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5. Excited state intramolecular proton transfer reactions, Dec. 7th 2000, Chemistry Department, Guru Nanak Dev University Amritsar.

6. Excited state intramolecular proton transfer reactions, Dec. 8th, 2000, Chemistry Department, Guru Nanak Dev University Amritsar.

7. R. Mukherjee "Modeling Tyrosinase Monooxygenase Activity. Synthesis, Structure and Reactivity of Dicopper Complexes", Symposium on Frontiers in Inorganic Chemistry, Department of Inorganic and Physical Chemistry and Jawaharlal Nehru Center for Advanced Scientific Research, Indian Institute of Science, Bangalore, Book of Abstracts, L-4 (January 18-20, 2000).

8. R. Mukhejee and R. Gupta, "Modeling Tyrosinase Activity: Dioxygen Activation by Copper(I) Complexes: Exogenous Substrate Oxidation", Fifth IUPAC International Symposium on Bio-Organic Chemistry, Book of Abstracts (IL-28), National Chemical Laboratory, Pune (January 30 – February 4, 2000).

9. R. Mukherjee "Reactivity of Copper(I) Complexes with Dioxygen/Iodosylbenzene from Bioinorganic Perspectives: Aromatic Ring Hydroxylation and Exogenous Substrate Reactivity", One Day Symposium in Chemistry, Book of Abstracts, (p.10), Department of Chemistry, Indian Institute of Technology, Kharagpur, (August 11, 2000).

10. R. Mukherjee "Magnetic Exchange Interactions in Ligand-Bridged Dimetal Systems: Some Recent Results", IndoFrench Workshop on Current Trends in Molecular Magnetism, Book of Abstracts, Jawaharlal Nehru Centre for Advanced Scientific Research, Indian Institute of Science, Bangalore (December 4-8, 2000).

11. Prof. N. Sathyamurthy, "Chemical Dynamics : A time-dependent quantum mechanical view", Departimento di Chimica, Universita di Roma, Italy, May, 2000, Dipartimento dic Chimica, Universita di Perugia, Italy, May 2000, Department of Chemistry, University College, London, UK Nov. 30 -- Dec.1, 2000, Department of Chemistry, University of Oxford, Oxford, UK Dec. 4, 2000, Department of Theoretical Chemistry, University of Cambridge, Cambridge, UK Dec. 6, 2000, School of Chemistry, Univesity of Bristol, Bristol, UK Dec. 8, 2000, Department of Chemistry, University of Manchester, Manchester, UK Dec. 12, 2000, Surface Science Research Centre, University of Livderpool, Liverpool, UK Dec. 14, 2000, Department of Chemistry, California Institute of Technology, Pasadena, Ca, USA, Jan.10, 2001

12. A. Chandra, "Structure and Dynamics of Molecular Liquids at Interfaces and in Confind Environment", Indian Association for the Cultivation of Science, Jadavpur, Calcutta, February 09, 2001.

13. A. Chandra, "Hydrogen Bond Dynamics in Aqueous Electrolyte Solutions", S.N. Bose Center for Basic Sciences, Salt Lake, Calcutta, February 12, 2001

14. A. Chandra, "Structure and Dynamics of Solid-Liquid Interfaces", J.N. Centre for Advanced Scientific Research, Bangalore, March 15, 2001.

15. S. K. Dogra, Excited state intramolecular proton transfer reactions between aminoprotons and = N – moiety; National Symposium on Radiation and Photochemistry, Chemistry Department, Roorkee University, Roorkee, Feb. 21-23, 2001 (Chaired a session)

16. S. K. Dogra, Excited state intramolecular proton transfer reactions, Dec. 7th 2000, Chemistry Department, Guru Nanak Dev University Amritsar.

17. S. K. Dogra, Excited state intramolecular proton transfer reactions, Dec. 8th, 2000, Chemistry Department, Guru Nanak Dev University Amritsar.

18. R. Mukherjee, "Modeling Tyrosinase Monooxygenase Activity. Synthesis, Structure and Reactivity of Dicopper Complexes", Symposium on Frontiers in Inorganic

Chemistry, Department of Inorganic and Physical Chemistry and Jawaharlal Nehru Center for Advanced Scientific Research, Indian Institute of Science, Bangalore, Book of Abstracts, L-4 (January 18-20, 2000).

19. R. Mukhejee and R. Gupta, "Modeling Tyrosinase Activity: Dioxygen Activation by Copper(I) Complexes: Exogenous Substrate Oxidation", Fifth IUPAC International Symposium on Bio-Organic Chemistry, Book of Abstracts (IL-28), National Chemical Laboratory, Pune (January 30 – February 4, 2000).

20. R. Mukherjee, "Reactivity of Copper(I) Complexes with Dioxygen/Iodosylbenzene from Bioinorganic Perspectives: Aromatic Ring Hydroxylation and Exogenous Substrate Reactivity", One Day Symposium in Chemistry, Book of Abstracts, (p.10), Department of Chemistry, Indian Institute of Technology, Kharagpur, (August 11, 2000).

21. R. Mukherjee, "Magnetic Exchange Interactions in Ligand-Bridged Dimetal Systems: Some Recent Results", IndoFrench Workshop on Current Trends in Molecular Magnetism, Book of Abstracts, Jawaharlal Nehru Centre for Advanced Scientific Research, Indian Institute of Science, Bangalore (December 4-8, 2000).

22. K. Srihari, Seminar at Jadavpur University, Calcutta for "Frontiers in theoretical Chemistry", 2000.

23. K. Srihari, Invited Seminar at the Physical Research Labs., Ahmedabad, Oct. 2000.

24. K. Srihari, Invited lecture at the Miller symposium, University of California, Berkeley, March 2001.

25. K. Srihari, Seminar at Jadavpur University, Calcutta for "Frontiers in theoretical Chemistry", 2000.

26. K. Srihari, Invited Seminar at the Physical Research Labs., Ahmedabad, Oct. 2000.

27. K. Srihari, Invited lecture at the Miller symposium, University of California, Berkeley, March 2001

DEPARTMENT OF CIVIL ENGINEERING

1. Animesh Das and B.B. Pandey, Pavement Design using Cementitious Stabilisers in Road Construction, ASCE-India Section, Calcutta, 9th September, 2000.
2. Dr. M.R. Madhav - Engineering of Ground for Earthquake Disaster Prevention/Mitigation, IGS Local Chapter, New Delhi, Feb. 15, 2001
3. Dr. M.R. Madhav - Application of Jute in Civil Engineering, Calcutta, Nov. 2000.

4. Dr. M.R. Madhav - Geocomposites – Non-adhesive Composites, Concordia Univ., Montreal, July 2000.

5. Dr. C.V.R. Murty - Organised and Conducted (at I.I.T. Kanpur during 4-5 Nov. 2000) a national workshop on Revised Indian Concrete Code IS:456-2000 to critically examine the fourth revision of this primary code for reinforced concrete in India.

6. Sinha, R., Sastry, V.N., & Rajagopalan, G. (2000), "Holocene Paleoclimatic Interpretations from shallow sediment cores from a freshwater lake in eastern Antarctica, Sediment 2000," European Association of Sedimentologists, Leoben, Austria, 19-25, June, 2000.

7. Sinha, R. (2000), "Quaternary sedimentation in the Himalayan foreland basin : Implications for interpretation of ancient sequences, Inaugural meeting of IGCP 449 : Global correlation of Cenozoic Fluvial Sequences," Prague 21-24, April 2001.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

1. M. Agrawal, Towards uniform AC0-isomorphisms, IMSc Chennai, Oct 2000.
2. D. Sanghi, MAC Protocols for Wireless ATM, PICT, Pune, Sep., 2000.
3. D. Sanghi, Latest Trends in Computer Networks, Walchand Coll. of Engg., Sangli, Oct 2000.
4. D. Sanghi, Internet Protocol Version 6, IPv6 India Forum, Bangalore, Jan 2001.
5. D. Sanghi, Network Security, National Informatics Center, New Delhi, Jan. 2001.
6. D. Sanghi, Network Security, HBTI Kanpur, Feb. 2001.
7. D. Sanghi, Network Security, Ministry of IT, New Delhi, Mar. 2001.
8. T. V. Prabhakar, Topic maps at Satyam, Secunderabad, Jan. 2001.
9. T. V. Prabhakar, Extreme Programming at Satyam, Secunderabad, Mar. 2001.
10. T. V. Prabhakar, Search Engines in Indian Languages, SIGMOD Japanese Chapter, Tokyo, Sept. 2000.
11. P.Jalote, Software engineering R & D at IITK, EPFL, Lansanne, Switzerland, June 2000.

12. P.Jalote: In pursuit of software quality, ETH, Zurich, Switzerland, June 2000.

DEPARTMENT OF ELECTRICAL ENGINEERING

1. Prof. V. Sinha presented a Seminar on *"An Introduction to Mobile Communication"*; at Institution of Electronics & Telecommunication Engineers, Kanpur Local Centre, June 16, 2000.

2. Prof. V. Sinha presented a Seminar on *"Software Radio"*, on University of Hong Kong, Hong Kong; Department of Electrical Engineering; January 15, 2001.

3. Dr. Y.N. Singh delivered an invited lecture on *"Introduction to Optical Networks"*, on September 22, 2000 during, Avishkar 2000, (Students' Technical Festival), MNREC, Allahabad.

4. Dr. Y.N. Singh delivered an invited lecture on "*Introduction to Photonic Packet Switching*", on February 24 2001 during TechSrijan 2001, (IEEE Student Branch's Technical Festival), Madan Mohan Malviya Engineering College, Gorakhpur.

5. Dr. Joseph John presented a seminar on "*Introduction to Virtual Instrumentation*", at CDRI, Lucknow during May 2001

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

1. A.M. Raina, "Contextual Parameters in the Minimalist Lexicon", Seminar on Language, Mind and Society: Recent Perspectives, University of Delhi, March 2001, (invited paper).

2. L. Krishnan, "Workshop conducted on "Interpersonal Skills and Assertiveness", at CARE - UP, Lucknow, Nov. 18, 2000, on invitation.

3. L. Krishnan, "Globalization & Work Motivation in the Indian Context", National Seminar on Prospects of Industrial R & D in India under Globalization, Feb. 6-7, 2001 Deptt. of HSS, IITK, B.K. Pattnaik (Organizer).

4. L. Krishnana, "Values and Psychological Research, National Seminar on Trends in Psychology, DDU University, Gorakhpur, March, 2001.

5. Munmun Jha, "Human Rights in India: NGO Action and State Response". Paper presented at Centre D'etudes de l'Inde et l'Asie due Sud, Universite catholoique de Louvain, Louvain-La-Neuve, Belgium, 19 May 2000.

6. Munmun Jha, "Pespectives on Child Labour in India". Paper presented at Centre d'etudes de l'Inde et l'Asie due Sud, Universite Catholoique de Louvain, Louvain-La-Neuve, Belgium, 22 May 2000.

7. N.K. Sharma, "Use of Multivariate Statistics in Psychology". Department of Applied Psychology, University of Bombay, March 28, 2001.

8. B.K. Pattnaik. Prospects cf Industrial R & D in India under Globalization, National Seminar at IITK, 6-7 Feb. 2001.

9. K.K. Saxena, "An Input-output study of structural changes in the Indian Economy 1983-84 to 1993-94", National Seminar on Growth and structural changes in Indian Economy since independence Feb 9-10, 2001 organised by CSSH, M.L. Sukhadia University, Udaipur. (with Misra Aparna)

10. K.K. Saxena, "R & D and Foreign Competition: A Study of the Indian Pharmaceutical Industry", in the National Seminar on Prospects of Industrial R & D in India under Globalization, Feb. 6-7, 2001, organized by the Dept. of HSS, IIT Kanpur. (with Barthwal R.R. and Misra D.N.)

DEPARTMENT OF INDUSTRIAL AND MANAGEMENT ENGINEERING

1. Evaluation of Administration and Management in Technical Institution, AICTE, NBA Awareness Seminar, IIT Kanpur, 12-13 January, 2001, Kripa Shanker.

2. Innovations in Manufacturing for Global Competitiveness, Sir Visweshara iyya Memorial Lecture, Engineers Day, Institution of Engineers , IIT Kanpur, 15 September, 2000, Kripa Shanker.

3. A Devanagari OCR and A Brief Overview of OCR and Research for Indian Scripts, Presented at STRANS-01, IIT Kanpur, 2001.

4. Introduction to Internet, an invited talk at SIDBI - sponsored Training Program by IIT Kanpur on Marketing on Internet, Dec. 2000, Veena Bansal.

5. Integrating Knowledge sources in Devanagari Text Recognition, Invited talk at Department of Computer Science and Engineering, IIT Bombay, June 2000, Veena Bansal.

6. On how to describe shapes of Devanagari characters and use them for recognition, presented at Fifth International Conference on Document Analysis and Recognition, Sept, 21-23, 1999, Veena Bansal.

7. Information Technology: an overview, an invited talk at DST sponsored Contact Program for young scientists, Department of Mechanical Engineering, June 2000, IIT Kanpur, Veena Bansal.

DEPARTMENT OF MATHEMATICS

1. Auto-epistemic Reasoning. Presented in Annual National Seminar of the Calcutta Logic Circle on Logic and Applications, Dept. of Pure Mathematics, University of Calcutta, September 15-17, 2000. A seminar presented by Banerjee, M.

2. Unconditional Bases : An Overview. Dept. of Mathematics, Marathwarda University, Aurangabad, December, 2000. An invited talk by M. Gupta.

