 11-24, 2001 *Physics and Applied Mathematics Unit, Kolkata.*
58. Maniquet, Francois, University of Namur, January 8 -22, 2001 *Planning Unit, Bangalore.*
59. McCullagh, Peter, University of Chicago, USA March 20, 2001 *Stat Math Unit, Bangalore.*
60. McCullagh, Peter, University of Chicago, USA., March 11 – March 14, 2001 *Stat Math Unit, Delhi.*
61. McDonald, David, University of Ottawa, Canada January 25, 2001 *Stat Math Unit, Bangalore*
62. McEnery ,Tony, Dept. of Linguistics, Lancaster University, UK, July'2000 *Computer Vision and Pattern Recognition Unit, Kolkata.*
63. Mahanty, Saru, Visiting Scientist, March'2001 *Stat Math Unit, Bangalore.*

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63. Mahanty, Sara, Visiting Scientist, March'2001 *Stat Math Unit, Bangalore..*
64. Mohanty, Parasara, Indian Institute of Technology, Kanpur, February '2001 – August' 2001 *Stat Math Unit, Kolkata..*
65. Mukherjee, A., University of Central Florida, USA, February 5 – March 23, 2001 *Advanced Computing and Microelectronics Unit, Kolkata..*
66. Mukherjee, Amiya, Visiting Professor, April '2001- March':2001 *Stat Math Unit, Kolkata.*
67. Mukherjee, Rahul, Indian Institute of Management, Kolkata, April 1, 2000 - March 31, 2001 *Stat Math Unit, Kolkata.*
68. Nagaraja, K.S., Deccan College Post-graduate Research Institute, Pune, May, 27-30, 2000 *Computer Vision and Pattern Recognition Unit, Kolkata.*
69. Narula, Subhas C., Virginia Common Wealth University from December 15, 2000 for two weeks *Statistical Quality Control and Operations Research Unit, Delhi.*
70. Pandey, Manju. . Benaras Hindu University, Varanasi, November 3-5, 2000 *Applied Statistics Unit, Kolkata.*
71. Pudney, Steve, University of Leicester, UK, January 3-5, 2001 *Planning Unit, Bangalore.*
72. Raghuram, A., University of Toronto, July 12-19, 2000 *Stat Math Unit, Bangalore.*
73. Rahaman, Saydul, University of Rajshahi, Bangladesh August 14 - 25, 2000 *Agricultural Sciences Unit, Kolkata..*
74. Rajopadhye, S., IRISA, Rennes, France, August 1-4, 2000, *Advanced Computing and Microelectronics Unit, Kolkata..*
75. Rajput, Balram, Mathematics Dept., The University of Tennessee, USA., January 10 – February 10, 2001 *Stat Math Unit, Delhi.*
76. Ramamoorthi, R.V., Michigan State University, May 05, 2000 *Stat Math Unit, Bangalore.*
77. Rao, Arni SR Srinivasa, IIPS, Deonar, Mumbai, September 1, 1999 – July 14, 2000 and February '2001 – January'2002 *Stat Math Unit, Kolkata..*
78. Rao, M.R., Indian Institute of Management, Bangalore, November 22, 2000 *Stat Math Unit, Bangalore.*
79. Ratnakumar, P.K., Poorna Prajna Institute, Bangalore June – October 2000 *Stat Math Unit, Bangalore.*
80. Risset, T., IRISA, Rennes, France, March'2001 *Advanced Computing and Microelectronics Unit, Kolkata.*
81. Robinson Edward Raja, C., NBHM Post-Doctoral Fellow, April – May 2000 and June – October 2000 *Stat Math Unit, Bangalore.*
82. Samuel, Joseph, Raman Research Institute, Chennai, March 14, 2001 *Stat Math Unit, Bangalore.*
83. Semrul, Peter, University of Ljubljona, Slovenia, December 13–18, 2000 *Stat Math Unit, Delhi.*
84. Sengupta, Ambarnil, Louisiana State University, USA., February '2001 – April' 2001 *Stat Math Unit, Kolkata.*

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85. Sengupta, Arindam, Visiting Scientist, July 20, 1999 - August' 2001 *Stat Math Unit, Kolkata.*
86. Sengupta, Sarbajit, Viswa Bharati University, Shantiniketan, October 12 - October 30, 2000 *Planning Unit, Bangalore.*
87. Serra, Stenforo, The University of Firenze, Italy, January 15 - March 2001 *Stat Math Unit, Delhi.*
88. Shah, Riddhi, School of Mathematics Tata Institute for Fundamental Research, Mumbai, November 6, 2000 - November 12, 2000 *Stat Math Unit, Kolkata.*
89. Silva, Dias Da, Departamento de Matematica de Universickade de Lisboa, Portugal, August 27, 2000 - 23, February, 2001 *Stat Math Unit, Delhi.*
90. Sin, Peter, University of Florida, U.S.A , June 19,2000 - July 19, 2000 *Stat Math Unit, Bangalore.*
91. Somers, Harold, UMIST, UK, March' 2001 Computer Vision and Pattern Recognition Unit, Kolkata.
92. Srinivasan, R., NBHM Post-Doctoral Fellow, April 2000 *Stat Math Unit, Bangalore.*
93. Stempak, K., Pliotechnika Wrocklawska, March 15 - April 10, 2001 *Stat Math Unit, Bangalore.*
94. Subba Rao, Suhasini, University of Bristol, U.K., February 20 – March 5, 2001 *Stat Math Unit, Delhi.*
95. Subramoniam, V.I., ISDL, May' 2000 *Computer Vision and Pattern Recognition Unit, Kolkata.*
96. Tarannikov, Yuriy, University of Discrete Mathematics, Moscow, Russia, December 1, 2000 -- January 15, 2001 *Applied Statistics Unit, Kolkata.*
97. Terdik, Habil Gy, KLTE, Debrecen, Hungry, January 03–30 ,2001 *Stat Math Unit, Delhi.*
98. Tiwari, Ram, University of North Carolina, USA., August 10-11, 2000 *Stat Math Unit, Delhi.*
99. Varma, Mahendra, Physics Department, Indian Institute of Technology., Kanpur, September 25, 2000 October 22, 2000 *Physics and Applied Mathematics Unit, Kolkata.*
100. Volanfova, Julia, Louisiana State University, U.S.A December 14 - 16, 2001 *Stat Math Unit, Delhi.*
101. Wadhwa, Wilima, SERFA, August – December 2000 *Planning Unit, Bangalore.*
102. Yanase, Shinichiro, Department of Mechanical Engineering, Okayama University, Japan, February 14-19, 2001. *Physics and Applied Mathematics Unit, Kolkata*
103. Zvengrowskii, Peter, University of Calgary, Canada, February 19-24, 2001 *Stat Math Unit, Kolkata.*

9. HONOURS, AWARDS AND SPECIAL ASSIGNMENTS

Theoretical Statistics and Mathematics Division

Stat Math Unit, Calcutta

Ghosh, J.K., was awarded the P.V. Sukhatme Prize.

Mukherjee, Rahul, received Bhatnagar award in Mathematical Sciences for the year 2000.

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

Stat Math Unit, Delhi

Dey, Aloke, was elected Fellow of the Indian National Science Academy (FNA).

Pal, Arup, received the INSA Young Scientist Award in Mathematics.

Parthasarthy, K.R., Conferred Doctor Honoris Causa by Nottingham Trent University, U.K. in July 2000.

Rao, B.L.S.P., His presented paper entitled Weighted Least Squares and Nonlinear Regression published in the Journal of Indian Society of Agricultural Statistics was adjudged as the Best paper in the field of Statistical Methodology.

Applied Statistics Division

Applied Statistics Unit

Biwas, Atanu, received M.N. Murthy award for 2000-2001.

Computer and Communication Sciences Division

Advanced Computing and Microelectronics Unit

Sinha, B. P., was awarded Homi J. Bhabha Award by the University Grants Commission, Outstanding Contributions to Applied Sciences. He also selected JSRO-Chair Professor at IIT Kharagpur by Indian Space Research Organisation, Outstanding Contributions to Computer Science.

Computer Vision and Pattern Recognition Unit

Chaudhuri, B.B., was elected Fellow of the IEEE.

Electronics and Communication Sciences Unit

Dutta Majumder, Dwijesh, was awarded S K Mitra memorial award and medal by Institution of Electronics and Telecommunication Engineers.