3. On Schauder Bases, Dept. of Mathematics, AMU, Aligarh, March 2001. An invited talk by M. Gupta.

4. Combinatorial Identites using Order Statistics, Department of Statistics, University of Kerala, Trivandrum, Seminar presented by P.C. Joshi.

5. Numerical Methods for Linear Systems, Department of Mathematics, IIT, Bombay, Feb. 28, 2001. A colloquium talk delivered by V. Sundarapandian.

6. Persistence of Equilibria for Locally Asymptotically Stable Systems with Parameters, Department of Mathematics, IIT, Bombay, March 1, 2001. A seminar talk delivered by V. Sundarapandian.

7. Persistence of Equilibria for Locally Asymptotically Stable Systems with Parameters, Department of Mathematics, IIT, Madras, March 8, 2001. A seminar talk delivered by V. Sundarapandian.

DEPARTMENT OF MATERIAL AND METALLURGICAL ENGINEERING

1. R. Balasubramaniam, *Hydrogen in Iron Aluminides* (invited), International Symposium on Metal-Hydrogen Systems: Fundamentals and Applications, Noosa, Australia, 1-6 October 2000.

2. R. Balasubramaniam, Ted B. Flanagan, W. Zhang, S. Luo and D. Wang, *Hydrogen as a Probe for Pd/Yttria Internal Interfaces Prepared by Internal Oxidation of Pd-Y Alloys*, International Symposium on Metal-Hydrogen Systems: Fundamentals and Applications, Noosa, Australia, 1-6 October 2000.

3. R. Balasubramaniam, *Environmental Degradation of Al-Li Alloys*, Aerospace Materials and Technologies for 21st Century Aviation Applications (AEROMAT-2001), Air Force Station, Kanpur, 23-24 February 2001.

4. Anshu Gaur, Deepak Gupta and Prabhanjan Mishra, *Investigation of a new non-isothermal process for blanket tungsten for microelectronic interconnects*, Indo-Israel Workshop on Advanced Materials, February 11-13, 2001, Hyderabad. (Invited).

5. Monica Katiyar and Saumya Mukherjee, S. Rajesh, E. Subramanyam, *Optimization of oxy-acetylene flame spraying process for 20 B Material*, AEROMAT-2001, AeSI, Kanpur, 23-24 February, 2001.

6. Rohit Kumar Gupta, N. Sridhar, Monica Katiyar, *Structure and properties of ZnO thin films prepared by oxidation of metallic zinc*, 12th Annual General Meeting of Materials Research Society of India, Calcutta, Jan. 31 – Feb. 2, 2001.

7. A.Robert and D.Mazumdar, *Physical and Mathematical modelling of flow and residence time distributions in multi strand tundish systems*, 54th Annual technical Meeting of the IIM, Bhilai, Nov.14-17, 2000.

8. S.P. Mehrotra, *Keynote Lecture: Process Control in Mineral Processing*, Mineral Processing Technology-Perspective for New millennium (MPT-2000), Nagpur, April 4-6, 2000.

9. S.P. Mehrotra, *Keynote Lecture: Studies on Particle Suspension in Air-Agitated Pachuca Tanks, Processing of Fines (PROF-2000)*, NML Jamshedpur, November 2-3, 2000.

10. S.P. Mehrotra, *Challenges and Opportunities in Mineral Processing*, Presidential Address delivered during the Inaugural Function of Annual Technical Meeting of Indian Institute of Mineral Engineers, and International Seminar on Mineral Processing Technology (MPT-2001), Hyderabad, February 15-17, 2001.

11. B. K. Mishra, *Application of the Discrete Element Method in Minerals Engineering*, MPT 2001, Ramada Hotel, Hyderabad, February 15-17, 2001.

12. D. Bhimji, B. K. Mishra, and C. Thornton, *Poster presentation: Preliminary investigation into batch granulation using the discrete element method*, Particle Technology UK Forum, 29/30 June 1999.

13. Raj Narayan and Surya Narayanan, *Electrodeposition of Heat -Treatable Ni-P-Al_2O_3 Composite Coatings*, Proceedings AESF SUR/FIN 2000, Pub. American Electroplaters & Surface Finishers Society, USA, June 26-29, 2000.

14. K.N. Rai and N.K.Kapuri, *Dehydration And Sintering of Nano Alumina Particulates*, Inter National Symposium on Small Particles and Inorganic Clusters, Georg.Tech., Atlanta, USA, May 11-15, 2000.

15. K.N. Rai and S.R.Vidhyarthi, *Alloying Effect on Ultrafine Ni Particulate*, International Symp.on Small Particles and Inorganic Particulate, Georgia Tech. USA, Atlanta,11-15, 2000.

16. A. Upadhyaya, *Recent Developments in Hardmetal Processing* (invited talk), International Symposium on Recent Progress in Powder Metallurgy, Japan Iron & Steel Institute, Tokyo, Japan, November 2000.

17. A. Upadhyaya and R.M. German, *Strategies for Controlling Distortion and Dimensional Precision in Liquid Phase Sintering*, Powder Metallurgy World Congress 2000, Kyoto, Japan, November 2000.

18. A. Upadhyaya, D. Sarathy, and G. Wagner, *Effect of Alloying on Microstructural Homogeneity and Mechanical Properties of Hardmetals*, Powder Metallurgy World Congress 2000, Kyoto, Japan, November 2000.

19. A. Upadhyaya, *P/M Alloys for Aerospace Applications* (invited talk), Aerospace Materials & Technologies for 21st Century Aviation Applications (AEROMAT-2001), Aeronautical Society of India, Kanpur, February 2001.

DEPARTMENT OF MECHANICAL ENGINEERING

1. K. Muralidhar, "Numerical Analysis of a Regenerator using a Single Wire Model", paper number NHTC2000-12214, Proceedings of the 34th National Heat Transfer Conference (ASME), held during 20-22 August 2000, Pittsburgh, USA (2000).

2. K. Muralidhar, "Laser Measurement Techniques in Fluid Flow and Heat Transfer", KEYNOTE PAPER, Proceedings of the 16th National Convention of Mechanical Engineers, University of Roorkee, pp. 897-905, 29-30 September 2000.

3. K. Muralidhar, "Thermal Conductivity of a Heterogeneous Medium", KEYNOTE PAPER, Indo-German Workshop on High-Temperature Fibre Composite Materials, pp. 243-255, Banaras Hindu University, 11-15 September 2000.

4. N. Ghata and K.Muralidhar, "Parameter Estimation in Nonlinear Diffusion Problems by an Inverse Technique", INVITED PAPER, 27th National Fluid Mechanics and Fluid Power Conference held at FCRI, Palghat, pp. 126-137, December 2000.

5. T. Sheorey and K. Muralidhar, "Application of Domain Decomposition to the Simulation of Oil Recovery on a Parallel Computer", presented at the ISMMACS Annual Conference on Mathematical Modelling and Computer Simulation, Organized by NEERI, Nagpur, October 2000.

6. A.K.Saha, K.Muralidhar and G.Biswas, "Comparison of Two and Three Dimensional Models of Transitional Flow Past a Square Cylinder", presented at the 27th National Conference on Fluid Mechaniccs and Fluid Power, Palghat, pp. 251-278, December 2000.

7. S. Dutta, K. Muralidhar and P.K. Panigrahi, "Influence of Orientation of a Square Cylinder on the Wake Properties", presented at the International symposium on advances in experimental fluid mechanics, IIT Kanpur, pp. 170-179, December 2000.

8. Atul Srivastava, K. Muralidhar and P.K.Panigrahi, " Interferometric Study of Rayleigh-Benard Convection in an Axisymmetric Fluid Layer", Presented at the International Symposium on advances in experimental fluid mechanics, IIT Kanpur, 151-160, December 2000.

9. V.B.Shenoy and L.B. Freund," Compositional stability of thin films", ICTAM Conference, IUTAM, Chicago, August 2000.

10. V.B.Shenoy. "Quasicontinuum Method: Current Status and Future Directions", (Invited), National Conference on Computational Material Science (NCCMS), Materials Research Society, India, BARC Mumbai, June 2000.

11. S. Sarkar, D. Basu, K. Das, 2000, "Prediction of Transitional Flow and Heat Transfer Over Transonic Turbine Cascade", 34th National Heat Transfer Conference, ASME Paper No. NHTC2000-12045, Pennsylvania, Aug. 20-22.

12. S. Sarkar, K. Das, D. Basu, 2000, "Heat Transfer Analysis in Film-Cooled Turbine Cascades Using Multigrid Method", Second International Symposium on Advances in Numerical Methods for Aerodynamics and Hydrodynamics for Turbomachionery, ASME Paper No. FEDSM2000-11067, Boston, June 11-15.

13. S. Sarkar, K. Das, D. Basu, 2000, "Viscous Calculation for Turbomachinery Application with Multigrid Algorithm", Fourth ISHMT-ASME Heat and Mass Transfer Conference and Fifteenth National Heat and Mass Transfer Conference, Pune, January 12-14, pp. 889-894.

14. G.Pohit, C. Venkatesan and A.K.Mallik, 2000, "Influence of nonlinear elastomer on isolated lag dynamics and rotor/fuselage areomechanical instability"-41st AIAA/ASME/ASCE/AHC/AHS- Structures, Structural Dynamics and Material Conference, Atlanta, USA, Paper No. 2000-1691.

15. A.K.Mallik, 2000, "Nonlinear Vibration of a beam axially moving over simple supports"-ICRAMS, 2000, Dec. 20-22, Kharagpur, pp.

16. Prashant Kumar, NN Kishore & B Raj Kumar, " Determination of Interlaminar Fracture Toughness Through an Embedded Crack", Seventh Annual International Conference on Composite Engineering, July 2-8, 2000, Denver Colorado.

17. K. Maeno, K. Saito, Y.Kasai & P.K. Panigrahi, " Non equilibrium Condensation of low-temperature vapor or R-134a on cold wall behind shock wave", Fluid Dynamics Conference, Japan Society o Fluid Mechanics, Kougakuinn University, Siniuku Ku, Japan. July 31st to August 2nd 2001.

18. K. Maeno, T. [illegible] and P.K.Panigrahi, " Behavior of laser-induced bubble and shock waves in liquid nitrogen", Fluid Dynamics Conference, Japan Society of Fluid Mechanics, Kougakuinn University, Siniuku Ku, Japan, July 31st to August 2nd 2001.

19. A.Srivastava, K.Muralidhar and P.K.Panigrahi," Laser interferometric study of Rayleigh-Benard covection in an axisymmetric differentially heated fluid layer" International Symposium on Recent Advances in Experimental Fluid Mechanics, December 18-20, 2000, IIT Kanpur, India.

20. S. Dutta, P.K.Panigrahi & K.Muralidhar, " Influence of the orientation of a square cylinder on the wake properties", International Symposium on Recent Advances in Experimental Fluid Mechanics, IIT Kanpur, December 18-20, 2000.

21. Acharya S. & Panigrahi P.K., " Turbulent separated shear layer flow past a rib forced by the fundamental', 2000 ASME Fluids Engineering Division Summer Meeting, Boston, June 11-15, FEDSM 2000-11179 (2000).

22. Singh M., Panigrahi P.K. & Biswas G. " Flow Characteristics in a three–dimensional rectangular channel with a pair of ribs placed symmetrically at the channel walls", IMELE Conference, Orlando, ASME, 2000.

23. B.P.Pundir, "Emission Control in Two and Three Wheelers", Workshop in Automotive Technology and Fuel Quality for Environmental Protection, Indian Institute of Petroleum Management, Gurgaon, Jan. 15-17, 2001.

24. B.P.Pundir, "Impact of Fuel Quality on Engine Emissions", Workshop on Automotive Technology and Fuel Quality for Environmental Protection, Indian Institute of Petroleum Management, Gurgaon, Jan 15-17, 2001.

25. B.P.Pundir, " Diesel Fuel Quality for Low Emissions", 3rd International Colloquium on Fuels, Ostfildern (near Stuttgart) Germany, Jan. 17-18, 2001.

26. Om Prakash, "Hybrid Control of structural damping using a combination of smart coating and cellular metal matrix composite", in Indo –US workshop, Roorkee, Jan 2-4 2001.

27. Om Prakash, "Indentation Creep, Mechanics, Physics and Chemistry of contact at the Molecular Scale", Sikkim, International Nanotribology Symposium, Pelling, Sikkim, May 16-25, 2001.

28. N.V.Reddy, "Gate Location and Part Quality in Injection Molding, National Symposium on Manufacturing Engineering in Twenty First Century", IIT Kanpur, March 2-3, 2001, 37-40, N. Satyamurthy, Pulak M. Pandey, N.V.Reddy.

29. Deb K. and Goel, T. (2001), "Controlled elitist non-dominated sorting genetic algorithms for better convergence", Proceedings of the First International Conference on Evolutionary Multi-Criterion Optimization (EMO-2001), 7-9 March. (Zurich, Switzerland), (pp. 67-81).

30. Deb K., Pratap A. and Meyarivan T. (2001), "Constrained test problems for multiobjective evolutionary optimization", Proceedings of the First International Conference on Evolutionary Multi-Criterion Optimization (EMO-2001), 7-9 March,. (Zurich, Switzerland). (pp.284-298).

31. Deb K. and Goel T. (2001), "A hybrid multi-objective evolutionary approach to engineering shape design", Proceedings of the First International Conference on Evolutionary Multiobjective Criterion Optimization (EMO-2001), 7-9 March.(Zurich, Switzerland), (pp., 385-399).