Pal, Nikhil R., continued as an associate editor (i) IEEE Trans. on Fuzzy Systems, (ii) IEEE Trans. on SMC part B (Electronic), (iii) International Journal of Approximate Reasoning and (iv) International Journal of Fuzzy Systems.

Machine Intelligence Unit

Bandyopadhyay, S., was awarded the Indian National Science Academy (INSA) Young Scientist medal in Engineering Sciences, 2000.

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Mitra, S., was elevated as Senior Member of ISEE.

Murthy, C. A., was elected a fellow of Indian National Academy of Engineering.

Pal, S.K., has been received the Khwarizmi International Award (1st winner) from the Islamic Republic of Iran, 2000. He continued as an IEEE (USA) Computer Society Distinguished Speaker for the Asia Pacific Region, and as a Category B speaker under the Theoretical Physics Seminar Circuit Programme of S. N. Bose National Centre for Basic Science for 1998-2000. He appointed a member of the Editorial Boards of the Fuzzy Sets and Systems, Fundamenta Informaticae, Int. Journal of Pattern Recognition and Artificial Intelligence, and a member of the Advisory Editor of Image Vision and Graphics and. He also continued to serve as an Associate Editor of the journals - Pattern Recognition Letters, Neurocomputing, Information Sciences, and Applied Intelligence; as an Executive Advisory Editor of IEEE Trans. on Fuzzy Systems and Int. J. of Approximate Reasoning; and a member of the Reviewing Boards of Mathematical Reviews (American Mathematical Society) and IEEE Computer.

Physics and Earth Sciences Division

Physics and Applied Mathematics Unit

Mandal, B.N. was awarded Fellow (FIMA) by the Institute of Mathematics and its Applications, U.K.

Biological Sciences Division

Agricultural Sciences Unit

Joshi, Hema, received the award of Certificate of Merit for the Best Paper presentation in the section of Ecology, Plant Geography and Environmental Studies at the 23rd All India Botanical Conference, Meerut during October 14-16, 2000.

Anthropology and Human Genetics Unit

Majumder, Partha P., was elected a Fellow of the Indian National Science Academy.

Social Sciences Division

Economic Research Unit

Chakravarty, Satya R., was elected as a member of the Editorial Board of 'The Journal of Economic Inequality', Kluwer Academic Publishers.

Population Studies Unit

Bhattacharya, Biswanath, was elected a member of the Editorial Board, Demography India by Indian Association for the Study of Population.

Pathak, Prasanta, elected as a member, Editorial Board of Indian Journal of Regional Science.

Psychology Research Unit

Ghosh, Anjali, was awarded Witkin Okonji award by the International Association of Cross-Cultural Psychology.

Maitra, Manjishtha, was awarded 'ISCA Young Scientist Award' by the Indian Science Congress Association in January, 2001.

10. SCIENTIFIC ASSIGNMENTS ABROAD

Theoretical Statistics and Mathematics Division

Stat Math Unit, Calcutta

Bandyopadhyay, Pradipta, visited the Department of Mathematics, University of Iowa, Iowa City, USA during August 16, 1999 - May 22, 2000 as a Visiting Professor.

Barua, Rana, visited the Department of Mathematics and Computer Science at the University of Miami, Coral Gables, U.S.A during August 16, 1999 - May 15, 2000.

Basu, Srabashi, attended the International Biometric Society Conference and presented a paper "*Estimating AIDS incubation distribution for Indian Seroconverters*" in Berkeley, USA, during July 2-7, 2000. He also visited Pennsylvania State University, USA during Jan, 2001 - June, 2001.

Bose, Anup, visited (i) the Department of Statistics, Purdue University, USA during January 3, 2000 - May 15, 2000, (ii) the Department of Statistics, National University of Singapore. He delivered lectures on (i) "*Generalised Bootstrap and its accuracy*" at Indiana University-Purdue University at Indianapolis; University of Illinois, Urbana Champaign; University of California, San Diego; Northern Illinois University, De Kalb, Illinois; Michigan State University, East Lansing, Michigan; Rutgers University, New Brunswick, New Jersey; University of Georgia, Athens, Georgia and University of Cincinnati, Cincinnati, Ohio, (ii) "*Boundary crossing problem with application to sequential estimation*" at Indiana University, Purdue University at Indianapolis. He participated in a workshop on *Limit Theorems in Probability* held in the Department of Statistics, University of Mysore during September 04-07, 2000 and delivered four lectures. He also worked as co-editor and managing editor of *Sankhya A*

Bose, Smarajit, visited (i) the National University of Singapore during April 15-29, 2000, (ii) the Hong Kong University of Science and Technology, (iii) the University of California, Santa Barbara during Jan, 2001 to June, 2001.

Choudhuri, Probal, visited the Laboratory of Statistics and Probability at Paul Sabatier University at Toulouse (France) in June 2000 for a month, (ii) the National Institute for Agronomic Research (INRA) in France and gave several invited lectures in France during this period as a Visiting Professor. He also delivered lecture at the Leeds Annual Statistics Research Workshop at University of Leeds (UK) in July 2000.

Ghosh, J. K., visited the Purdue University, U.S.A., as Professor during August 14, 2000 - December 27, 2000. He also delivered lecture at (i) the IMS-Bernoulli in Mexico during May 6 - June 19, 2000, (ii) the Biennial meeting of International Society of Bayesian Analysis held in Crete, Greece.

Mukherjee, Goutam, visited IRMA, Strasbourg, France during August 30 - December 13, 2000. He delivered a talk (i) at University Pan's Nord in November 2000, (ii) in GDR-meeting on Algebraic Topology at Starbourg in October 2000. He also attended workshop on "Operands and applications" in Oberwolfach, Germany in October 2000.

Purkayastha, Sumitra, was invited as a Guest Scientist for the collaborative project *Biomedical Image Processing and Image Database Generation* between GSF and Indian Statistical Institute, CVPRU, Calcutta, at GSF-Institute of Biomathematics and Biometry, Munich, Germany during September 7, 1999 - March 3, 2000.

Sikdar, K., visited NTT Labs at Yokosuka, Japan, during August 14-15, 2000 and gave a talk entitled "*on the approximation properties of NP-optimization problems and hardness of approximation*". He also attended the IFIP International Conference on Theoretical Computer Science (IFIP TCS 2000) held at Tohoku University, Sendai, Japan, during August 17-19, 2000 and presented a paper.

INDIAN STATISTICAL INSTITUTE

Sinha, Bikas Kumar, visited (i) the University of Tampere, Finland and University of Waterloo, Canada, during May-June 2000, in connection with collaborative research projects, (ii) the University of Florida, Gainesville, USA during October-November, 2000 in connection with collaborative research.

Stat Math Unit, Delhi

Bapat, R.B. visited University of Bielefeld, Germany during November 7-24, 2000. He attended conference on "Nonnegative Matrices, M-matrices and Applications, Oberwolfach, Germany, November 26 - December 2, 2000, and presented a talk entitled "Perron Eigenvector of the Tsetlin Matrix."

Bhatia, R., visited the (i) University of Jordan during 8 -11 June 2000 and delivered two lectures, (ii) Erwin Schrodinger Institute, Vienna, Austria during June 12 - 17, 2000, (iii) University of Bielefeld, Germany, during June 20 - July 19. He also visited University of Pisa during October 10 - 12. He gave a talk at the Institute of Biomathematics and Biometry, Munich, on June 19, 2000. He also gave three lectures at the University of Pisa, (i) University of Genova on November 8, (ii) University of Udine on November 13, (iii) University of Ljubljana in Slovenia on November 16, 2000.

Dey, Aloke, visited the Department of Statistics, The University of Akron, Ohio during August 2000 - December 2000.

Kocher, S.C., visited (i) the Department of Statistics and Actuarial Science, University of Hong Kong, during November 27-December 7, 2000, (ii) Paul Sabatier University, Toulouse, France during the period Jan 15-Feb 2, 2001, (iii) the Department of Mathematics of the University "La Sapienza" Rome, Italy during February 4 -24, 2001. He also appointed as a Associate Editor of the (i) Journal of Statistical Inference and Planning for a period of three years (2001 - 2003), (ii) Reliability and Applications, an international journal published by the Korean Reliability Society.

Parthasarthy, T., attended an International conference on Mathematical Programming at Georgia Institute of Technology, U.S.A. during August 7-11 and gave a talk on "Stochastic Games and Vertical Linear Complementarity Problem." He visited (i) France for four weeks during August 17 - September 16, 2000 under the bilateral exchange programme. During this time he visited INRIA (ii) the Ecole Polytechnique Institute and gave a talk on "Stability and Largeness of the Core".

Rao, B.L.S.P., was an invited speaker at the International Symposium on "Inference for Stochastic Processes" University of Georgia, Athens, during May 10-12, 2000.

Roy, Rahul, visited Chiba University, during May 1 - October 15, 2000 under the auspices of the Japan Society for the Promotion of Science.

Stat Math Unit, Bangalore

Bhat, B.V. Rajarama, visited the (i) Technical University of Cottbus, Germany, (ii) Centro Vito Volterra, Rome, (iii) University of Bari, Italy, (iv) University of Nottingham and Nottingham Trent University, UK during June 04, 2000 - August 03, 2000 and (v) Institute for Mathematics and Informatics, Burg, Germany during March 15-21, 2001. He also gave an invited lecture at the international conference on "Quantum Probability and Infinite Dimensional Analysis".

Biswas, J., visited I.C.T.P., Trieste, Italy during April - May, 2000.

Prajapat, Jyotshana, visited University of Paris IX-Dauphine, Paris during October 30, 2000 - December 05, 2000.

Rajeev, B., visited (i) Michigan State University, East Lansing, Michigan (ii) University of California, San Diego, USA Since August 09, 1999.

Rao, K.P.S.B., visited (i) University of Essen, Germany during October 16, 2000 - November 15, 2000 and (ii) North Dakota State University, Fargo, North Dakota during February 19, 2001 - May 18, 2001.

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Rao, T.S.S.R.K., visited University of Missouri, Columbia, USA during August 30, 1999 - June 02, 2000.

Sury, B., visited University of Glasgow, Scotland, UK during January 15 - March 15, 2001.

Thangavelu, S., visited Brock University, Canada during May 01 - May 31, 2000.

Applied Statistics Division

Applied Statistics Unit

Biswas, Atanu, visited (i) the Department of Mathematics and Statistics, University of Montreal, Montreal, Canada, for three weeks in July, 2000. (ii) the Department of Mathematica and Statistics, memorial University of Newfoundland, St. John's Canada, for two months in 2000. (iii) Institute of Statistical Science, academia Sinica, Taipei, Taiwan, during November 30, 2000 - December 23, 2000.

SenGupta, Ashis, visited the University of Leeds, U.K., during 1st week of July, 2000 to present an invited paper at the International Conference. He also continued as (i) Associated Editor of Journal of Statistical Planning and Inference, USA, 2001 and (ii) Member of the Governing Body. Forum for Interdisciplinary Mathematics, USA.

Vijayan, K.S., served as a Guest Editor, Journal of Statistical Planning & Inference, Vol.95.

Computer and Communication Sciences Division

Advanced Computing and Microelectronics Unit

Bhattacharya, B. B., visited (i) University of Potsdam, Germany, during June - July 2000, (ii) the Department of Computer Science and Engineering, University of Nebraska, Lincoln, USA since January 2001 as a Visiting Professor.

Das, N., visited Canada during August 2000 to present a paper at the International Conference on "Parallel Processing, (ICPP 2000)", held in Toronto. She also delivered lectures at the University of Guelph and the Carleton University, Ottawa.

Sinha B. P., visited IRISA, Rennes, France during April 2000.

Sur-Kolay, S., visited IRISA, Rennes, France during September 2000.

Computer Vision and Pattern Recognition Unit

Chaudhuri, B.B., visited LORIA, France for one year.

Garain, U., visited GSF, Munich during September, 2000 -- January, 2001.

Pal, U., visited LORIA, France for one year.

Palit, S., visited the Department of Electrical & Computer Engineering, University of California, Santa Barbara, as a visiting scientist during July--August, 2000.

Electronics and Communication Sciences Unit

Pal, Nikhil R., visited (i) Computer Science Department, University of West Florida, USA during January 10, 2000 - July 10, 2000, (ii) Meiji University & University of Tokushima, Japan in January, 2001 for 15 days and gave seminars.

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Mukherjee, Dipti Prasad, visited the International Centre for Theoretical Physics (ICTP), Italy, during September 4-22, 2000 to attend a school on mathematical problems & image processing.

Machine Intelligence Unit

Ghosh, A., visited (i) the German National Research Center for Information Technology (GMD), Bonn, in April 2000 and delivered talks (ii) Dortmund University, Dortmund, (iii) University of Karlsruhe, Karlsruhe Germany in April 2000 under the INSA-DFG (Germany) Scientific Exchange Program, (iv) the Warsaw University, Warsaw, and Warsaw University of Technology, Warsaw, Poland and delivered talks, (v) the Leiden University, Leiden, Netherlands. He served as a member (i) the programme committee of the Seventh International Conference on Fuzzy Theory and Technology, New Jersey, USA, 2000, (ii) the International Conference on Parallel Problem Solving from Nature (PPSN VI), Paris, during September 16-20, 2000. He also acted as an International Scientific Committee Member for the International Conference on Mathematics and Computers in Physics, Greece, during July 10-15, 2000.

Mitra, S., served as a member of the International Programme Committee of the Second International ICSC Congress on Computational Intelligence: Methods & Applications (CIMA 2001), Bangor, UK, during June 19-22, 2001.

Murthy, C. A., visited the University of Leeds, UK, in July 2000. He also attended a workshop, presented a paper and chaired a session.

Pal, S. K., worked at the Hong Kong Polytechnic University as a Visiting Professor during November 2000 to January 2001 and at the Warsaw University, Poland during September 9 - 29, 2000. He attended the 15th Int. Conf. on Pattern Recognition (ICPR 2000) at Barcelona in September 2000 as an invited tutorial speaker and was a chairperson of a session, and the Int. Conf. On Automation, Robotics, Control and Vision (ICARCV) at Singapore in December 2000 as an invited tutorial speaker. He visited and delivered lectures at the Universidad Pontificia Comillas, Instituto de Investigacion Tecnologica, Madrid, Spain, during September 7-8, 2000; INSEAD, France, during September 28-30, 2000; Institute of Automatics, University of Mining and Metallurgy, Krakow, Poland on September 13, 2000; Dept. of Electronics, Telecommunications and Informatics, Technical University of Gdansk, Poland, September 21, 2000; Hong Kong observatory, Hong Kong in December 2000; the Iran Telecommunication Research Center (ITRC),

Tehran, Iran, on February 4, 2001; the Iranian Research Organization for Science and Technology (IROST), Tehran, Iran, on February 6, 2001. He served as a member of the programme committee of IIZUKA 2000 during October 1-4, 2000, at Iizuka, Japan; International Software Development and Management Conference during October 12-13, 2000, at Hong Kong, Japan; 1st International Conference on Parallel and Distributed Computing, Applications and Technologies, during May 22-24, 2000, Hong Kong 15th Int. Conf. On Pattern Recognition (ICPR 2000) during September 3-8, 2000. He has been serving as a programme committee member of the 3rd International Conference On Data Warehousing and Knowledge Discovery (DAWAK 01) during September 5-7, 2001 at Munich, Germany, and JSAI International Workshop on Rough Set Theory and Granular Computing, Shimane Prefectural Assembly Hall, Matsue Shimane, Japan, during May 20-22, 2001.

Physics and Earth Sciences Division

Physics and Applied Mathematics Unit

Dandapat, B.S., served as a member of the Editorial of "International Journal of Applied Mechanics and Engineering", Poland.

Das, P.K., visited Italy during September 23-29, 2000 to attend CIRM-Volterra International School on "Quantum Interacting Particle Systems".

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Mandal, B.N., served as a member of the (i) the Board of Editors of "International Journal of Mathematics and Mathematical Sciences", USA, (ii) Editorial Board of "Advances in Fluid Mechanics" Book Series, and Associate Editor, WIT Press, Southampton, U.K.

Mazumder, B.S., visited Beijing, China, during June 1- July 31,2000. He also served as member of the Editorial Board of "International Journal of Sediment Research" (IRTCES), China.

Roy, Bamana, visited Italy, during October 1-31,2000.

Roy, Pinuki, Visited Czech Republic, Hungary, Italy during September 12 – October 31,2000.

Ruychoudhury, Rajkumar, visited Czech Republic, Hungary, Italy during September 12 - October 13,2000.

Biological Sciences Division

Agricultural Sciences Unit

Bagchi, Dipal Kumar, visited University of Reading, UK during July 11-24,2000. He also attended an International Workshop sponsored by DFID on Forest Products in Poor Urban and Peri-urban Areas.