32. Deb K., Pratap A., Moitra S. (2000), "Mechanical component design for multiple objectives using elitist non-dominated sorting GA", Proceedings of the Parallel Problem Solving from Nature VI Conference, 16-20 September. (Paris, France), (pp. 859-868).

33. Deb K., Agrawal S., Pratap A., Meyyarivan, T. (2000), " A Fast Elitist Non-dominated sorting genetic algorithm for multi-objective optimization: NSGA-II", Proceedings of the Parallel Problem Solving from Nature VI Conference, 16-20 September. (Paris, France), (pp. 849-858).

34. Beyer H.G. and Deb K. (2000), " On the desired behaviors of self –adaptive evolutionary algorithms", Proceedings of the Parallel Problem Solving from Nature VI Conference, 16-20 September, (Paris, France). (pp. 59-68).

35. Deb K. (2000), " Multiobjective Evolutionary Algorithms: Past, Present, and future," Proceeding of the Fourth Advanced Computing in Design and Manufacture (ACDM-2000) Conference, 26-28 April. (Plymouth, UK), (pp.225-236).

36. S.Kumar, Kripa Shanker and G.K.Lal, "Feature-based extrusion die design for non re-entry cold extrudable shapes" Conference on Agile Engg., BIT, Ranchi, Nov. 2000.

37. S.Kumar, Kripa Shanker and G.K.Lal, " Analysis of cold extrusion of non re-entry shapes", Trans. ASME, J. of Mfg. Eng. & Science, In Press.

38. Anupam Saxena , " Number Synthesis of Linkages via Topology Optimization", 2001 ASME Design Engineering & Technical Conferences, Pittsburgh September 2001 (Accepted).

39. Anupam Saxena, " On Strength Issues in Topolgy Optimization of Compliant Mechanism, ASME, DETC, Pittsburgh, September 2001, (Accepted).

Papers Presented in Conferences/ Workshops etc. but NOT published in proceedings:

1. S. Sarkar, D. Basu, K. Das, 2000, "Three-Dimensional Navier-Stokes Analysis of Transonic Turbine Cascades Using Multigrid Algorithm", 22nd Congress of the International Council of Aeronautical Science, Harrogate, U.K, Aug 27-Sep 1.

2. A.K.Mallik, 2000, " Dynamics of linear and nonlinear periodic systems", Plenary Lecture in Vetomac-I, Bangalore, October 25-27.

Seminar Presented

1. G.Biswas, "Longitudinal Vortices and Enhanced Heat Transfer: Analysis of Flow and Transport Rate" (Invited Talk), Proceedings of the Sixteenth National Convention of Mechanical Engineers, University of Roorkee, Vol. 2, pp. 885-896, 2000.

2. K.Muralidhar, "Optical Measurement Techniques for Fluid Flow and Heat Transfer", Proceedings of the 16th National Convention of Mechanical Engineers, University of Roorkee, September 2000.

3. K.Muralidhar, " Thermal Conductivity of a Heterogeneous Medium, Indo-German Workshop on High-temperature Fibre Composite Materials", Banaras Hindu University, September 2000.

4. K.Muralidhar, "Estimation of Thermal Conductivity of Heterogeneous Materials by an Inverse Techniques", CEP course on Spectroscopic and Thermal Techniques for materials characterization, organized by DMSRDE Kanpur, November 2000.

5. K.Muralidhar, "Modelling And Simulation of Transport Processes During Crystal Growth", Center of Advanced Technology, Indore, November 2000.

6. K.Muralidhar, " Parameter Estimation in Nonlinear Diffusion Problems by an Inverse Technique", 27th National Fluid Mechanics and Fluid Power Conference held at FCRI, Palghat, December 2000.

7. V.Shenoy, "Quasicontinuum Method for Multiple Scale Modeling of Materials", S.N.Bose National Centre for Basic Sciences, Kolkata, Theoretical Physics Seminar Circuit (TPSC), March 2001.

8. V.Shenoy, "Size Dependent Rigidity of Nanoscale Structural Elements", Joint Seminar of MRC, Metallurgy and Mechanical Engineering, Indian Institute of Science, Bangalore.

9. V.Shenoy, "Quasicontinuum Method for Atomic Scale Mechanics", J.N. Centre for Advanced Scientific Research, Bangalore, Theoretical Physics Seminar Circuit (TPSC), March 2001.

10. V. Shenoy, "Pattern Formation in Thin Film", Department of Physics, Indian Institute of Science Bangalore, Theoretical Physics Seminar Circuit (TPSC), March 2001.

11. V.Shenoy, " Quasicontinuum Models for Atomic-Scale Mechanics", Department of Physics, Indian Institute of Technology, Kanpur, Workshop on "Trends in Condensed Matter Physics", March 2001.

12. S. Sarkar, "CFD and Aero-engines", invited by the Aeronautical Society of India, 17.06.2000.

13. S. Sarkar, "Aero-Thermal Analysis of Film-Cooled Turbine Blades", invited by the Gas Turbine Research Establishment, Bangalore, India, 17.07.2000.

14. P.K.Panigrahi, "Wavelet, Fractal & FFT Analysis of Condensation instability behind shock wave chiba university, Japan, 6th June, 2001.

15. P.K.Panigrahi, "Turbulent Structure Characterization of Excited Flow behind a rib turbulator Yokohama National University, Japan, 8th June, 2001.

16. B.P.Pundir, " Whither Automotive Power plants in First Decade of 21st Century", Invited Talk on the occasion of felicitation of Dr. R. Baranescu, SAE President at SAE North India Section, Gurgaon, Jan 15, 2001.

17. N.V.Reddy, "Process Modeling and Recent Trends in Metal Forming", CBIT Hyderabad, March 7, 2001.

18. K.Deb, 26 April 2000: Keynote lecture at the Advanced Designed and Manufacturing Conference (ADCM-2000) in the University of Plymouth, UK entitled 'Multi-objective evolutionary optimization: Past, present, and future'.

19. K.Deb, 22 September 2000: "An Introduction to Genetic Algorithms", ABB Heidelberg, Germany.

20. K. Deb, 9 December 2000: " Non-dominated Sorting Genetic Algorithms for Multi-Objective Optimization", Tenth NASAS Conference, IIT Kanpur.

21. G.K.Lal, September 2000: Keynote Lecture, " Evaluation of Administration & Management of Technical Institution", AICTE Workshop MACT, Bhopal.

22. G.K.Lal, December 2000: Keynote Lecture, " Management of Technical Institution", AICTE Workshop, IISc., Bangalore.

23. G.K.Lal, Januray 2001: Keynote Lecture, " A historical perspective", National Conference on Manufacturing in 21st Century, IT, BHU.

DEPARTMENT OF PHYSICS

1. Noncommutative Hamiltonian Systems and Quantum Classical Correspondence, at Allahabad University, Dec 15, 2000, Tulsi Dass.

2. Electronic transport in porous silicon layers, Md. N. Islam, Sanjay K. Ram, and Satyendra Kumar presented at 12th AGM, Materials Research Society of India, Science City, Calcutta, January 31 to February 2, 2001.

3. Plasma CVD deposited highly tetrahedral amorphous carbon thin films, at Ecole Polytechnique, France, April 2000, S. Kumar.

4. Nanocrystalline carbon and silicon, ETH Zurich, Switzerland, May 2000, S. Kumar.

5. Polysilicon by Plasma CVD, Phillips Research laboratory, Redhill, U.K., July 4, 2000, S. Kumar.

6. SiF_4 deposition of microcrystalline Silicon, Joumee des etudes couches minces, Ecole Polytechnique, France, September 15-18, 2000, S. Kumar.

7. Thin Film Transistors by Display Applications, Samtel Display Technology Center, IIT Kanpur, Nov 2000, S. Kumar.

8. Green's functions in axial and Lorentz gauges, IIT Kanpur, 11.4.2000, S.D. Joglekar.

9. Non-local regularization, non-local effective field theory and application to the Renormalization theory, Harish Chandra Research Institute, Allahabad, 30.10.00, S.D. Joglekar.

10. Non-local regularization, non-local effective field theory and application to the Renormalization theory, IIT Kanpur, 25.03.01, S.D. Joglekar.

11. Axial and other non-covariant gauges and FFBRS transformations (invited plenary talk), University of Hyderabad, 21.12.00, S.D. Joglekar.

12. Photo-physics of correlated electron systems, Dec. 2000, CAT Indore, H. Ghosh.

13. Photo-physics of correlated electron systems, Feb. 2001, IIT Kanpur, H. Ghosh.

14. Photo-physics of correlated electron systems, March 2001, IIT Kharagpur, H. Ghosh.

15. Neutrino-induced giant air showers in large extra dimensions models, IIT Kanpur, 27 Feb. 2001, P. Jain

16. The mystrious nature of exclusive processes and color transparency, invited talk, Int Symp on Nuclear Physics, 18-22 Dec 2000, BARC, Mumbai, P. Jain.

17. Cosmic anisotropy in extra galactic radio polarizations, NCRA, Pune, 15 Dec 2000, P. Jain.

18. Neutrno induced giant air showers in large extra dimension models, IUCAA, Pune, 14 Dec 2000, P. Jain.

19. Cosmic anisotropy in extra galactic radio polarizations: an update, IIT Kanpur, July 2000, P. Jain (Talk presented).

20. Noncommutative Geometry, D-brane zero modes and divergences, 7 Apr 2000, ITP, Chalmers Univ of Tech and Gothenburg Univ, Sweden. Supriya Kar.

21. Renormalization(s) and non-commutative quantum field theory, 16 Oct 2000, IIT Kanpur, Supriya Kar.

22. Renormalization(s) and non-commutative quantum field theory, 23 Oct 2000, IIT Kanpur, Supriya Kar.

23. D-brane dynamics, Renormalization(s) and Non-commutative geometry, 11 Dec 2000, CTS, IISc, Bangalore, Supriya Kar.

24. D-brane dynamics and Non-commutative geometry, 14 Dec 2000, IMS, Chennai, Supriya Kar.

25. D-brane dynamics and non-commutative strings and fields, 25 Jan 2001, HRI, Allahabad, Supriya Kar.

26. Percolation as Critical Phenomena and Effect of External Constraints, IIT Kanpur, S.B. Santra.

27. Biased Diffusion in Disordered Systems, Trends in Condensed Matter Physics, IIT Kanpur, Feb 25-27, 2000, S.B. Santra.

28. Problem of Storing Nuclear Waste in Glass, IIT Kanpur, S.B. Santra.

29. Gravitation Exchange Effects in Lepton-proton Collisions, at SUSY2K – Workshop on Supersymmetry held at CERN, Geneva, June 26-July 1, 2000, S. Raychaudhuri.

30. Neutrino Masses and Oscillations in theories with Extra Dimensions, at a Workshop on Neutrino Physics held at SINP, Kolkata, Aug 9-11, 2000, S. Raychaudhuri.

31. Randall-Sundrum Phenomenology, under TPSC, TIFR, Mumbai, Dec 7, 2000, S. Raychaudhuri.

32. Phenomenology of Extra Dimensions, Workshop on LHC Physics with the CMS Detector held at TIFR, Mumbai, Dec 11-15, 2000, S. Raychaudhuri.

33. Interface Modifications by Energetic Ions: A Scenario of Experimental and Theoretical Development, IIT Kanpur, April 3-4, 2001, V.N. Kulkarni.

34. Ion beam induced Epitaxial crystallization, NSC, New Delhi, Feb 26, 2001, Invited Talk, V.N. Kulkarni.

35. Black Holes in a Brane World, IIT Kharagpur, May 2001, G. Sengupta.

CONFERENCE ATTENDED OUTSIDE IIT KANPUR

CENTRE FOR LASER TECHNOLOGY

1. 50^{th} IEEE Electronic Components and Technology Conference, Las Vegas, May 2000. (A. Ghosh presented a paper)
2. SPIE ISPA Conference on Microelectronic Yield, Reliability and Adv. Packaging, Singapore, Nov. 2000. (A. Ghosh presented a paper)
3. Photonics-2000 Conf., Calcutta, Dec. 2000. (A. Ghosh and U.Das presented papers)
4. National Laser Symposium' 2000 at Delhi, contributed papers. (A Pradhan and BansiLal presented papers)
5. International Conference on Communications, Computers & Devices (ICCCD-2000), Dec. 14-16, 2000, IIT Kharagpur, India. (U.Das presented a paper as well as chaired a session)
6. Optical Measurement Techniques for Fluid Flow and Heat Transfer, Proceedings of the 16^{th} National Convention of Mechanical Engineers, University of Roorkee, September 2000. (K Muralidhar presented a paper)

DEPARTMENT OF AEROSPACE ENGINEERING

1. IX SEM International congress on Experimental Mechanics Orlando, Florida, U.S.A., June 5-8, 2000, presenting a contributed paper

2. Seventh Annual International Conference on Composites Engineering, Denver, Colarado, U.S.A. July 2-8, 2000, presenting a contributed paper, chaired a session

3. 8^{th} ASCE Joint Specialty Conf. On Probabilistic Mechanics and structural Reliability, July 24-26, 2000, University of Notre Dame, Notre Dame, Indiana, USA, Presenting contributed paper

4. 22^{nd} International Sym. Space Technology and Science, Morilea, Japan, May 28-June 4, 2000, presnted a contributed paper.