Ghosal, Prabir Kumar, visited International Rice research Institute, Los Banos, Philippines during May 6-10,2000.

Anthropology and Human Genetics Unit

Majumder, Partha P., participated (i) meeting at the Fogarty International Center, U.S. National Institutes of Health, Bethesda during September 25-26, 2000, (ii) the World Health Organisation's Global Forum on Bioethics in Research as a member of the Working Group on Community Benefit Agreements during October 14-15, 2000, Bangkok, (iii) the annual meeting of the International Genetic Epidemiology Society and chaired a Scientific and the ELSI sessions, San Antonio during October 27-28, 2000. He also delivered a talk on (i) "Ethnic India: A Genomic View" in the Department of Biostatistics, on September 27, 2000 and (ii) "Deciphering the Genetic Architecture of a Multivariate Phenotype" in the Department of Psychiatry on September 28, 2000, Washington University School of Medicine, St. Louis.

Roy, Bidyut, visited the Institute of Molecular Medicine, John Radcliff Hospital, Oxford, U.K.

Biochemistry Unit

Duttagupta, C., was appointed as Visiting Assistant Professor at the Department of Obstetrics and Gynecology, Albert Einstein College of Medicine, New York, USA during July 2000 – June 2001.

Biometry Unit

Basu, T.K., visited (i) University of Berkeley, California, USA during July 2-7,2000 to participate in the XXth International Biometric Conference and (ii) University of Kasetsart, Thailand during July 10-14,2000.

Embryology Unit

Chattopadhyay, Joydev, visited Laboratoire d'Informatique Applique, Bondy Cedex, Paris, France, as a visiting scientist during June 1 - August 30, 2000. He was also invited by the University of Neuchatel, Switzerland during November 1 - December 15, 2000 to work on the description of food webs and plankton blooms.

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Sarkar, Ram Rup, visited by the University of Neuchatel, Switzerland during November 1 - December 15, 2000 to work on the description of food webs and plankton blooms.

Plant Chemistry Unit

Dewanji, Anjana, visited Chemical Nutrition Research Program at the University of Washington, Seattle, USA during June 7 - November 10, 2000.

Social Sciences Division

Economic Research Unit

Chakravarty, Satya R., visited the Kagawa University and Okayama University, Japan in June 2000.

Chattopadhyay, Manabendu, attended (i) the OECD/UNU conference on "Sustainable Global Future" at Tokyo during May 24-25, 2000 and (ii) the project review meeting on "Sustainable Development Framework for India" during May 26-27, 2000 being sponsored by the Institute of Advanced Studies, United Nations University Tokyo. He also visited (i) the University of Iwate, Morioka, Japan and (ii) the University of Hokkaido, Sapporo, Japan.

Dasgupta, Dipankar, visited the Institute of Social & Economic Research, Osaka University, Osaka, Japan during October 1, 2000 - March 31, 2001.

Kabiraj, Tarun, visited (i) the Department of Decision Sciences and (ii) Managerial Economics, The Chinese University of Hongkong, Shatin, NT, Hongkong.

Mazumdar, Krishna, presented a paper in the "Rich and Poor Conference" at International Sociological Association Working Group on Social Indicators and Social Reporting, Wissenschaftszentrum - Berlin during October 12-16 October, 2000.

Mukherjee, Diganta, presented a paper and chaired a session at the 5th meeting of the Society for Social Choice and Welfare, University of Alicante, Alicante, Spain in June, 2000.

Mukherjee, Robin, attended (i) the OECD/UNU Conference on "Sustainable Global Future" at Tokyo during 24-25 May 2000, (ii) the project review meeting on "Sustainable Development Framework for India" during 26-27 May 2000, Tokyo and also gave a seminar at the University of Hokkaido, Japan.

Planning Unit

Chatterji, Shurjit, visited Colegio de Mexico, Mexico in September 2000.

Das, Satya P., visited The University of Washington, Seattle, USA in August 2000.

Das, Saughamitra, Boston University, Northwestern University in July 2000.

Dutta, Bhaskar, visited University of Copenhagen, University of Warwick, Hitotsubashi University Japan during May 2000, November 2000 and March 2001.

Jalan, Jyotsna, visited The World Bank, Washington DC during June, July 2000.

Ramaswami, Bharat, visited LEI, The Hague, October 2000.

Sen, Arijit, visited The University of Maryland, College Park during June, July 2000.

Sen, Arunava, visited City University of Hong Kong and Bilkent University Turkey during June 2000 and August 2000.

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Psychology Research Unit

Ghosh, Anjali, attended and presented papers at the (i) 15th IACCP Congress at Pultusk, Poland during July 16-21, 2000, (ii) 27th International Congress of Psychology at Stockholm, Sweden, during July 23-28, 2000, (iii) 8th Symposium of European Psychologists of Religion-Pluralism and Religions Identity at Sigtuna, Sweden during July 28-31, 2000, (iv) XVIIth Congress of the International Association of Empirical Aesthetics at New York, USA during August 9-12, 2000 and (v) the International Conference on "People and the Environment" held at Dhaka, Bangladesh during February 24-25, 2001. She also visited and gave two lectures at California State University, Chico, USA during August 16-26, 2000.

Sociological Research Unit

Das Gupta, Umm, was elected to a Visiting Fellowship at Oriol College, University of Oxford during July-September 2000 for research on the Thompson Papers.

Ramachandran, V.K., visited (i) Conference on Gender, Development and Rights, as part of the Beijing Plus Five UN Meetings, United Nations Research Institute for Social Development (UNRISD), New York, during June 1-6, 2000, (ii) Development Studies Institute (DESTIN) Conference on "New Institutional Theory, Institutional Reform and Poverty Reduction", London School of Economics and Political Science, London during September 7-8, 2000 and (iii) UNRISD Conference on Social Policy in a Development Context, Stockholm, during September 23-24, 2000.

Swaminathan, Mudhura, visited and attended (i) Conference on Rethinking the Information Sector, Organised by the Radcliffe Public Policy Centre, Harvard University during May 24-26, 2000, (ii) Conference of the International Association of Feminist Economics, Bogazici University, Istanbul during August 14-18, 2000. She also presented a paper.

Statistical Quality Control and Operations Research Division

Chakraborty, S.C., visited Indianapolis, USA to attend 54th Annual Quality Congress (AQC) and presented a paper on 'Analysis of Routine Data to Improve Product Quality' during May 08-10, 2000. He also gave a talk at IOWA University, USA, during his visit.

Majumder, B., visited Mauritius during August 23 - September 04, 2000 to organize training programme for the industries in Mauritius.

Murthy, G.S.R., visited (i) University of Chicago, Chicago and (ii) University of Maryland, Baltimore, during August-October 2000.

Rajagopal, A., visited Colombia and U.K. in connection with 'New Development in Cotton Textiles and participated in customer meet' on challenges of India in quality improvement and cost control during the forthcoming Non-quota era.

Documentation and Information Sciences Division

Documentation Research and Training Centre (DRTC)

Ravichandra Rao, I.K., visited (i) Addis Ababa University, Addis Ababa during June 2-9, 2000, (ii) COLNET for workshop on Scientometrics during September 1-3, 2000 where he presented a paper and chaired a Technical Session and (iii) Linthurgs University Centrum, Belgium during March 1 - May 30, 2001.

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11. SCIENTIFIC ASSIGNMENTS IN INDIA

Theoretical Statistics and Mathematics Division

Stat Math Unit, Calcutta

Bose, Arup, chaired a session in International Conference in honour of eightieth birthday of Professor C.R. Rao, Indian Statistical Institute, Kolkata, India, December 29-30, 2000.

Dutta, Amartya Kumar, served as a member of the NBHM Nurture and contact programme organized by ISI, Calcutta for the 1998-2002 batch of Olympiad students. He delivered lectures in Algebra during the second summer camp of the programme held at ISI, Calcutta, during 5 June - 1 July, 2000. He also delivered lectures on (i) "Some Problems in Affine Fibrations" on 20th February 2001 at the University of Calcutta, (ii) "Mathematics in Ancient India : Some Diophantine Equations" at Presidency College, Calcutta, on 4th December, 2000 and at Ramkrishna Mission College, Narendrapur, on 15th December, 2000.

Dasgupta, Ratan, attended the software quality project meeting at Bangalore during June 30 - July 4, 2000 and at Calcutta during 26-30 August, 2000 and gave a lecture on Mahalanobis distance between two populations.

Ghosh, J. K, delivered lectures at several Universities and Conferences. He visited I.S.I., Bangalore and gave several lectures and I.S.I., Delhi to chair a DST meeting on mathematical sciences. Chaired the Advisory and Organizing Committee for an international conference in Delhi in December, 2000.

Mukherjee, Amiya, worked on a project of DST, Government of India, under the USERS scheme. He gave lectures on (i) some topics in Differential Geometry in NBHM in the Nurture Programme held at ISI, Calcutta, during June 5 - July 1, 2000, (ii) topology of four manifolds. He also attended "Low Dimensional Topology" Conference at Allahabad organized by Allahabad University and MRI, during December 15 - December 31, 2000. He also gave two lectures in the World Mathematical Lecture Series for Colleges Students (sponsored by NBHM) during November - December 2000.

Mukherjee, Goutam, attended conference on "Low Dimensional Topology" at MRI, Allahabad in December 2000.

Naolekar, Anirudha C., attended a workshop on "Low Dimensional Topology" at MRI, Allahabad, in December 2000.

Purkayastha, Sumitra, attended and presented a paper in a national level discussion meeting held during March 2-3, 2001 at the Department of Statistics, Calcutta University.

Raha, A. B, participated in the Mathematics Training and Talent Search (MTTS) programme of the NBHM as a Resource Person held at IIT Guwahati during June 5-30, 2000. He also participated and presented a paper in the Golden Jubilee Conference of the International Statistical Education Centre (ISEC) held at New Delhi & Calcutta during October 13-18, 2000.

Rao, A.R, served as an expert on the Faculty Selection Committee of Indian Institute of Technology, Madras for Mathematics during 18-19 September 2000. He also gave six lectures on Graph Theory in the Refresher Course conducted by Academic Staff College, University of Hyderabad, during 22-25 September 2000.

Rao, B.V, participated in the second contact programme for NBHM students during May-June 2000. He gave two lectures as part of a series of lectures (during November-December, 2000) for College students in Calcutta and its environs, under the sponsorship of NBHM, to celebrate the World Mathematical Year 2000.

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Roy, A.K., delivered lecture on "Convex Geometry" at Lady Brabourne College, Calcutta as part of a series of lectures (during November-December, 2000) for College students in Calcutta and its environs, under the sponsorship of NBHM, to celebrate the World Mathematical Year 2000.

Sarbadhikari, H., served as the regional coordinator for conducting the Regional and National level tests for the Mathematical Olympiad on behalf of NBHM.

Sinha, Bikas Kumar, continued to work as the Editor of *Calcutta Statistical Association Bulletin*. Participated as an expert in the Workshop On Survey Methods, Data Analysis And Quality Control organized by Public Affairs Committee [PAC], Bangalore during April 14-15, 2000. He attended an International Conference in Honour of Professor C. R. Rao at ISI, Hyderabad Centre. He visited Indian School of Mines as a Member of PG Board of Studies, Vallabh Vidya Nagar, Gwahati University, Dibrugarh University, Delhi University, Pt. Ravi Shankar Shukla University [Raipur] & IIT, Bombay. He also acted as a Core Member of the "Curriculum Development Committee (CDK)" of the UGC (UG & PG - Statistics).

Srivastava, S.M., attended 11th Mid-Year meeting of the Indian Academy of Sciences at the Indian Institute of Science, Bangalore, during July, 14-15, 2000.

Tripathi, T.P., visited Aligarh Muslim University, Aligarh, to attend a meeting of the Board of Studies. He also acted as a member of the Editorial and Refereeing Board of the Aligarh Journal of Statistics.

Stat Math Unit, Delhi

Bapat, R.B., was invited as a Resource person, International Mathematical Olympiad Training Camp, Homi Bhabha Science Education Centre, Mumbai, during May 8-20, 2000.

Bhattach, R., acted as the Chairman of a Committee to celebrate the World Mathematical year 2000 in Delhi on behalf of the National Board for Higher Mathematics. He attended a conference on Geometry and Analysis at the Banaras Hindu University during August 21 - 24 and gave a talk. He visited the Tata Institute of Fundamental Research, Mumbai during August 31 - September 8, 2000 and gave three lectures there.

Dewan, I., attended a workshop on Statistical Modelling, Computations, Graphical Methods and Data Analysis held at Delhi University during December 29, 2000. He also presented a talk on "Testing Bivariate Symmetry Against Dispersive Asymmetry" at IISA conference held at IIC during December 30 - January 2, 2001.

Kocher, S.C., chaired a session and gave an invited talk in the National conference on Statistical Inference and Reliability held at Punjab University, Chandigarh in November 2000 and organised and chaired a session on Reliability and Survival Analysis during the joint meetings of the International Indian Statistical Association held in Delhi in January 2001. He served as a member of the local organizing committee and gave a talk. He also gave an invited talk in the Statistics section of the Science Congress held in Delhi in January 2001.

Rao, B.L.S.P., was reappointed as the Chairman of the Programme Advisory Committee on Scientometrics, Department of Scientific and Industrial Research, Ministry of Science and Technology (2000-2002). He gave an invited talk (i) during the International Mathematical Year 2000, Indian Institute of Technology, Kanpur, (ii) in the International Conference on "Stochastic Processes" in honour of Prof. Gopinath Kallianpur, Indian Statistical Institute, Calcutta, in December 2000 and (iii) in the International Indian Statistical Association Conference, New Delhi during December 2000-January 2001.

Sarkar, A., delivered a series of three lectures on Ising model in the Inter-disciplinary workshop on Probability and Statistical Physics at S. N. Bose Institute of Natural Sciences during February 2001.

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Stat Math, Bangalore

Bhat, B.V. Rajurama, visited University of Goa, Goa, during December 14 - 20, 2000. He also gave lectures at the international conference on Schrodinger and Jacobi Operators.

Padmawar, V.R., visited Birla Centre, Hyderabad during December 9 -13, 2000. He also attended the Ninth International Workshop on "Matrices and Statistics" organized to celebrate Prof. C. Rao's 80th Birthday.

Raja, CRE, the visited Tata Institute for Fundamental Research, Mumbai, during January 11 - 20, 2001.

Ramasubramanian, S., visited (i) Calcutta University, Calcutta during March 02-03, 2001, (ii) Karnataka University, Dharwar during March 23-24 , 2001 for invited talks and (ii) IISA-2000-2001-India-JSM: Joint Statistical Meeting during December 30, 2000 - January 03, 2001. He also participated and made a presentation at the DST- sponsored meeting of Statisticians/ Probabilists and Engineers/ Scientists.

Sury, B., visited Harish-Chandra Research Institute, Allahabad during November 13-18, 2000 to give lectures in the Conference on Elliptic Curves.

Sitaram, Alladi, Editor of the Proceedings of the Indian Academy of Science Mathematical Sciences.

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

Applied Statistics Division

Applied Statistics Unit

Adhikary, Arun Kumar, presented a paper entitled "On alternative variance estimators in three-stage sampling" (jointly with Arijit Chudhuri and Shankar Dikidar) in the Section of Statistics in the 88th Session of the Indian Science Congress held at Indian Council of Agricultural Research (ICAR), New Delhi during January 3-8, 2001.

Sengupta, Ashis, continued as a (i) guest editor of the Journal of the Indian Society for Probability and Statistics, 2001, (ii) Associate Editor of the Journal of the Indian Statistical Association, 2001 , (iii) Member of the Executive Council, Indian society for Probability and Statistics. He was elected as a (i) Regional Member of the Indian Science Congress, 2001, (ii) Resource Person for Workshop on Computer oriented Statistics, University of Pune, December 2000 and delivered series of invited lectures, (iii) Resource Person, Workshop on Biostatistics, Manipal University, January 2001 delivered series of invited lectures, (iv) Organizer of an Invited session, chairman of an Invited session, and Invited Speaker, International Conference of the IISA & JSM, Delhi, December 30, 2000 - January 2, 2001, (v) Organizer of two Invited sessions, Chairman of an Invited session and Invited Speaker, International Conference of the Forum for Interdisciplinary Mathematics, Indian Institute of Technology - Powai, December 2000, (vi) Invited Speaker, International Conference of Order Statistics and Related topics, University of Mysore, December 2000, (vii) Invited Speaker, (two lectures), International Triennial Conference, Calcutta University, December 2000, (viii) Invited Speaker, Conference of the Indian Society for Probability and Statistics, Pt. R.S. University, Raipur, March 2001.