5. AIAA, Atmospheric Flight Mechanics Conference, Denver, Colorado, 14-17 Aug., 2000, Presenting Technical Paper

6. "26^{th} European rotorcraft forum, The Hague, The Netherlands, Sept. 2000 (Contributed Paper)

7. "International Seminar on Aerospace Technologies, Bangalore, Feb. 2001 (Invited Paper)

8. ARDB projects symposium, 27-28 April 01, Hyderbad, Presentation of Research progress

DEPARTMENT OF CHEMICAL ENGINEERING

1. Petrocon 2000, IIT Kharagpur, July 1-2, 2000, invited lecture, chaired one session. (D. Kunzru)

2. Dynamics and morphology of thin fluid films on chemically heterogeneous surfaces, Conference on Sow Dynamics and Freezing in Condensed Matter System, JNU, New Delhi 2000, A. Sharma.

3. Instability, dewetting and morphology of thin liquid films on heterogeneous surface, 74th American Chemical Society Colloid and Surface Science Symposium, Lehigh University, 2000, Sharma A., Kargupta K.

4. Morphological Transitions and Templating during Dewetting of Thin Films on Patterned Substrates, International Workshop on Nanomaterials, Saha Institute, Science City, Calcutta 2001, Konnur R., Kargupta and Sharma R.

5. Studies on Reaction in a Model Trickle-Bed Reactor, by S. Subramanyam, M. Radhika, P.V. Ravindra, D.P. Rao and M.S. Rao at CHEMCON-2000- adjudged best presentation.

6. Chairman for the Reaction Engg.-I-Technical Session at CHEMCON-2000 (Dec.18-21, 2000). (M.S. Rao)

7. Attended Symposium entitled CHEMINAR at Bhubaneshwar Feb., 2001 (M.S. Rao)

8. American Institute of Chemical Engineers, Los Angeles, USA, Nov. 12-17, 2000 paper presented on, online optimization of a crude distillation unit with constraints on product properties, K.S. Basak, K.S. Abhilash, S. Ganguly and D.N. Saraf.

9. North American Catalysis Society Meeting, Toronto, Canada. June 3-8, 2001, Structure -Reactivity Studies of Supported Chromium Oxide Catalysts. (Goutam Deo)

10. Symposium on Utilization of Natural Resources, IIChE, Bhubaneswar, Feb. 2001, Structure-Reactivity Relationships of Cr2O3/Al2O3 Catalysts: ODH of LPG. (Goutam Deo)

DEPARTMENT OF CIVIL ENGINEERING

1. Dr. Malya Chaudhuri, Shubha Verma - National Symposium on Environmental Challenges for the New Millennium, Kanpur (November 24-25, 2000). Presented a contributed paper 'Removal of Arsenic from Water'.

2. Dr. Animesh Das - Research summary presented on "Development of Analytical Design Method for Flexible Pavements" in the IRC Annual Session, Calcutta, 3 to 8th November, 2000.

3. Dr. Umesh Dayal, "Co-Disposal of Redmud and Ash" presented in the 16th International Conference on Solid Waste Technology and Management Philadelphia, USA, Dec. 2000.

4. Dr. Umesh Dayal, Chaired a Session on Utilziation of Waste in Concrete in the 16th International Conference on "Solid Waste Technology and Management," Philadelphia, USA, Dec. 2000

5. Dr. Umesh Dayal, "Integrated Solution of Flyash and Redmud Disposal," National Conference on Environmental Management, Banaras Hindu University, Varanasi, India, Feb. 2000.

6. Dr. Umesh Dayal, Chaired a Specially Session on "Ganga Pollution in the National Conference on Environmental Management," Banaras Hindu University, Varanasi, India, Feb. 2000.

7. Dr. Onkar Dikshit - Contributed papers in the following conferences:

   (i) ICORG International conference on Remote Sensing and GIS, ICORG-2000, Hyderabad, (Feb. 2-5, 2000), presented paper.
   (ii) XX INCA International Congress, Dehradun (28 Feb.-2 March, 2001).

8. Dr. S.K. Jain - Sixth International Conference on Seismic Zonation, Palm Springs Riviera Resort, California, USA, Nov. 2000

9. Dr. M.R. Madhav - International Symposium on Lowland Technology, Saga, Japan, Nov. 2000 – Keynote Speaker & Closing Session

10. Dr. M.R. Madhav. - Indian Geotechnical Conference, Mumbai, Dec. 2000 – Inaugural Lecture and Chairman, Tech. Session.

11. Dr. N.S.V. Kameswara Rao - 4th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, San Diego, USA, 26-31, March 2001, Contributed paper, Official Discusses and Co-Chairman of a session.

12. Dr. B.C. Raymahashay - Platinum Jubilee Workshop on' "Geology and Mineral Resources of Bihar – Jharkhand," ISM, Dhanbad, December 6-7, 2000 :

   (i) Keynote Address on "Environmental Impact of Urbanization – A Geological Assessment".
   (ii) Chairman, Session on Water Resources.

13. Dr. R.P. Singh - Fifth Pacific Ocean Remote Sensing Conference (PORSEC 2000), NIO, Goa, Dec. 5-8, 2000 paper presented.

14. Dr. R.P. Singh - International Conference on Natural Hazards : Mitigation and Management, Guru Nanak Dev University, Amritsar, March 12-15, 2001, Chaired session and presented an invited talk.

15. Dr. R.P. Singh - Seminar on Geology and Natural Environment of the Lesser Himalaya : Present Status and Strategy for the Next Two decades, Kumaun University, Nainital, March 23-25, 2001, Chaired session and presented an invited talk.

16. Dr. R. Sinha - Sediment 2000, European Association of Sedimentologists, Leoben, Austria, 19-25, June, 2000.

17. Dr. R. Sinha - Inaugural meeting of IGCP 449: Global correlation of Cenozoic Fluvial Sequences, Prague 21-24, April, 2001.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

By	Conference	Venue	Dates	Participation as
A. K. Jain	VDAT'00	New Delhi	Sept 2000	Chaired
S. Biswas	FST & TCS		Dec 2000	Attended
P. Jalote	ISIDEC	Beijing	Aug 2000	Presented a paper
P. Jalote	SEPG	New Delhi	Feb 2001	Plenary talk
P. Jalote	Mexico City	Mexico	Mar 2001	Invited talk
P. Jalote	ICSE	Ireland	June 2000	Gave a tutorial
P. Jalote	SIA	Chile	2000	Gave a tutorial
D. Sanghi	ICPWC'00	Hyderabad	Dec 2000	Presented a paper
D. Sanghi	CIT'00	Bhubaneshwar	Dec 2000	Presented a paper
D. Sanghi	Infranet'00	New Delhi	Dec 2000	Attended
P. Gupta	Comp. & Info. Tech.	Dhaka	Jan 2001	Presented two Papers
T. V. Prabhakar	IDEAS 2000	Yokohama	2000	Presented a paper

DEPARTMENT OF ELECTRICAL ENGINEERING

1. Prof. V. Sinha attended the 3rd Workshop on Global Engineering Education (GEE'3); Aachen, Germany; October 18-20, 2000 and presented three contributed papers.

2. Prof. V. Sinha attended the 3rd International Symposium on Wireless Personal Multimedia Communications (WPMC'00) at Bangkok, Thailand; November 12-15,

2000 and presented one contributed paper. He also chaired two Sessions; Session M 5.1 on "Networking I" on November 13, 2000 and Session W 5.1 on "Multimedia" on November 15, 2000.

3. Prof. V. Sinha attended International Conference on Learning and Teaching On-Line : Practices, Challenges and Prospects; Guangzhou, China, during January 10-12, 2001 and presented two contributed papers.

4. Prof. S. C. Srivastava attended International Conference on Electric Utility Deregulation and Restructuring and Power Technologies 2000 (DRPT 2000), City University, London, UK, 4-7 April, 2000 and presented two contributed papers & chaired a session.

5. Prof. S.C. Srivastava attended the International Conference on Power System Technology (Power Con 2000), Perth, Western Australia, 4-7 December, 2000 and presented a contributed paper

6. Prof. S.C. Srivastava attended the Eleventh National Power Systems Conference (11th NPSC) at IISc Bangalore, 19-22 December, 2000, presented a contributed paper and chaired a session.

7. Dr. Y.N. Singh attended Photonics-2000 at Calcutta, December 18-20, 2000 and presented a contributed paper.

8. Dr. G.K. Dubey attended Summer meeting of Power Engineering Soc. in July 2000 at Seattle and presented a paper.

9. Dr. Arindam Ghosh attended IEEE Power Engineering Society Winter Meeting between January 28 and February 1, 2001 in Columbus, Ohio, USA and presented five contributed papers.

10. Dr. G.C. Ray attended 22nd IEEE International Conference organized by World Congress on Medical Physics and Biomedical Application – Chicago – 2000, July 23-28, Illinois, Chicago and presented one paper

11. Prof. S.S. Prabhu attended Eleventh National Power Systems Conference NPSC-2000, Dec. 20-22, 2000, Indian Institute of Science. Bangalore. He presented a paper, chaired a plenary session and chaired a technical session.

12. Dr. R.K. Varma & Dr. B.C. Pal attended 11th NPSC held at IISc Bangalore during 19-22 December, 2000. Dr. Varma also chaired a technical session.

13. Dr. A.K. Chaturvedi attended Ericssion's "3G Tour Transcontinental-ON AIR Show" in New Delhi on 22 March, 2001.

14. Drs. A.K. Chaturvedi, S.K. Bose and S.C. Srivastava attended Marconi's seminar on Industry-Academia Interaction in New Delhi in the first week of January 2001.

15. Drs. A.K. Chaturvedi and S.K. Bose attended the launching of Cradle's Technical Activities Board meeting on 30th March 2001 in New Delhi.

16. Dr. S. Kar attended the Fifteenth International Symposium on Chemical Vapor Deposition, Toronto, Canada, 14-18 May 2000. Presented an invited paper, "Chemical Vapor Deposition of Low Trap Density SiGe Quantum Well Layers on Silicon".

17. Dr. Kar attended the Second International symposium on ULSI Integration, Washington, DC, USA, 25-30 March, 2001. Presented a contributed paper, "Fabrication of High Quality MOS Structures with SiGe Buried Channels for CMOS Applications".

18. Dr. S. Kar attended the Sixth International Symposium on Silicon Nitride and Silicon Dioxide Thin Insulating Films, Washington, DC, USA, 25-30 March 2001. Presented a contributed paper, "Two Limiting Thinnesses of the Ultrathin Gate Oxides".

19. Dr. S. Kar attended the Sixth International Symposium on Low and High Dielectric Constant materials: Materials Science, Processing, and Reliability Issues, Washington, DC, USA, 25-30 March 2001. Presented an invited paper, "Electrical Characteristics of Organic Monolayer Dielectrics on Silicon".

20. Dr. Anjan Ghosh attended 50th IEEE Electronic Components and Technology Conference, Las Vegas, May 2000 and presented a contributed paper.

21. Dr. Anjan Ghosh attended SPIE ISPA Conference on Microelectronic Yield, Reliability and Adv. Packaging, Singapore, November 2000 and presented a contributed paper.

22. Dr. Anjan Ghosh attended Photonics-2000 Conference, Calcutta, December 2000 and presented a contributed paper.

23. Dr. R.K. Bansal attended six day International Conference on Stochastic Process at, Indian Statistical Institute, Calcutta during December 18th 23rd, 2000, which was held in honor of Professor Gopinath Kallianpur his Seventy Fifth birth anniversary.

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

1. A.K. Sharma, Presented a paper on "Routinization and Deskilling Debate in Indian Software Industry", XXVI All India Sociological Conference held at University of Kerala, Thiruvananthapuram, 29-31 December, 2000 (jointly with P. Vighnesh Illavarsan as the first author).

2. A. K. Sharma, Presented a paper on "Fertility in Uttar Pradesh: What can be done?" in National Seminar on Population and Health at Govind Vallabh Pant Social Science Institute, Allahabad, 18-19 January 2001. Also chaired a session on Population Policies: Implementation and Agencies.

3. A. K. Sharma, Presented an invited paper on "Measurement of Urbanization: Construction of Chernoff-Type Face" in National Seminar on Emerging Methodologies of Data Analysis and Related Inferences, Department of Statistics, Banaras Hindu University, Varanasi, 5-7 February 2001.

4. A K. Sharma, "Would WTO Routinize System Work in India? Some Answers from a Pilot Study", in Opening Seminar of WTO and Allied Issues, Conducted by Strategic Forum, India at IIM Lucknow, 4-5 Feb. 2001 (jointly with P. Vighnesh Illavarsan as the first author).

5. A. K. Sharma, Paper "Issues in Population Policy Implementation in UP", State Conference on Mobilization of Opinion Makers on Population Policy, organized by Centre for Policy Research, New Delhi at Taj Residency Hotel, Lucknow, 16th May 2001.

6. Munmun Jha, Participant. Winter Workshop on "Sources of Conflict in South Asia: Globalisation, Governance, Environment." Eden Hotel, Beruwela, Sri Lanka, 17-25 April 2001. Organized by the Regional Centre for Strategic Studies, Colombo, Sri Lanka.

7. R.R. Barthwal (with K.K. Saxena & D.N. Misra), R & D and Foreign competition: A Study of The Indian Pharmacentical Industry National Seminar: Prospects of Industrial R & D in India under Globalization, Deptt. of IIT Kanpur, Feb. 6-7, 2001.

8. N.K. Sharma, Indian Science congress Association, January 3-7, 2001, IARI, New Delhi. Invited Symposium Paper: "what is in a number that tells the psychologist what is in the mind?" Symposium on Errors of Measurement: Psychometrically Based Solutions.

9. B.K. Pattnaik, Chairing a session & Presenting a paper in the International Workshop on 'Emerging Trends in Science and Technology Indicators: Aspects of collaborations. Organized by the NISTADS, CSIR, New Delhi, During 20-25 Feb. 2001.