Computer and Communication Sciences Division

Advanced Computing and Microelectronics Unit

Bhattacharyya, B. B., acted as (i) the Program Co-Chair of the 4th VLSI Design and Test Workshops, New Delhi in August 2000 and (ii) a member of the Program Committee of the 14th International Conference on

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VLSI Design in January 2001, jointly sponsored by IEEE Circuit and Systems Society, IEEE Computer Society, ACM SIGDA and VLSI Society of India.

Chakraborti, M. K., acted as the Organizing Chair of the National Workshop on " Mobile Computing" Tezpur University, Assam in January 2001.

Das, N., acted as (i) a member of the Program Committee of the 8th International Conference on Advanced Computing and Communications (AICOM 2000), Cochin in December 2000, jointly sponsored by IEEE Computer Society, Advanced Computing and Communications Society, India and Cochin University of Science and Technology, India and (ii) Program Chair of the National Workshop on Mobile Computing, Tezpur University, Assam in January 2001.

Das, S., acted as the Publications Co-Chair of the National Workshop on Mobile Computing, Tezpur University, Assam in January 2001.

Dattagupta, J., acted as a member (i) the Program Committee of the 8th International Conference on Advanced Computing and Communications (AICOM 2000), Cochin in December 2000, jointly sponsored by IEEE Computer Society, Advanced Computing and Communications Society, India and Cochin University of Science and Technology, India and (ii) the Program Committee of the National Workshop on Mobile Computing, Tezpur University, Assam in January 2001, (iii) the Program Committee of the Asia-Pacific Conference on ASIC (AP-ASIC' 2000), Korea in 2000.

Mukhopadhyay, K., acted as (i) the Fellowship Co-Chair and (ii) as a member of the Program Committee of the National Workshop on Mobile Computing, Tezpur University, Assam in January 2001.

Mukhopadhyaya, S., acted as a member of the Program Committee of the National Workshop on Mobile Computing, Tezpur University, Assam in January 2001.

Sinha B P., visited (i) the Department of Electronics and Electrical Communications Engineering (ii) G. S. Sanyal School of Telecommunications, (iii) IIT Kharagpur as the ISRO-Chair Professor during July 21-December 31, 2000. He acted as the (i) Program Co-Chair of the 8th International Conference on Advanced Computing and Communications (ADCOM 2000), Cochin, December 2000, jointly sponsored by IEEE Computer Society, Advanced Computing and Communications Society, India and Cochin University of Science and Technology, India, (ii) General Chair of the National Workshop on Mobile Computing, Tezpur University, Assam in January 2001, (iii) member of the Advisory Committee of the Conference on Intelligent Computing and VLSI, Kalyani, India during February 16-17, 2001, (iv) Steering Committee Chair of the 3rd International Workshop on Distributed Computing, to be held in Calcutta, December 2001. He also worked as the Program Co-Chair of the 9th International Conference on Advanced Computing and Communications (ADCOM 2001), Bhubaneswar in December 2001.

Sur-Kulay, S., acted as a member of the (i) Program Committee of the 4th VLSI Design and Test Workshops, New Delhi in August 2000 and (ii) Program Committee of the 14th International Conference on VLSI Design in January 2001, jointly sponsored by IEEE Circuit and Systems Society, IEEE Computer Society, ACM SIGDA and VLSI Society of India. She also delivered invited lectures at the UGC Sponsored Refresher Course for Engineering College Teachers on *Computer Aided Design of VLSI Circuits* at the Department of Electronics and Telecommunications Engg. of Jadavpur University, on March 24 and 26, 2001.

Computer Vision and Pattern Recognition Unit

Chaudhuri, B.B., participated in a ZOPPI workshop on Information Technology for Indian Languages, held at IISc, Bangalore during May, 4-6, 2000. He visited IISc, Bangalore as an external expert for a Ph.D. viva, May 21, 2000. He also served as a member of the IAPR Fellow Committee.

Dash, N.S., delivered a lecture on (i) "Utilities of Corpora as a New Branch of Linguistics" at the Winter School of Core Linguistics, organized by LRU, ISI, Kolkata in November, 2000, (ii) "Design and Application of Corpora in Language Education and Research" at IWTDL in March 2001, Kolkata.

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Garin, U., (i) delivered a lecture on "Introduction to OCR Technology Development" at IWTDL March 2001, Kolkata.

Mitra, M., served as a program committee member of the twenty-fourth Annual International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2001). He delivered a lecture on (i) "Text Mining: An Overview" at the Indian Institute of Management, Kolkata on November 26, 2000 and (ii) "Introduction to Information Retrieval" at IWTDL in March 2001, Kolkata.

Ü. Pal., delivered a lecture on "Multi-script OCR System Development" at IWTDL in March 2001, Kolkata.

Machine Intelligence Unit

Bandyopadhyay, S., served on (i) the program committee of the Conference on Intelligent Computing and VLSI held at Kalyani Government Engineering College, Kalyani, India in February 16-17, 2001, (ii) the editorial board of the proceedings of the conference. She delivered an invited lecture at the conference titled "Genetic Algorithms for Pattern Classification". She also acted as the Co-Guest Editor of Special Issue on "Evolutionary Computation in Engineering Sciences" IETE Journal of Research.

De, R. K., served as a member of the Technical Committee of the Conference on Intelligent Computing and VLSI, Kalyani during February 16-17, 2001.

Ghosh, A., delivered a series of lectures at the *Spring School on Soft Computing, Image Processing and Data Mining*, Gauhati University, Guwahati, Assam on "Neural networks and their applications" in March, 2001.

Kundu, M. K., delivered an invited lecture on "Pattern Recognition and Image Processing" in the seminar on 'Space Science And Technology' organized by the Indian Physics Association (Calcutta Chapter), Calcutta on April 26, 2000 and delivered series of lectures at the *Spring School on Soft Computing, Image Processing and Data Mining*, Gauhati University, Guwahati, Assam on "Soft Hybrid Systems" in March, 2001.

Mandal, D. P., delivered (i) a talk on the Progress of the project "Cancer Management in Soft Computing Paradigm" at the Project Monitoring Workshop of CSIR, New Delhi in February, 2001, (ii) a series of lectures at the Spring School on Soft Computing, Image Processing and Data Mining, Gauhati University, Guwahati, Assam on "Fuzzy Logic" in March, 2001.

Mitra, S., delivered a series of lectures at the *Spring School on Soft Computing, Image Processing and Data Mining*, Gauhati University, Guwahati, Assam on "Soft Hybrid Systems" in March, 2001.

Murthy, C. A., delivered a lecture on "Genetic Algorithms" in the Radio Physics and Electronics department, University of Calcutta, in a workshop on Recent trends in Information Technology during February 5 - 10, 2001. He also served as a Guest Editor of the Proc. INSA for a special issue on Pattern Recognition, Image Processing and Computer Vision.

Pal, S. K., served as (i) member of the Sectional Committee for Engineering Sciences of (a) Indian National Science Academy (INSA), (b) Indian Academy of Sciences (IASc), (ii) convener of the Sectional Committee of the Indian National Academy of Sciences (INAE), (iii) member of many Expert Committees of DST and CSIR, India, (iv) member of the advisory committee of the Int. Conf. on Recent Advances in Mathematical Sciences and a Symposium on Challenges in Mathematical Sciences for the New Millennium held at the Dept. of Mathematics, IIT, Kharagpur, during December 20-22, 2000 and (v) member organizing committee of the Int. Conf. on Multimedia Processing and Systems, at the IIT, Madras during August 13-15, 2000, (vi) guest editor of a special issue on Pattern Recognition, Image Processing and Computer. He delivered invited talks (i) at the Int. Conf. on Multimedia Signals and Systems, at Indian Institute of Technology, Madras, during August 13-15, 2000, (ii) Functional Program on Information Technology & Telecommunication for System & E & T Executives at the Indian Institute of Coal Management, Ranchi on June 8, 2000, (iii) conference

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on Intelligent Computing on VLSI at the Kalyani University during February 16-17, 2001, (iv) Bangiya Bijnan Parishad, Calcutta on February 24, 2001, (v) Spring School on Soft Computing, Data Mining and Image Processing held at Gauhati University during March 16-20, 2001 and (vi) Tezpur University on March 26, 2001. He also visited the S.D. Marine Biological Research Institute, Sagar Island, Sundarbans during August 18-20, 2000.

Physics and Earth Sciences Division

Geological Studies Unit

Chaudhuri, A.K., visited Wadia Institute of Himalayan Geology, Dehradun during March 20-21, 2001 to attend the meeting of the Research Advisory Committee.