DEPARTMENT OF INDUSTRIAL AND MANAGEMENT ENGINEERING

1. Third World Congress on Intelligent Manufacturing Processes and Systems, MIT, Cambridge, June 28-30, 2000 (*contributed papers & session chair*), Kripa Shanker.

2. Special International Conference on Production Research (ICPR) 2000, Bangkok, August 2-4, 2000, (*contributed papers, session chair & general chair technical arrangements*), Kripa Shanker.

3. Attended a 5 day workshop on Learning Materials for Technology Management, IIT Bombay, June 2000, Veena Bansal.

4. Attended a 5 day workshop on Learning Materials for Technology Management, IIT Bombay: June 2000, Veena Bansal.

5. Attended a 3-day workshop on Object Oriented Project Management, ZOPP, at IISC Bangalore Organized by Ministry of Technology, May 2000, Veena Bansal.

DEPARTMENT OF MATHEMATICS

1. Annual National Seminar of the Calcutta Logic Circle on Logic and Applications, Dept. of Pure Mathematics, University of Calcutta, September 15-17, 2000. An Invited talk by Banerjee, M.

2. International Conference on Recent Advances in Mathematical Sciences, Dept. of Math., IIT Kharagpur, December 20-22, 2000. A contributed paper by S. Ghorai.

3. 66th Annual Conference of IMS, Dept. of Mathematics, Marathwarda University, Aurangabad, December, 2000. Delivered the Invited Talk Unconditional Bases : An Overview by M. Gupta.

4. Conference on Emerging Trends of Mathematics, Dept. of Mathematics, A.M.U., Aligarh, March 2001. Delivered the Invited Talk On Schauder Bases by M. Gupta.

5. IISA Conference, New Delhi, December 2000, Presented one paper.

6. International Conference on Order Statistics and Extreme Values: Theory and Applications, Department of Studies in Statistics, University of Mysore, December 18-20, 2000.

7. Presented an Invited Talk entitled Moments of Order Statistics from Cauchy Distribution and Related Identities for Riemann Zeta Functions by P C Joshi and S Mitra.

8. International Symposium on Advances in Statistical Methods and Applications, (ISASMA-2000), Department of Statisitcs, University of Madras, Chennai, December 21-22, 2000.

9. Presented an Invited Talk entitled Moments of Order Statistics in Samples from Exponential Distribution for two-outlier exchangeable model by S Rani and P C Joshi, Also Chaired a Session of contributed papers in the same symposium.

10. International Symposium on Advances in Statistical Methods and Applications, (ISASMA-2000), Department of Statisitcs, University of Madras, Chennai, December 21-22, 2000.

11. Presented an Invited Paper entitled Estimating the Number of Components in a Two Dimensional Model by Swagata Nandi and Debasis Kundu.

12. 16TH SIDM Conference, University of Puerto Rico at Humacao Campus, 23-24th February 2001.

13. Presented a paper entitled A generalized decoding algorithm for expander codes on some multi-partite graphs, A K Lal and H L Janwa.
14. International Conference on Nonlinear Systems Modelling, Simulation and Application, N.E.S. Science College, Nanded, Maharashtra, December 26-29, 2000. An invited lecture delivered by V Raghavendra., Also Chaired a Session in the same conference.

15. 17th International Symposium on Mathematical Programming, Georgia Tech., Atlanta, USA, August 7-11, 2000. An invited paper presented by Prabha Sharma.

16. OR-2000, XXXIII Annual Convention of the Operational Research Society of India, IIM, Ahmedabad, Gujarat, December 14-16, 2000. An invited paper presented by Prabha Sharma.

17. An International Conference on Recent Developments in Statistics and Probability and their Applications, India International Centre, New Delhi, December 30 - January 2, 2001. Delivered an Invited Talk entitled "Study of Genotype - Environmental Interaction using Information on Environmental Variables".

18. A Life of Mathematics, ICICI Centre for Mathematical Sciences, St. Stephen's College, Delhi, January 10-31, 2001.

19. Chaired a Session on January 17, 2001.

20. Conference on Emerging Trends in Mathematics, Dept. of Mathematics, A.M.U., Aligarh. March 24-26, 2001. Gave an invited talk on Multiplier Problems.

DEPARTMENT OF MECHANICAL ENGINEERING

1. V.K. Jain, 13th Int. Conference on wear of Materials held at Vancouver (Canada during April 2001.)

2. M.Singh, P.K.Panigrahi and G.Biswas, Flow Characteristics in a Three- Dimensional Rectangular Channel with a Pair of Ribs Placed Symmetrically at the Channel Walls, Proceedings of the IMECE, Orlando-USA, Vol. 366-3, pp. 79-87, 2000.

3. N.V.Reddy, Asian Academy Seminar on Advanced Manufacturing Systems, NFC Hyderabad, All the participants are invited by DST (India) and (Japan), One of the Indian Delegates. (On Invitation).

DEPARTMENT OF PHYSICS

1. National Symposium on Quantum Implications, at University of Allahabad, Dec 14-15, 2001, Tulsi Dass.

2. International Conference "Polycrystalline Semiconductors – Materials, Technologies and Large Area Electronics" POLYSE 2000, St. Malo, France, September 3-7, 2000, S. Kumar.

3. Current Trends in Theoretical Physcis, H.R.I, Allahabad, Invited Talk, 29-31.10.00. S.D. Joglekar

4. XIV DAE symposium in High Energy Physics, Invited Plenary talk, University of Hyderabad, 18.12.00-22.12.00. S.D. Joglekar.

5. XIV DAE symposium in High Energy Physics, Contributed paper, University of Hyderabad, 18.12.00-22.12.00. S.D. Joglekar.

6. Magnetization and electrical transport in Fe-Cr multilayers, Invited talk by A.K. Majumdar at the Symposium on New Developments in Materials: Nanomaterials and Manganites, J.N.U., New Delhi, March 2-3, 2001.

7. Contributed paper entitled "Irreversibility and relaxation in the magnetization of Fe-Cr multilayers structures exhibiting a giant magnetoresistance (GMR) effect, a paper presented by N. Theodoropoulou, A.K. Majumdar, A.F. Hebard, C. Pace, J. Lannon Jr. and D. Temple at session C22 of the APS meeting, Seattle, March 12, 2001.

8. Recent Developments in Disordered Materials, Panjab University, Chandigarh, 15-16 March 2001, presented invited paper on 'Small hydrogenated silicon clusters', chaired a session, R. Prasad.

9. International Conference on strongly correlated electron system 2K, SINP, Calcutta, Presented a contributed paper, H. Ghosh.

10. Strings 2001, TIFR, Mumbai, January 2001. Supriya Kar.

11. Strings 2000,Univ of Michigan, Ann Arbor, USA, July 2000, Supriya Kar.

12. String Workshop at NORDITA, Copenhagen, Denmark, May 2000, Supriya Kar.

13. SUSY2K – Workshop on Supersymmetry, at CERN, Geneva, June 26 – July 1, 2000, presented invited talk, S. Raychaudhuri.

14. Conference on Extra Dimensions, at Abdus Salam ICTP, Trieste, July 3-6, 2000, S. Raychaudhuri.

15. Workshop on Neutrino Physics, SINP, Kolkata, Aug 9-11, 2000, presented invited talk, S. Raychaudhuri.

16. Conference on Trends in theoretical Physics, HRI, Allahabad, Oct 29-31, 2000, chaired a session, S. Raychaudhuri.

17. Workshop on LHC Physics with the CMS Detector, TIFR, Mumbai, Dec 11-15, 2000, presented invited talk, S. Raychaudhuri.

18. Accelerator based research in basic & applied Sciences, NSC, New Delhi, Feb 25-27, 2001, V.N. Kulkarni.

19. National Conference on Science and Technology of Nanomaterials and Clusters, Barkatullah University, Bhopal, Nov 23-25, 2000, Invited Talk, V.A. Singh.

20. International Conference on magnetism and Magnetic Materials, SINP, Kolkata, H.C. Verma, presented two contributed papers.

21. Gordon Research Conference: Statistical Physics, New Hampshire, USA, June 2000, Invited Talk, D. Chowdhury.

22. Interdisciplinary Research Workshop on Probability and Statistical Physics, S.N. Bose National Center for Basic Sciences, Kolkata, Feb 2001, Invited series of lectures, D. Chowdhury.

23. International conference on STRINGS 2001 held at TIFR, Mumbai, January 5-10, 2001, G. Sengupta, chaired a session.

OTHER ACTIVITIES

(A) TECHNOLOGY DEVELOPED

DEPARTMENT OF AEROSPACE ENGINEERING

1. Jet acoustic data acquisition tool

2. **Helment mounted active air filter for a motorcyclist or scooterist**

3. Temperature calibration unit

DEPARTMENT OF CHEMICAL ENGINEERING

1. Coke inhibitors for pyrolysis furnaces have been developed. Test these, in a joint collaboration with Indian Institute of Chemical Technology, Hyderabad, a pilot plant for gas cracking has been designed for GAIL and will be soon commissioned.

2. Member, Editorial Advisory Board, Journal of Colloid and Interface Science (2000), A. Sharma.

3. Obtained DST funded research project entitled 'Process Intensification in Trickle-Bed Reactors' (Rs. 9,07,560 for 2 years) starting March 2000.

4. Soft sensors for petroleum refineries. (D.N. Saraf)

DEPARTMENT OF ELECTRICAL ENGINEERING

1. Remote Tutor, a product has been developed under the Telematics Project; providing a virtual university facility (on-line interactive pedagogic tool). The technology is ready for transfer for commercial exploitation. (Project Coordinator ; Vishwanath Sinha)

(B) SOFTWARE DEVELOPED

DEPARTMENT OF AEROSPACE ENGINEERING

1. Jet Acoustic level and spectrum analysis pacuage (Transjet to VSSC)

2. Structural Optimization for Launch Vehicle Components (S0LV), especially for shape optimization, stiffner design.

3. Software developed for optimal sensor location for vibration measurement and testing, and transferred to RWR&DC, HAL Bangalore under a consulting project

4. CAI for gas turbine propulsion

DEPARTMENT OF CIVIL ENGINEERING

1. Dr. Partha Chakroborty - A software for transit system routing is being developed. The initial test runs have been successful but further testing and minor improvements (in terms of computation efficiency) are necessary.

2. Dr. N.S.V. Kameswara Rao - Developed graphicstutor.com : A web based multimedia web based Course on Engineering Graphics, May 2001 (Student associates : Altaf Hasan, Mudit Srivastava and Ganesh Kak).

3. Dr. N.S.V. Kameswara Rao - Developed sweetgarh.freeservers.com: Web based Technical Information Portal for the holistic Design of Housing, May 2001 (Student associates : Sudeep Suman and Rahul Raj Jain).

4. Dr. N.S.V. Kameswara Rao - Developed Sweethomes.freeservers.com : Web based Technical advisory Portal for rehabilitation of Defective Buildings, May 2001 (Student associates : G. Vikranth Kumar and Anil Kumar).

5. Dr. Mukesh Sharma - Air Quality Index Presentation on Web-site for Public Information – Transferred to Central Pollution Control Board, Delhi.

DEPARTMENT OF ELECTRICAL ENGINEERING

1. A "Lab VIEW based Software for GPIB based HUD EU Test Station" software has been developed under a project, co-ordinated by Dr. Joseph John is transferred to HAL Korwa in April 2000. The second phase of the activity is in progress for developing LabVIEW based software for the new VXI based HUD EU Test Station.

2. A "Neural Network Simulator" software has been developed by Dr. P.K. Kalra.

DEPARTMENT OF INDUSTRIAL AND MANAGEMENT ENGINEERING

1. IME has successfully transferred IMPACT, a prototype spacecraft operations planning system to ISRO, Bangalore. IMPACT is a powerful automated LEO spacecraft mission support scheduling system developed at IIT Kanpur under ISRO's RESPOND sponsored research programme designed to replace MSS, an existing computerised scheduling system in use at ISTRAC, Bangalore. IMPACT uses

artificial intelligence and constraint-directed search to determine the weekly optimal allocation of spacecraft support. (PI : T P Bagchi).

DEPARTMENT OF MATHEMATICS

1. A Code for "h-p spectral element methods for elliptic problems" has been partly developed jointly by P Dutt, S K Tomar and R Kumar.

DEPARTMENT OF MECHANICAL ENGINEERING

1. Developed Flow Solver for the analysis of flow and thermal fields through aero-engines. (Subrata Sarkar)

2. Non-dominated Sorting Genetic Algorithms (NSGA-II): A generic software in C for solving multi-objective optimization problems. (K. Deb)

3. Penn Syn.1: A Topology optimization software for Stiff Structures & Compliant Mechanism. (Anupam Saxena).

DEPARTMENT OF PHYSICS

1. Two software packages developed on mechanics. They are ready for Transfer, V.A. Singh.

(C) INDUSTRY VISITED

DEPARTMENT OF CHEMICAL ENGINEERING

1. Hindustan Lever Research Centre, Mumbai for discussions on ongoing collaboration project on Thermal Cracking of Pinane. (D. Kunzru)

2. Indian Institute of Chemical Technology, Hyderabad for finalizing the design of pilot-plant for gas cracking for GAIL.

DEPARTMENT OF CIVIL ENGINEERING

1. Dr. Animesh Das - Conducted an Industrial Tour with the 3rd year B.Tech. students to Mumbai and Delhi from 2nd March to 10th March and visited sites and other Civil Engineering activities of CIDCO, TCE, DMRC, NBCC and CES.

2. Dr. Mukesh Sharma - Visited University of Kyoto, Kyoto, Japan to Work on Risk Management of Perticides, Oct. 2000.

3. Dr. Rajesh Srivastava - Water Management Consultants, USA : Consulting, May 30 – July 4, 2000.

4. Dr. R. Sinha - University of Karlsruhe, Germany, June 2000, to develop a research collaboration on paleoclimatic studies in Thar desert, India

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

1. D. Gupta, Visited TRDDC, Pune from May 15 to June 30, 2000
2. D. Sanghi, IIT Mumbai,
3. D. Sanghi, IIIT Hyderabad
4. D. Sanghi, IIM Ahmedabad
5. D. Sanghi, HBTI Kanpur
6. D. Sanghi, Pune Institute of Computer Technology, Pune
7. D. Sanghi, Walchand College of Engineering, Sangli
8. D. Sanghi, BPL Systems, Bangalore
9. D. Sanghi, Tata Consultancy Services, Hyderabad
10. D. Sanghi, Reliance Infocom Limited, Mumbai
11. D. Sanghi, NSDL, Mumbai
12. D. Sanghi, SHCIL, Mumbai
13. S. K. Agrawal, Aumtech Inc., NJ, USA
14. S. K. Agrawal, Mahendra British Telecom, Pune
15. P.Jalote, Infuses Technologies Ltd., Banglore
16. P.Jalote, EPFL, Lansanne, Switzerland

DEPARTMENT OF ELECTRICAL ENGINEERING

1. Dr. V. Sinha visited University of Hong Kong; Department of Electrical Engineering; January 14-15, 2001.

2. Dr. Joseph John visited HAL, Korwa for his consultancy project on software development for VXI based HUD EU test station during April 2000, August 2000, November 2000

3. Dr. S. Kar visited Institute d'Electronique et de Micro-electronique du Nord, C.N.R.S., Lille, France, to carry out research activities under the Indo-French collaborative project sponsored by IFCPAR, 19th May to 05th June 2000.

4. Dr. S. Kar visited Department of Electrical and Computer Engineering, Clemson University, Clemson, South Carolina, USA, to carry out research activities under the Indo-US collaborative project sponsored by DST and NSF, 29th March to 06th April 2001.

DEPARTMENT OF INDUSTRIAL AND MANAGEMENT ENGINEERING

1. Tata Info. Tech, Mumbai, To discuss possibilities of joint research, Veena Bansal.

2. IIT Bombay, To attend a workshop on Technology Management, Veena Bansal.

DEPARTMENT OF MECHANICAL ENGINEERING

1. Attend the Annual Project Meeting and a Workshop sponsored by NEDO on Application of Vortex Generators and Oval Tubes to Enhance Performance of Air-Cooled Condensers and other Heat Exchangers in Yokohama National University, Japan between October 2-8, 2000. (Gautam Biswas).

2. Samtel Color, Ghaziabad; Clutch Auto, Faridabad; Tacumse, Faridabad. (V.Shenoy).

3. HAL, NAL and GTRE, (S. Sarkar).

4. Visited CITD, Hyderabad related to Design of Deep Drawing Tools (DST Project), March 5-8, 2001. (N.V.Reddy).

5. ABB Heidelberg, Germany during September 2000 to discuss the use of genetic algorithm in ABB's product design. (K. Deb)

DEPARTMENT OF PHYSICS

Samtel Technology Lab, Ghaziabad, October 2000, February 2001, S. Kumar.

CTS, IISc, Bangalore, Nov-Dec 2000, Supriya Kar (Research).

HRI, Allahabad, Jan-March 2000, Research and Collaboration, Supriya Kar.

(D) PATENTS

DEPARTMENT OF AEROSPACE ENGINEERING

A patent application has been filed with M.Tech student and co-guide through Dean, R&D on the same as 5(a) above

Modifications of the open Withering Trough, Tea Research Association applying for patent, Result of consultancy work by me.

AWARDS AND HONOURS

DEPARTMENT OF CHEMICAL ENGINEERING

Member, Advisory Committee, Council of Sc. & Tech., U.P. (2000-2003). (P.K. Bhattacharya)

Member –Editorial Board (from 2000) for 'Environmental Conservation Journal', India. (P.K. Bhattacharya)

DEPARTMENT OF CIVIL ENGINEERING

Dr. Animesh Das - Selected member for the HRB-IMRA (Highway Research Board, Identification, Monitoring and Research Application) committee appointed by Indian Roads Congress for a period of three years.

Dr. Animesh Das - Selected member for the Flexible Pavement Committee appointed by Indian Roads Congress for a period of three years.

Dr. Animesh Das - Awarded a research project by DST under Fast Track Proposal for Young scientists (2000-2001).

Dr. Umesh Dayal - Nominated Regional Editor of the Journal of on Solid Waste Technology and Management, Philadelphia, USA.

Dr. M.R. Madhav - Geotechnical Society for 2001 and 2002.

Dr. M.R. Madhav - Editor of Publciations and Member of the Council, Indian National Academy of Engg. for 2001 – 2002.

Dr. R. Sinha - Alexander von Humboldt Fellowship for post-doctoral research in Germany (Dec. 2000).

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

1. M. Agrawal was a Programme Committee Member for the 20th FST and TCS Conferences held in Delhi, Dec 2000.
2. S. K. Agrawal is a Programme Committee Member of IPDS-2002
3. R. Moona is the Programme Committee Member for VLSI 2001 Conference.
4. D. Sanghi was a Programme Committee member for ADCOMP 2001 and CIT 2001.
5. P.Jalote was Programme Committee Chair for SEPG 2001, New Delhi.

6. P.Jalote is a Programme Committee member for International Conference on Software Engineering, ICSE-2002.

7. R.M.K. Sinha was the Chairman of Programme Committee of Translation Support System STRANS'2001

8. Ajai Jain was the Chairman of Organizing Committee of Translation Support System STRANS'2001

9. Ajai Jain is the member of Board of Studies, Department of Computer Engineering, Z. H. College of Engineering and Technology, Alighar Muslim University.

10. Ajai Jain is the member of Board of Studies, Department of Computer Science and Engineering, K. N. I. T. Sultanpur.

11. Ajai Jain is the member of Board of Studies, Uttar Pradesh Development systems Corporation Professional Studies, University of Allahabad.

12. Ajai Jain was invited as an expert by the Steering Committee for IT education, Institute of Professional Studies, University of Allahabad.

13. Ajai Jain has been nominated as senior member of IEEE.

DEPARTMENT OF ELECTRICAL ENGINEERING

1. Prof. G.K. Dubey was nominated as Fellow of ***Indian National Science Academy (INSA).***

2. Prof. S.R. Doradla received ***16th Bimal Bose Award*** of the Institution of Electronics and Telecom. Engineers (IETE) for outstanding contributions in the field of "Power Electronics in the Broadest Sense".

3. Prof. G.C. Ray received the ***12th Hari Ramji Toshniwal Gold Medal*** of IETE for outstanding innovations for application to industry, in the field of "Electronic Instrumentation Leading to the Development and Production of Electronic Instruments and Related Systems for use in India and abroad.

4. Dr. Bikash Chandra Pal received the year 2001 ***AICTE Young Teachers Award.***

5. Prof. Arindam Ghosh and Prof. Sachidanand, received the ***Union Ministry of Energy: Department of Power Medal and the President of India Medal*** of the Institution of Engineers (India) for their joint research paper titled "Damping of Subsynchronous Transient Torque Oscillations Using STATCOM.

6. Prof. P.K. Kalra received ***Tata Rao Medal*** of the Institution of Engineers (India) for his joint research paper on 'Development of Fuzzy Simulator for DC Machine Modeling'.

7. Prof. S.C. Srivastava received ***Hari Ohm Ashram Prerit Bhaikaka Inter-University Smarak Trust Prize*** of Sardar Patel University for his joint paper on "Impact of Generator and FACTS devices Rescheduling on Voltage Stability Margin'.

8. Prof. S. Qureshi received the *Best paper Award* for his joint paper titled 'An Explicit Surface Potential Formulation for Doped Poly-Silicon Thin Film Transistors' in 24th National Systems Conference held at ISRO Bangalore in December 2000.

9. Prof. V. Sinha served as Chairman, Publications Committee; Institution of Electronics & Telecommunication Engineers. (Responsible for publications of IETE Technical Review, IETE Journal of Research, IETE Journal of Education and IETE News Letter).

10. Prof. K.R. Srivathsan joined as Founder Director of Indian Institute of Information Technology and Management (IIITM), Trivendrum, Kerala.

DEPARTMENT OF MATHEMATICS

1. Chakravarti, Anjan Kumar (Ph D Scholar), C.L. Chandana Mathematics Award for Students for the year 2000.

2. Shrikanth K Iyer, Outstanding Faculty Award for Teaching at UCSB: June 2000.

3. Prawal Sinha, C.L. Chandana Award for Distinguished and Outstanding Contributions to Mathematics Research and Teaching for the year 2000.

4. U B Tewari, Meghnad Saha Award for Research in Theoretical Sciences, 1997, Awarded by Hari Om Ashram Trust

DEPARTMENT OF MECHANICAL ENGINEERING

1. Nominated as the member of the Editorial Board of an International Journal: Progress in Computational Fluid Dynamic published by Inderscience, Switzerland.(Gautam Biswas)
2. Elected fellow of the Indian National Science Academy (FNA), (A.K.Mallik)
3. BOYSCAST FELLOWSHIP at Chiba University, Japan, January 15th to July 15th, 2001. (P.K.Panigrahi)
4. Associate Editor of IEEE Transactions on Evolutionary Computation Journal. (K.Deb)
5. Member of Council of Conferences and Council of Authors, International Society of Genetic and Evolutionary Algorithms (ISGEC). (K.Deb)
6. Foundation Steering Committee Member of Evolutionary Multi-Criterion Optimization (EMO). (K.Deb)
7. Current invitations to International conferences as a program committee member are: (K. Deb)

- Fifth International Conference on Artificial Evolution (EA) in Universite de Bourgogne, France (October 29-21, 2001).
- AFSS 2002 International Conference on Fuzzy Systems in Calcutta, India (February 3-6, 2002).
- Congress on Evolutionary Computation (CEC) in Honolulu, USA (May 2002).
- Fourth Genetic and Evolutionary Computing Conference (GECCO) in New York, USA (July 9-13, 2002).
- Seventh Parallel Problem Solving from Nature (PPSN) Conference in Granada, Spain (September 2002).
- International Workshop on Optimization and Inverse Problems in Electromagnetism OIPE2002, Lodz, Poland (September, 2002).
- Scientific Committee Member of the IUTAM/ISSMO Symposium on ' Evolutionary Methods in Mechanics', Cracow, Poland. (24-27 September 2002).
- Fourth International Conference on Applied Mathematics and Engineering Sciences in Casablanca, Morrocco (October 23-25, 2002).
- Fourth Asia-Pacific Conference on Simulated Evolution And Learning (SEAL) in Singapore (November 18-22, 2002)

DEPARTMENT OF PHYSICS

1. Selected for inclusion in the 18th Edition (Year 2000) of Marquis Who's Who in the World (NEW PROVIDENCE, NJ, USA), Supriya Kar.

(F) CONTINUING EDUCATION ACTIVITIES

DEPARTMENT OF CIVIL ENGINEERING

1. Dr. Partha Chakroborty Organized a short course during April 2000. Optimization and Optimal design; Type : Self-sponsored; Place : Kanpur, Dates : April 17, 2000 to April 20, 2000; Registrants 5.

2. Dr. Onkar Dikshit - Industry academia interaction in the form of 2001 Summer Camp at IIT Kanpur for the UG students of Civil Engineering, 4 June to 2 July 2001. 27 UG students of Civil Engienering from various engineering colleges across the country. 23 distinguished visitors from industry and 4 faculty members and one Ph.D. student addressed the participants

3. Dr. S.K. Jain and Dr. C.V.R. Murty Organised and conducted a short course on "Seismic Design of Reinforced Concrete Buildings," (July 2000, 65 participants, 2days), Hyderabad.

4. Dr. S.K. Jain and Dr. C.V.R. Murty Organised and conducted a short course on "Seismic Design of Bridges," (Sept. 2000, 53 participants) Kanpur.

5. Dr. M.R. Madhav - Granular Piles – Recent Contributions, Invited Lecture Delivered at the Short term course on Ground Improvement and Deep Foundations, IIT, Chennai, Dec. 2000.

6. Dr. Sudhir Misra - QIP Short Course on "Durability of Concrete Structures," July, 2000.

7. Dr. R. Sinha - Training Workshop on "Fluvial geomorphology with special reference to floodplains", sponsored by DST, IIT Kanpur (April 3-7, 2000).