Physics and Applied Mathematics Unit

Dandapat, B.S., visited (i) Indian Agricultural Research Institute, Delhi during January 3-7, 2001 to deliver invited lectures in the Science Congress.

Mandal, B. N., visited Indian Agricultural Research Institute, Delhi during January 3-7, 2001 to deliver invited lectures in the Science Congress, (ii) Department of Mathematics, Bangalore University on January 8, 2001 to deliver a invited lecture, (iii) Department of Applied Mathematics, Kolkata University on February 8, 12 and 15, 2001 to deliver invited lectures in Refresher Course and (iv) Assam University, Silchar during March 14-16, 2001 to deliver invited lectures in the National Conference.

Biological Sciences Division

Anthropology and Human Genetics Unit

Bharati, Premananda, participated in (i) National Symposium on Eco-degradation (ii) Population Health: The Challenges and Management in New Millennium, Purnia during April 14-15, 2000.

Dasgupta, Parushmani, acted as a Consultant in a research project on Physical growth of the thalassaemic patients undertaken by the Thalassaemia Unit of the Vivekananda Institute of Medical Sciences, Calcutta.

Majumder, Partha P., delivered (i) a Special Lecture entitled "Ethnic India: A Genomic View" on July 15, 2000 during the half-yearly meeting of the Indian Academy of Sciences, Bangalore, (ii) an Invited Lecture on "Genomic Informatics" on July 25, 2000, at the Federation of Indian Chambers of Commerce and Industry, (iii) the Foundation Day Lecture of the National Institute of Immunology, New Delhi, entitled "Out of Africa into India: Then What?", (iv) invited talk on "Human Genome Project and Neurological Disorders" during the 14th Annual Conference of the Association of Neuroscientists of Eastern India, Calcutta, on November 4, 2000 (v) the Fifth Foundation Day Lecture of the Centre for Archaeological Studies and Training entitled "Genomics and Human Evolution with Special Reference to India", Calcutta, on November 5, 2000, (vi) "Mapping Genes Controlling Quantitative Traits" during the 69th Annual Meeting of the Society of Biological Chemists, Calcutta, during December 7-9, 2000, (vii) Genomics in the CHEMCON-2000, Calcutta, on December 18, 2000, (viii) "Human Genomic Diversity in India" during the annual meeting of the Indian National Science Academy, Calcutta, on December 28, 2000, (ix) "Gene Flow to South Asia and Beyond" in the International Seminar on Haemoglobinopathies, Calcutta, on December 28, 2000 and (x) "Use of Isolated Populations for the Study of Complex Disorders with Special Reference to India" during the Indo-US Workshop on Genetics of Alcoholism, Bangalore, on March 3, 2001. He also participated in the First ICMR-NIH Biomedical Research Policy Forum, New Delhi during October 18-19, 2000.

Reddy, B. Mohan, served as member of the (i) Advisory Board of the Journal of Human Ecology, (ii) the Editorial Board of International Journal of Human Genetics, (iii) the Editorial Board of Human Biology and (iv) the Working Committee for the selection of endogamous groups to be studied as part of the National Project

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on Validation of Highly Polymorphic DNA loci for Indian Populations and Their Data Base, Central Forensic Science Laboratory, Calcutta.

Vasulu, T.S. participated in discussion meetings about the selection of Indian populations for the genetic-data base and forensic purposes which was held at the Central Forensic Science Laboratory, Bureau of Police Research and Development, Calcutta, since October, 2000.

Biochemistry Unit

Duttagupta, C., delivered invited lecture at the (i) National Symposium on Morality and Practices, organized by the UGC Centre for Advanced Study in Philosophy, Jadavpur University in January, 2001 and (ii) International Symposium on Ethical, Legal and Social Aspects of Biotechnology jointly organized by the Humboldt Club and Max Muller Bhavan, Calcutta in January, 2001.

Embryology Unit

Ghosh, Asit Kumar, visited Centre of Cellular and Molecular Biology (CCMB), Hyderabad, for participating in a workshop on Mathematical and Computational Biology during January 8-13, 2001.

Chattopadhyay, Joydev, visited CSIR Centre for Mathematical Modelling and Computer Simulation (C-MMACS), Bangalore, for participating and delivering invited talk in the Indo-French Workshop on Climate and Environment during April 9-14, 2001.

Plant Chemistry Unit

Mazumder, Priyanka, visited Indian Agricultural Research Institute, New Delhi during January 3-8, 2001.

Social Sciences Division

Economic Research Unit

Ghosh, Buddhadeb, was invited by Sir Ratan Tata Trust and National Council of Applied Economic Research to present a paper on India's Infrastructure in Rural India Infrastructure Report, New Delhi, during November 3-5, 2000.

Mukherjee, Diganta, presented a paper at the DSA Conference, Jadavpur University, Kolkata, India, in October 2000 and gave a seminar in the Department of Economics in February 2001.

Mukherjee, Robin, served as a member of (i) Environmental Economics Research Committee (EERC) and (ii) Expert Committee on Environmental Economics (ECEB).

Economic Analysts Unit

Narayana, N.S.S., visited (i) ISEC, Bangalore on May 30, 2000 and participated as a Panelist in the symposium on "WTO and Its Implementations for All-India and Karnataka Agriculture, (ii) ISEC, Bangalore on November 10, 2000 and participated as an Expert in the workshop on Karnataka - Cell on WTO and Related Issues in Agriculture and Food, (iii) IGIDR, Mumbai during July 13-15, 2000 and participated and chaired a session in the International Conference on Economic Policy in the New Millennium, held in Honour of Prof. Kirit S. Parikh.

Rao, K. Surekha, visited (i) Madras School of Economics, Chennai for to deliver a series of lectures on Bayesian methods, (ii) Delhi School of Economics, Delhi, during December 20-22, 2000 as an invited discussant at the conference to honour Prof. K.L. Krishna on his 65th birthday, (iii) IIM, Bangalore during December 8-10, 2000 as an invited participant at the conference on Development Reform in India., (iv) ISEC, Bangalore to deliver invited lectures on analysis of Qualitative data & Discrete Choice Models.

Linguistic Research Unit

Bandyopadhyay, Debaprasad, delivered invited lectures at the (i) "man, Machine and creativity", Department of Philosophy Rabindrabharati University in April, 2000, (ii) "Churning the ocean of Language": A Seminar on Bhasa/Munthan organized by "Bhasa" (Vadaodara) and Sahitya Akademy during October 14-16, 2000, M.S.University, Vadodara, (iii) "In defence of Linguistics". In the Winter-School organized by Linguistic Research Unit, Indian Statistical Institute during Decemxnber 6-15,2000, (iv) "CU-Syllabus:A Critique".Panel Discussion on "Linguistics Syllabus" in the Winter-School organized by Linguistic Research Unit, Indian Statistical Institute during December 6-15 ,2000, (v) "Does Linguistics contribute something to Literary theory?"Panel Discussion on "Linguistics and Literary Theory" in the Winter-School organized by Linguistic Research Unit, Indian Statistical Institute during December 6—15 ,2000, (vi) "ECP and deletion: A Nyaya-Vaiseshika response" ICOSAL-III, Hyderabad Central University, January 4 - 6,2000, (vii) "The Ekalavya Relation" ICOSAL-III, Hyderabad Central University during January 4—6 ,2001, (viii) "On Language and Decentralized Education". A UGC Lecture given in the Department of Education, University of Kolkata on January 13, 2001, (ix) "Linguistic Cybercolonization" Interdisciplinary Seminar on "Globalization, Language, Culture and media. "organized by Simla Institute of Advanced Studies, IIT Kanpur during January 30-31 and February 1, 2001.

Population Studies Unit

Bhattacharya, Biswa Nath, visited (i) the International Institute for Population Sciences, Mumbai, during September 4 - 23, 2000 being invited to attend the Report Writing Workshop for the National Family Health Survey 1998 - 99 (NFHS - 2) and to write report for the State of West Bengal . 1998 - 99. (ii) the Institute for Research in Medical Statistics, Indian Council of Medical Research, New Delhi on December 19, 2000 to attend the Scientific Advisory Committee meeting as nominated member, (iii) the Department of Statistics, Banaras Hindu University, Varanasi during February 5 - 7, 2001, to deliver a talk on "Application of Models in estimation of Parameters of Human Reproduction", in a National Seminar on Emerging Methodologies of Data Analysis and Related Inferences and (iv) the International Institute for Population Sciences, Mumbai on March 16, 2001 to attend the academic council meeting as a member of the academic council of the I.I.P.S.