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

The department undertook training for IBM-ACE teachers, engineering graduates, and other industries, e.g., Cadence. The details are as follows:

Name of the course	Coordinated by	Type	Place	Dates	Number of attendees
IBM-ACE Teachers Training Programme	A. Jain		IIT Kanpur	Feb 2000	30
Cadence Induction Training Programme	A. Jain		IIT Kanpur	June-July2000	30
ACSET Summer School 2000	A. Jain		IIT Kanpur	May-June2000	700
Information Security course for IAF	M. Agrawal		IIT Kanpur	Aug-Sept 2000	15
Information Security course for IAF	S. Ganguli		IIT Kanpur	Aug-Sept 2000	15
FASET summer School	D. Sanghi		IIT Kanpur	May 2000	60
IPv6, QIP Course	D. Sanghi		IIT Bombay	Aug 2000	30
Building Large Web-Sites	T. V. Prabhakar		IIT Kanpur	Nov 2000	

Besides these departmental initiatives, individual faculty members also conducted courses for the industry:

Name of the course	By	Type	Place	Dates	Number of attendees
Computer Networks for AP State Council for Higher Education.	D. Sanghi		Hyderabad	Oct 2000	60
Unix Network Programming for BPL Systems	D. Sanghi		Bangalore	Nov 2000	30
TCP/IP Suite of Protocols for Reliance Infocom Ltd.	D. Sanghi		Mumbai	Dec 2000	30
Software Engineering	T.V.Prabha-kar		IIT Madras		
UML	T.Vprabha-kar		Banglore		

DEPARTMENT OF ELECTRICAL ENGINEERING

1. Prof. V. Sinha Co-ordinated the Short Courese on "ISP Technologies", December 15-17, 2000 at I.I.T. Kanpur.

2. Prof. V. Sinha Co-ordinated and delivered lectures in the Short Course on "Trends in Mobile Radio Communication Technologies" at the International Centre for mechanical Sciences, Udine, Italy; December 18-22, 2000 (under the Economic Cross-Cultural Programme of the European Commission).

3. Dr. Aloke Dutta conducted an Instructional Enhancement Program (IEP) on "Semiconductor Device Modeling" under the VLSI-SMPD Project funded by MIT, New Delhi from December 11 to December 22, 2000. The course was attended by faculty members from Regional Engineering Colleges and was well appreciated by the participants. The course was held at IIT Kanpur.

4. Dr. P.K. Kalra Co-ordinated and delivered lectures in the Short Course on "Neural Networks and Its Engineering Applications" June 2000 at I.I.T. Kanpur.

5. Dr. A.K. Chaturvedi delivered two invited talks on WCDMA and 3G Mobile Communications on 29th July 2000 at Trivandrum. These talks were held during TECON-2000, which was jointly organized by IEEE Kerala section and Technopark, Government of Kerala. The number of participants were approximately on hundred and were mostly from the industry.

6. Dr. A.K. Chaturvedi delivered fifteen hours of lectures in a course organized for Indian Air Force Engineers on Security Issues in Computer Networks during September 2000 at IIT Kanpur.

7. Dr. A.K. Chaturvedi conducted a four hour tutorial on Turbo Codes on 26th January 2001 at IIT Kanpur during NCC-2001, Seventh National Conference on Communications. Ten persons attended the tutorial. Two were from the industry while the remaining were from academics.

8. Dr. A.K. Chaturvedi delivered a three hours of lectures on Security Issues in Mobile Communications on 30th March 2001 in a course on Telematics organized in the last fortnight of March 2001 by the Department of Electrical Engineering, IIT Delhi. Three participants were from industry while the remaining twelve were from academics.

DEPARTMENT OF INDUSTRIAL AND MANAGEMENT ENGINEERING

1. Quality Management in Information Technology and Management, Continuing Education Centre, Asian Institute of Technology, Bangkok, June 2000, Kripa Shanker.

2. Participated as Instrucor in the SIDBI sponsored Six-Month Programme on Management Education for the Young Enterprenuers held at Industrial and management Engineering Department, IIT Kanpur July-December, 2000, R R K Sharma.

3. Coordinated Course on Hospital Management, at IIT Kanpur in collaboration with Apollo Hospital, April 21-24, 2000, A P Sinha.

4. Coordinated Course on Small Industrial Enterprise Management, IIT Kanpur, May 4-September 20, 2000, A P Sinha.

5. Coordinated Executive Development Programme on Marketing on the Internet for Small and Medium Enterprise in Kanpur City sponsored by SIDBI, IIT Kanpur, December 1-2, 2000, Sanjeev Swami and Ashok K Mittal

6. Delivered lectures on Compilers at Facility for Software Education and Training - FASET, Indian Institute of Technology, Kanpur to Cadence Trainee, June 2000, Veena Bansal.

7. Taught Introduction to computing to students of Small Industrial Enterprise Management Course, sponsored by SIDBI, 2000, IIT Kanpur, Veena Bansal.

DEPARTMENT OF MATHEMATICS

An UNESCO Regional Training Programme on Mathematical Modelling of Fluid Flows, Diffusion and Environmental Pollution was organized by Prof. J.B. Shukla and Prof. Peeyush Chandra (programme coordinators) at the Indian Institute of Technology, Kanpur from March 12, 2001 to March 24, 2001. The objective of the programme was to train the participants in the art of modelling and its application to the study of fluid flows and diffusion process in nature as well as in engineering systems. In all 31 persons attended the programme, which included 6 participants from the neighbouring countries (one from Sri Lanka, two from Bangladesh and three from Nepal) and others from India.

There were 6 female participants, which included one from Bangladesh.

DEPARTMENT OF MECHANICAL ENGINEERING

1. (V.K.Jain),' Contact Program' sponsored by DST During May 2000, Participants 35.

2. (V. Shenoy), Delivered a series of three lectures on " Calculus of Variations and The Finite Element Method" in QIP Course " Computational Topics in Engineering" organized by Dr. B. Dasgupta, ME Department, IIT Kanpur

3. (S. Sarkar), Presented a series of lectures on "CFD and Aero-thermal Analysis of Turbomachinery" to senior officers of Hindustan Aeronautics Limited, Koraput, India, 10.06.2000 to 19.06.2000.

4. (N.V.Reddy), "Metal Forming- Modelling Techniques, ISTE Sponsored for College Teachers", Kanpur, July 10-22, 2000, 18 attended. (Coordinator).

5. (K.Deb), Organized a Short course on Genetic algorithms in November ,2002 at IIT Kanpur.

6. (K.Deb), A master's degree program in Natural Computation' Proposed by Professors Kalyanmoy Deb (IIT Kanpur), Xin Yao (University of Birmingham), and Hans-Michael Voigt (Technical University of Berlin) is approved and funded by ASIA-ITC for international students at the University of Birmingham, UK from 1 October 2001. Prof. Deb took guest lectures as an 'international expert' on nature–inspired engineering design and multi-criterion optimization.

(G) PARTICIPATION IN HIGH LEVEL INDUSTRY ACADEMIA INDUSTRY INTERACTION PROGRAMME DURING SUMMER

DEPARTMENT OF AEROSPACE ENGINEERING

VSSC, DRDL, U of Tokyo Denki University

Interaction Programme during Summer, IISc, Bangalore

DEPARTMENT OF CIVIL ENGINEERING

1. Participated as expert member in Central Pollution Control Board, Delhi and CII (Confedration of Indian Industry), Delhi's project evaluation committees for World Bank Sponsored Projects.

DEPARTMENT OF ELECTRICAL ENGINEERING

1. Dr. P.K. Kalra spent 3 weeks in BARC as Visiting Scientists during summer 2000.

2. Dr. Sachchidanand spent about two months at Interra, Noida, during summer 2000.

(H) ANY OTHER IMPORTANT ACTIVITY NOT SPECIFIED IN ABOVE COLUMNS

DEPARTMENT OF AEROSPACE ENGINEERING

1. Organised a short course on Helicopter Technology at HAL Bangalore during 4-9, Sept. 2000.

DEPARTMENT OF CHEMICAL ENGINEERING

1. Self-sponsored Short course on 'Risk Analysis and Risk Management in Chemical Process Industry', Nov.27-30, 2000, I.I.T. Kanpur (J.P. Gupta).

2. Member, Advisory Committee for R & D, Gas Authority of India Ltd., New Delhi.

3. Ongoing work on setting up an AFM central facility. (A. Sharma).

DEPARTMENT OF CIVIL ENGINEERING

1. Dr. S.K. Chakrabarti - Visited S.R.M Engineering College, Kanchipuram, Tamil Nadu during December 20-22, 2000 as N.B.A. (National Board of Accreditation) Expert for the assessment of their M.E. (Structural Engineering) Programme.

2. Dr. S.K. Chakrabarti - Served as Expert in the selection process for CSIR Young Scientist Award 2000.

3. Dr. S.K. Chakrabarti - Worked as Reviewer of Technical Papers for the Journals of the Institution of Engineers (India).

4. Dr. Bithin Datta - Completed the large scale consultancy project : "Development of Drainage Master Plan for Kanpur South (under K.D.A.)

5. Dr. Vinay K. Gupta - Continued to work as Editor, ISET Journal of Earthquake Technology.

6. Dr. Ashu Jain - Model Studies for the Selection of Bridge Site on Sarda River near Lakhimpur, A World Bank Funded Uttar Pradesh State Roads Project Co-ordinated by a Netherlands based company, The DHV Consultants BV, Lucknow, UP.

7. Dr. Ashu Jain - Model Studies for the Selection of Bridge Site on Ghagra River near Bhagwanpur, District Behraich, A World Bank Funded Uttar Pradesh State Roads Project Co-ordinated by a Netherlands based Company, The DHV Consultants BV, Lucknow, UP.

8. Dr. Ashu Jain - Design of River Training and Abutment Protection Works for the Gandhi Setu on Gomti River near Lucknow, Lucknow Development Authority (LDA), Lucknow, UP.

9. Dr. Ashu Jain - River Training Works at Ram Ganga River to Protect Gas Pipeline, Gas Authority of India Ltd. (GAIL), Dibiyaur, UP.

10. Dr. Ashu Jain - Protection of GAIL Gas-pipeline under River Ganga near Kannauj, UP, GAIL, Dibiyapur, UP.

11. Dr. Ashu Jain - Model Studies for the Selection of Bridge Site on Rapti River, Public Works Department, Shravasti, UP.

12. Dr. Ashu Jain - River Training Works for the Protection of GAIL Gas-pipeline near River Yamuna at Agra, UP.

13. Dr. Ashu Jain - Model Studies for the Selection of Bridge Site on Ram Ganga River, Public Works Department, Shahjahanpur, UP.

14. Dr. Umesh Dayal - Design of Structured Ashfill for Potline No.9 Construction, Hindalco, Renukoot (Rs. 5 Lakhs).

15. Dr. Umesh Dayal - Design of Ash and Redmud Disposal, Hindalco, Renukoot (Rs. 4 Lakhs).

16. Dr. Umesh Dayal - Raising of 6th Stage of ash pond at Korba Super Thermal Power Projects, Korba, NTPC (Rs. 1.2 Lakhs).

17. Dr. Umesh Dayal - Raising of 3rd Stage of ash pond at BALCO Captive Power Plant, Korba, NTPC (Rs. 1.5 Lakhs).

18. Dr. M.R. Madhav - Continuing to be a Consultant to World Bank aided project to Coal India Ltd.

19. Dr. Sudhir Misra - Workshop on the "Revised Indian Concrete Code – IS 456 – 2000," Nov. 2000.

20. Dr. Sudhir Misra - Committee Work for BIS : Concrete Sub-Committee; AERB : Civil Engineering Safety Committee for Operating Plants.

21. Dr. R. Sinha - University of Dalhousie, Canada (Prof. Martin R. Gibling) – Initiated a project on fluvial geomorphology and sedimentology of the Indo-Gangetic plains through a seed grant in April 2000 (ongoing); conducted joint field programmes in Bihar and UP plains; more funding expected for long-term collaboration.

22. Dr. R. Sinha - Unviersity lof Karlsruhe, Germany (Prof. Dr. Werner Smykatz-Kloss) – Collaboration in the area of lacustrine sedimentology and paleoclimatic studies in Thar desert, Rajasthan started in May 2000 through the DAAD exchange programme; presently carrying out post-doctoral research (Nov.2000-Nov. 2001) under Humboldt fellowship programme; applied for a major grant to DFG, Germany for a long term project in Thar desert by Dr. R. Sinha.

23. Dr. R. Sinha - International Global Correlation Project (IGCP) – Currently participating in IGCP 449 : Global correlation of Late Cenozoic fluvial deposits (Project Leader : Dr. David Bridgeland, Univ. of Durham, UK); will be hosting the second project meeting in Dec. 2001 at IIT Kanpur.

24. Dr. R. Sinha - Universite Debis – Dielerot, Paris, France (Dr. Francois Metivier) – Initiated discussions to start a new project on river transport and erosion in India river catchments (north Bihar plains); has been invited as visiting professor at Paris (Oct. Nov. 2001).

25. Dr. R. Sinha - University of Delhi, Delhi (Prof. S.K. Tandon) – Presently collaborating in a project on fluvial sedimentology of the Gangetic plains; applied for a joint project grant to DST.

26. Dr. R. Sinha - Jawaharlal University, Delhi (Prof. V. Rajamani) – Presently collaborating on geochemical and REE studies of the lacustrine deposits of Rajasthan and also in the fluvial sedimentological studies in the Gangetic plains; applied for a joint project grant to DST.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

1. A scalable architecture for servers on the Web, R&D/Consultancy project, Avaya Labs, 2001-2002, USA, $30,000, Investigators: P. Jalote & D. Sanghi

2. Replication and performance of web servers, MHRD, 2002-2003, Rs.8Lakhs, Investigators: D. Sanghi & P.Jalote

3. Security Audit of NSDL, Mumbai, Rs.20Lakhs, Consultancy Investigator: D. Sanghi

4. WAN Design for SHCIL, Mumbai, Rs.1Lakh, Consultancy Investigator: D. Sangh.

5. Consultancy to UP-PWD for state level computerization, Rs.300000, Consultancy Investigator: S. K. Agrawal.

6. Completed MHRD project Machine Aids to the Design of Easily Testable ASICs, Investigator: A. Jain.

7. Started MIT Project A Translation Support System for Translation from English to Hindi based on Anglabharti and Anubharti approaches, Investigators: A. Jain and R. M. K. Sinha.

8. Started MIT Project Machine Translation and Internet under TDIL resource center, Investigator: A. Jain.

9. Recasting Theory & Computation using Abstract State Machine Microsoft Research Investigators: S. Biswas and M. Agrawal.

10. A Study of Technical Issues in Providing Level-Playing Field to Competitive Telecom Service Providers, IDFC, Mumbai. Investigator: D. Sanghi.

11. Parallel Data structures and Algorithms for Network Optimization Problems- DST Investigator: P. Gupta.

12. Sun Microsystems, USA on Program Analysis for Data dependence, US$ 22500,Invistigator: S. K. Agrawal.

13. MIT, Govt. of India, on Tools for Testing Quality of Programs, Rs.525000, Investigator: S. K. Agrawal.

14. C-DAC, Pune, Automatic Parallelization of Programs, Investigator: S. K. Agrawal.

15. Study of what natural reductions preserve beyond membership, with special emphasis to randomized reductions, Indo-French Centre for the formation of Natural Research Investigators: S. Biswas and Brnno Poizat.

16. Web site for Indian Language Tools, MIT under Technology Development for Indian Languages, Rs.14Lakhs, Investigators: R. Moona and T. V. Prabhakar.

17. Development of Linux tools for Indian Languages, MIT under Technology Development for Indian Languages, Rs.16Lakhs, Investigator: R. Moona.

18. Hindi and Nepali Portal Development, MIT under Technology Development for Indian Languages, Rs.35Lakhs, Investigators: R. Moona and T.V. Prabhakar.

19. Application processing software for CPMT 2000, Rs.1Lakh, Investigator: R. Moona.

20. Sun Microsystems USA on the development of micro-architectural simulator for the processors. Current value is about USD 17000.00, Investigator: R. Moona.

21. VLSI course Design and Course ware for VLSI related courses for Control net India Pvt. Ltd. Goa, Rs.3Lakhs, Investigator: R. Moona.

22. Development of question bank Ufor self assessmet in VLSI design and Embedded Systems, Frontier Information Technologies Ltd., Secunderabad, Rs.2.1Lakhs, Investigator: R. Moona.

23. Courseware Developed on VLSI Testing for ministry of Information Technology, Rs.2Lakhs, Investigator: Ajai Jain.

24. Study of IT Manpower in the Country, special MHRD Project, Rs.10Lakhs, Investigator: Ajai Jain.

25. Creating Precedents and Leadership, Directions (IITK Magazine), 2000, author: P. Jalote

26. Its quality that has done the trick – developing nations in Asia and Latin America want to replicate India's story, Economic Times, Oct 26, 2000, author: P. Jalote

27. Role of the Head, Directions (IITK Magazine), Nov 2000, author: P. Jalote

28. UG Curriculum – Imperatives for CSE and IITK, Directions, Nov 2000, author: P. Jalote

29. Applied for copyright of the ANGLABHARTI system, Developers: Ajai Jain & R. M. K. Sinha

DEPARTMENT OF ELECTRICAL ENGINEERING

1. Prof. V. Sinha visited Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland as a Visiting Professor and was associated with the work at the LCM (Laboratory for Mobile communications) during May 22- June 21, 2000.

2. Dr. Aloke Dutta has been responsible for developing a VLSI Lab. at IIT Kanpur for the last two years.

3. Dr. Joseph John served as Organising Vice-Chairman of GATE-2001, when IIT Kanpur was the Organising Institute.

2. Dr. S.K. Bose developed a sub site for lecture note in QUEUING THEORY. comprehensive on the subject including detailed lecture notes, assignments, tests and solutions is maintained at – http://home.iitk.ac.in/~skb/ee679/ee679.html. This is currently one of the most popular web sites on the subject in the Internet and is reachable through all search ingines and links from various other websites. It has got about 7000 hits from Nov 24, 2000 to May 29, 2001.

5. Dr. A.K. Chaturvedi served as convener Technical Programme Committee and member of the Programme Committee and Organizing Committee during the seventh National Conference on Communication at IIT Kanpur during 26th to 28th January, 2001.

6. Samtel Centre for Display Technology (Coordinator: Prof. R. Sharan)

At IIT Kanpur, there has been a strong desire to interact with Indian industry. One example of manifestation of this desire is Samtel Centre For Display Technologies which has been set up with active collaboration of Samtel Group of Industries.This centre was launched at IIT Kanpur on March 5th, 2000 and Prof. Sharan had been actively involved in planning and executing the creation of this centre before March 5th, 2000. After this date (i.e., between the period April 1st 2000 to March 31st, 2001) , as head of this centre as well as an active participant in the research programme of this centre, activities of Prof. Sharan have involved:

a: collecting a dedicated team of faculty members from different departments to carry out the interdisciplinary research work needed for development of products like display devices,
b. sharpening research problems related to display technologies that would be pursued at the centre,
c. maintaining an active interaction with the administration and engineers of Samtel Group of Industries so that proper communication is maintained,
d. organizing continuing education programmes for display industry, and
e. making efforts to create suitable infrastructure (e.g. building, project funding, equipment etc) and suitable atmosphere so that the team can be optimally creative.

The activities that have been mentioned above require continuing long-term effort. However, some initial results have been obtained during the period April 2000 to March 2001.

(i) A team of sixteen faculty members drawn from five departments (Chemistry 2, Physics 2, EE 8, MME 2, ME 2) are actively participating in the research work of Samtel Centre for Display Technologies.
(ii) There are several display technologies, at various stages of development, that are of academic and commercial interest. At this centre, it has been planned to concentrate in a major way on research on OLED (organic light emitting diodes) and minor attention will be paid to Cathode Ray Tubes, Plasma Display Panels and Field Emitter arrays. Narrowing

down the choices and initiating the research work has been a major achievement in this year.

(iii) A meeting of the Apex committee, two meetings of the management committee and several organizational meetings were arranged to establish lively contact with Samtel Group of Industries and IIT Kanpur.

(iv) Three continuing education programmes (in April 2000,August 2000 and February 2001) were organized where, each time, about twenty engineers from Samtel participated.

(v) Time was spent with architect and other functionaries to plan and design a building for this centre. Also a project proposal for support of research on OLED at the centre has been submitted to Department of Science and Technology. Some critical equipment needed for research work have been acquired and work on the fabrication of polymer light emitting diodes has already started.

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

1. A.K. Sharma, Conflicted a consultancy project "Quick Evaluation Study of Development of Women and Children in Rural Areas", sponsored by Ministry of Rural Development, routed through WIZMIN Management Consultants, Kanpur.

2. Munmun Jha, Human Rights Millennium Award. Conferred by the Indian Institute of Human Rights, New Delhi. Presented on the occasion of the Global Assembly of Educators for World Peace, Environment and Human Rights, India International Centre, New Delhi, 23-29, December 2000.

3. Munmun Jha Coordinator with N.K. Sharma. Workshop on "Developing Users' Charters," organized at IIT Kanpur, 1-2 Sept. 2000, Sponsored by CDTE/QIP, IIT Kanpur.

4. N.K. Sharma, Workshop organised at IIT Kanpur: "Developing Users' Charters," IIT Kanpur, Sept. 1-2, 2000 (with Munmun Jha).

DEPARTMENT OF INDUSTRIAL AND MANAGEMENT ENGINEERING

1. National Convener, task Force for HRD Programmes, sponsored at Educational Institutions by SIDBI, A P Sinha.

2. Consultancy on Marketing Strategy for a private General Hospital in Kanpur, A P Sinha.

3. Consultancy on Implementation and Evaluation of Silver Screen : a Marketing management Support System for Movie exhibitors sponsored by Pathe Theaters, B.V., The Netherlands, Sanjeev Swami.

4. Sanjay Kumar (M Tech 2000) received the best thesis award in IIT Madras in December 2000 for his research "LEO Satellite Operations Scheduling: An Approach using Genetic Algorithms" Mr. Kumar was competing against this year's M Tech, Fellow and Ph D qualifiers in management from all IIT and IIMS.

5. Tapan Bagchi received the Institute of Engineers' Rs. 2000.00 cash award and Citation for his paper "A New Method for Planning LEO Satellite Mission Support" at the Annual IE (India) Convention held in Lucknow in December 2000.

6. IME completed two case studies of Indian industry's TQM practices as part of a NSF-funded international study of post-ISO 9000 experience across diverse cultures and sectors. The study indicates that sustainment of good business results requires companies to go beyond the respect of international standards and audits. It requires exercise of autonomy, and opening up channels of communication throughout the organization. It also shows that adaptations can be successfully made of good management practices regardless of the national culture in which the organization operates. (PI : TP Bagchi).

DEPARTMENT OF MATHEMATICS

1. World Mathematics Year - 2000 Lecture Series (WMY-2000) - A total of 6 lectures were organized by the department as detailed below :

   (a) Speaker : Prof. K.R. PARTHSARATHY, Indian Statistical Institute, Delhi, Title of the Talk : Coding Theory, Date : September 21, 2000.

   (b) Speaker: RODDAM NARASIMHA, Director, National Institute for Advanced Studies, Indian Institute of Science Campus, Bangalore, Title of the Talk : Understanding Clouds on Computers, Date : October 12, 2000

   (c) Speaker : B.L.S. PRAKASA RAO, Indian Statistical Institute, Delhi, Title of the Talk: Spatial Data Analysis, Date : November 3, 2000

   (d) Speaker : Prof. J.K. GHOSH, Indian Statistical Institute, Calcutta, Title of the Talk: Models Matter - A Grand Tour from Daniel Bernoulli and Small Pox to the US Embargo on Indian Shrimp, Date : February 1, 2001

   (e) Speaker : Prof. RAMMOHAN RAO, Director, Indian Institute of Management, Bangalore, Title of the Talk: Integer Programming Approaches to Combinatorial Optimisation, Date : February 22, 2001

   (f) Speaker : Prof. M.S RAGHUNATHAN, Tata Institute of Fundamental Research, Mumbai, Title of the Talk : The Congruence Subgroup Problem, Date : February 27, 2001.

2. Banerjee M., Project entitled Rough Set Theory through Logic and Algebra, sanctioned by the Indian National Science Academy, for a duration of 3 years.

3. Banerjee M., Lectures and Tutorials on Turing Machines given in a logic workshop ("Logic Matters") for 'gifted' students, organized by Jagadish Bose National Science Talent Search, held during December 14-16, 2000, in Calcutta.

4. Gupta M., "Introduction to Fractals" - refresher course on Analysis and Algebra, AMU, Aligrah,, Sep, 2000.

5. Gupta M., "On Fractals" - refresher course on Analysis, AMU, Aligarh, March 2001.

6. Kundu D., Consulting Service to DPS, Calcutta on Voice Compression,

7. Kundu D., Invited to serve as a Contributed Editor of Abstracts in Statistics, published jointly by American Statistical Association and the Institute of Mathematical Statistics.

DEPARTMENT OF MATERIAL AND METALLURGICAL ENGINEERING

1. R. K. Dube, *International Conference on "Environmental Management in Metallurgical Industries"*, B.H.U., Varanasi, Acted as Chairman of the Session "Environment Impact Assessment", December 14 – 16, 2000.

2. R.K. Dube, *Invited to NISTADS – INSA Workshop on "History of Science Research in India: Future Directions"*, INSA, New Delhi, October 17 – 18, 2000.

3. A. Ghosh, Advisor, Tata Research Development and Design Centre, Pune. As advisor, participated in the research and development project on:*"Ladle furnace operator reckoner" (LFOR)*, which has been successfully implemented at Tata Steel, Jamshedpur. It is being marketed by TCS.

4. A. Ghosh, Research and Development work on *Thermodynamic modelling of deoxidation and inclusion precipitation of steel (continuing).*

5. Monica Katiyar and Deepak Gupta, *QIP Short Course: Electrical and Electronic Properties of Materials and their Application*, July 3-7, 2000.

6. Monica Katiyar, *Invited to Indo-Israel Workshop on Advanced Materials*, Hyderabad, February 11-13, 2001.

DEPARTMENT OF MECHANICAL ENGINEERING

1. Computer Modelling and Simulation of Plane Strain Rolling Process for Internal Defect Prediction, Sponsored by DST under Young Scientist Scheme, Rs. 1.98 lakhs, 2 years, Started on August 1, 2000. (N.V.Reddy)

2. Knowledge Based Process Planning System for Deep Drawing, Sponsored by DST for 3 years, SERC projects, Rs. 8.96 lakhs. Started on Nov 1, 2000. (N.V.Reddy)

3. Manufacturing Engineering in Twenty First Century, March 2-3, 2001, as Co-Convener, Sponsored by AICTE, CST Lucknow and IITK. (N.V.Reddy & P.C.Pandey). Organization of a National Symposium

DEPARTMENT OF PHYSICS

1. R. Prasad, Was convener of the Condensed Matter Workshop held at IIT Kanpur from march 23-25, 2001.

2. Supriya Kar, Received invitation from World Scientific Publication Co. Singapore for writing a text book.

3. S. Raychaudhuri. Nominated as Working group Coordinator for the working group on physics beyond the Standard Model at the forthcoming Workshop on High Energy Physics Phenomenology to be held at HRI, Allahabad in January 2001.

4. S. Raychaudhuri., Nominated a member of the National Organizing Committee for the next DAE High Energy Physics Symposium to be held in 2002.

5. G. Sengupta, Member, National Organizing Committee for International Conference, STRINGS 2001, held at TIFR Mumbai, Jan 5-10, 2001. *