Datta,Pranati, visited Office of the Census Commissioner, West Bengal in February and March, 2001 as Master Trainer to train enumerators for the Census of India, 2001.

Gupta, Swagata, visited Office of the Census Commissioner, West Bengal in February and March, 2001 as Master Trainer to train enumerators for the Census of India, 2001.

Majumdar ,Prasanto Kumar, visited the Department of Statistics, Banaras Hindu University, Varanasi, U.P. during February 5 - 7 to deliver a lecture on "the measurement of natural fertility" in a National Seminar on Emerging Methodologies of Data Analysis and Related Inferences and presented a paper on " Agricultural Modernisation, Child Labour and Fertility : Rural West Bengal, India" in the above National Seminar

Pathak ,Prasanta, visited Office of the Census Commissioner, West Bengal in February and March, 2001 as Master Trainer to train enumerators for the Census of India, 2001. He visited the Indian Institute of Health Management Research, Jaipur during October 9 - 20, 2000, on invitation to teach a 10-day Course on "Biostatistics and Inferences" to the Post-Graduate Diploma students in Health and Hospital Management

Roy ,Ram Deb, visited Office of the Census Commissioner, West Bengal in February and March, 2001 as Master Trainer to train enumerators for the Census of India, 2001.

Saha ,Anuj Kumar, visited Office of the Census Commissioner, West Bengal in February and March, 2001 as Master Trainer to train enumerators for the Census of India, 2001.

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Psychology Research Unit

Banerjee, S.N., visited (i) NCERT, Kolkata on February 27,2001 and delivered an invited lecture on the Problems and Challenges of Elementary Education in India and (ii) Kalyani University, West Bengal during February 28 - March 2,2001 and chaired a session and presented a paper in Science and Technology Congress.

Bhattacharya, Himani, visited Kalyani University, West Bengal during February 28 - March 2,2001 and presented a paper in Science and Technology Congress on health aspects of Neo-literates of North 24-parganas.

Dutta Roy, D., visited IIT, Kanpur to give seminar on Organizational diagnosis and Application of Multivariate Statistics in Psychology.

Ghosh, Anjali, visited National Institute of Human Development, Kolkata during April-May 2000.

Gupta, Rumki, visited Institute of Psychological and Educational Research, Calcutta on October 30,2000. She also acted as a resource person and delivered a talk on "Normal early childhood development - a bio psycho-social perspective".

Mitra, Subir, visited Department of Education, Calcutta University on January 17,2001 and delivered a lecture on Measurement and Scaling in Education.

Statistical Quality Control and Operations Research Division

Bhimasankaram, P., acted as a (i) guest editor of the special issue of Proceedings of Andhra Pradesh Akademi of Sciences (Vol. 5, No.1,2001) on Statistical Methods brought out in honour of Prof. C.R. Rao in celebration of his 80th Birthday, (ii) member of the Board of Studies of MICS, University of Hyderabad and Department of Statistics, Osmania University. He participated as an organizer and faculty for the multivariate analysis workshop organized by SQC & OR Unit, Indian Statistical Institute, Bangalore during February 7-25, 2001. He attended IISA conference on Statistics held in New Delhi during December 30- January 3,2001 and gave an invited talk and the valedictory speech.

Kamalanathan, K., attended (i) Waste minimisation, (ii) Quality Management Systems and (iii) Environmental Management Systems.

Pandian, Kanagavel, attended (i) Waste minimisation, (ii) Quality Management Systems and (iii) Environmental Management Systems.

Rajagopal, A., attended (i) Waste minimisation, (ii) Quality Management Systems and (iii) Environmental Management Systems.

Rao, NTV Ranga, acted as a judge for the inter unit BHEL QC Circles convention held at BHEL, Bhopal during January 10-11,2001. He also attended a workshop and seminar on software testing held at Central University, Hyderabad during January 5-6,2001.

Subhani, S.M., attended a workshop and seminar on software testing held at Central University, Hyderabad during January 5-6,2001.

Documentation and Information Sciences Division

Documentation Research and Training Centre (DRTC)

Madalli, Devika P., visited (i) Department of Library and Information Sciences, Mysore University to deliver a lecture at Academic Staff College. (ii) Law School of India during March 1-3,2001 for Academic Staff College Lecture on Internet and (iii) Bangalore University on March 19,2001 for Academic Staff College Lectures

Prasad. A.R.D. visited (i) Mysore University on September 19,2000 to deliver lecture at Academic Staff College, Mysore University, Mysore. (ii) UGC, New Delhi during October 23-25,2000 for curriculum development committee meeting. (iii) XIXIASLIC National Seminar at Bhopal during November 13-17,2000 to represent general for conference on "Library & Info. Profession at on Crossroad. (iv) Dept. of Library and Information Science, Goa University, Goa during January 29-30,2001. and (v) University of Mysore during March 12-16,2001 to present the paper on "Creation of Digital Libraries in Indian Languages Using Unicode for Digital Libraries Workshop.

Ravichandra Rao. I.K., visited (i) DLIS, University of Mysore, Mysore on May 22,2000 to give special lectures. (ii) Indira Gandhi National Open University, New Delhi on July 4,2000 . July 6-7,2000 and August 5,2000. (iii) INSDOC, Chennai on August 17,2000. (iv) MMW, New Delhi during December 11-13,2000 and delivered special lectures "Education for Library & Information Science Professionals in India: Need for orientation to Inf. Management and IT". (v) IIMA Alumni (Bangalore Chapter) and presented a paper on E-commerce and Cyber Law in India and (vi) NAL on December 6,2000 to participate in the Panel discussion on Cyber Laws as applicable to Libraries.

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PART III. ADMINISTRATION AND OFFICE BEARERS

12. GENERAL ADMINISTRATION

Administrative Services Division

The Administrative Services Division at the headquarters caters to the various needs of the scientific workers 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 of 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 their 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 to ensure financial and accounting disciplines and statutory compliances; maintain system and procedures and bring out audit observations and suggest 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, 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 liaison with outside centres and branches of the Institute.

Engineering Unit : The Unit is responsible for day to day maintenance of the office/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 of 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 three regular doctors and several part-time specialist doctors

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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 attended 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 sorts 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) A discussion on "Reservation The role of Dr. B.R. Ambedkar against caste oppression" held on May 3, 2000, (ii) Hundred Seventh Birth Anniversary of Prof. P.C. Mahalanobis held on June 29, 2000, (iii) Golden Jubilee celebration of ISEC held during October 15-20, 2000, (iv) International Conference on "Indocrypt 2000" held during December 10-13, 2000, (v) International Conference on the occasion of Prof. C.R. Rao's eightieth birth day held during December 29-31, 2000, (vi) Special lecture on "Culture and Development" by Prof. Amartya Sen, Nobel laureate held on January 3, 2001, (vii) Annual Convocation of ISI held on January 8, 2001, (viii) Annual Convocation of the International Statistical Education Centre (ISEC) held on March 30, 2001. The Unit issued a number of press releases during the year in connection with various scientific programmes/research activities of the Institute.

Another important job of the Unit is to prepare and publish the Annual Report of the Institute each year under the guidance of an Editorial Board and arrange for its distribution to different universities in India and abroad and also to the Government departments. The Unit, in collaboration with Reprography Unit, also published a colourful folder containing photographs and paper clippings on the important activities of the Institute for the year 2000-2001.

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. Steps have been taken to modernise the existing letter press into an Offset printing press. As recommended by the modernisation committee under first and second phase, an Offset printing machine, a printing down frame and D.T.P. set up have been installed and started working. During this year modernisation committee has recommended for procurement of offset printing machine and paper cutting machine in order to augment the Off-set Press.

Another important activity of the Unit is to prepare and maintain its separate accounts beside monthly disbursement of salary, payments of D.A, Bonus etc., reply of audit para etc. The Unit has cells for sales and despatch of the journal, Sankhya and other publications of the Institute.

Binding Unit : The Institute has a large library with books and journals which are required to be bound regularly. Besides, various research divisions bring out research proposals, administrative division brings out booklets on budget for presentation to the Ministry. All such and many other documents are bound 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 transaction. Maintenance and services of all typewriters and duplicators of the Institute are done by the Unit 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 meeting to their bereaved families. The Unit also receives letters for Parliament and Assembly elections 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 communication of the Institute.