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6. Molecular and Metal Ion Recognition. Department of Chemistry, IIT Kanpur .. March 24. 1996. Bharadwaj P.K.
7. Heterodimeric Cryptands: From Molecular Assembly to Supramolecular Devices. Inorganic and Physical Chemistry Department. I.I.Sc. Bangalore. April 2. 1996. Bharadwaj P.K.
8. Chemistry of novel materials. Shivaji University .. Amravati January 23-24. 1996. Gajbhiye N.S.
9. Delivered an invited lecture at the Mid-year Meeting of Indian Academy of Sciences. Bangalore. held in July 1995, Chandra A ..
10. Novel mononuclear and Dinuclear Transition Metal Chemistry with Pyridine-based Ligands. Department of Chemistry. Banaras Hindu University, Varanasi, March 19, 1996. Mukherjee R.N.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ATM Internetworking with Legacy LANs, Workshop on Broad band Networks, IIT Kanpur. February 1996, Dr. Dheeraj Sanghi.

Computer Networking for School Education, TITI Chandigarh, May 1995, Dheeraj Sanghi.

Implementation of TCP/IP for Real-time OS. University of Maryland, College Park, May 1995, Dheeraj Sanghi.

Internetworking the Global World. Railway Staff College, Vadodra. December 1995. Dheeraj Sanghi.

DEPARTMENT OF CIVIL ENGINEERING

1. *Lower bound bearing capacity of strip footings over underground openings, Applied Mechanics in the Americas. Vol. I, 136-141. Ed. L.A. Godoy, S.R. Ide/sohn. P.A.A. Laure, and D. T. Mook. AAm and AMCA, Santa Fe .. Argentina. (1995) Singh. D.N. and Basudhar, P.K.*
2. *Stability Analysis of Geotextile Reinforced Embankment on Soft Soils based on Extended Limit Equilibrium Approach. Proc. IGC-95, Bangalore. (1995), Bhattacharya, G., Mitra. S .. Basudhar, P.K.*
3. *Determination of Critical Slip Surface for Slopes in cuttings and its relevance to hazard mitigation. Proc. Int. Conf on Disasters and Mitigation. Madras. P.A 5.1 - A 5.6., (1996) Bhattacharya, G .. Basudhar. P.K.*
4. *Simulation of Density Dependent 2-D Seawater Intrusion in Coastal Aquifers using Nonlinear Optimization Algorithm. Int. Symposium on Water Resources and Environmental Hazards. Honolulu. U.S.A .. 1995. Datta. B.*
5. *Raising the Dykes of Ash Ponds Design and Construction Aspects. April. 1996. Proc. Ash Pond and Ash Disposal System. Delhi. Dayal. U.*
6. *Residual Sediment Discharge Control in Ash Disposal Pond. April 1996. Proc. Ash Pond and Ash Disposal System. Delhi. Sinha. R., Kumar. D., Singh. A. and Dayal. U.*
7. *Use of Bitumen Emulsion to reduce Subbase Soil Permeability, Proc. 11th International Conference on Solid Waste Management. Philadelphia, U.S.A .. 12-15, Nov .. Dayal, U.*
8. *Wall Interference effects of piers in 33rd Conference FM and FP. held in Madras. IIT during December 1995, Gangadhariah T.*
9. *Gave an invited lecture on "Random Vibrations" in the workshop "Structural Dynamics and Modelling of Concrete Structures" organized by Reactor Engg. Division, BARC from August 21 to 22, 1995, Gupta Vinay K.*
10. *Geotechnical Engineering in Sites Prof K. Kurmh Rao Endowment Lecture, J.N. T. U. College of Engineering, Kakinada. March 1996, Madhav M.R.*
11. *Some views on Code for Ductile Detailing for Seismic Design of R. C. Structures (IS: 13920:1993), Proceedings of the National Seminar on "Codes of Practice for .. Reinforced Concrete", JNTU, Hyderabad, 28-29, July 1995, Jain, S.K. and Murty, C. V.R.*
12. *Effect of Brittle Masonry Infills on Displacement and Ductility Demand of Moment Resisting Frames, accepted for presentation at the Eleventh World Conference on Earthquake Engg., Acapulco Mexico, 23-28, June 1996, Murty. C. V.R. and Nagar A.*

3. *Torsional Failure, of Elemented Water Tanks: The Problems and Some Solutions.* accepted for presentation at the Eleventh World Conference on Earthquake Engg., acapulco. Mexico, 2328, June 1996. Dutra. S.c.. Murry, C. V.R. and Jain. S.K.

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

1. *Corporate Govemance and Capital structure, The Indian Econometric Society. Bangalore.* March 21-23. 1996. Rao T. V.S.
2. *Impact of Liberalisation of Foreign Trade on Growth and Structure of Production in Indian Economy: A Semi-closed Input-output Analysis.* Presented at the 3rd International Conference on Development and Future Studies held at Helsinki. Finland during 31 Aug. 2. 1995. Shanna. S.P. and Saxena. K.K.
3. *A Regional Dynamic Input-Output Model for Orissa - A State of Indian Union, Presented at the XI th International Conference on Input-Output Technique held at New Delhi during November 27 - December 1, 1995.* Dhal, S.c. and Saxena. K.K.
4. *Input-Output Analysis of Energy: An Application to Indian Economy (1979-89).* Presented at the XIth International Conference on Input-Output Technique held at New Delhi during November 27 - December 1. 1995. Dash. U.K. and Saxena. K.K.
5. *Impact of Foreign Trade on Employment and Income Linkages in various Sectors of the Indian Economy: A Semi-Closed Dynamic Input-Output Analysis.* Presented at the XIth International Conference on Input-Output Technique held at New Delhi during November 27 - December 1. 1995. Shanna, S.P. and Saxena. K.K.
6. *Impact of Foreign Trade on Structure of Production and Prices in Indian Economy: A Semi-Closed Dynamic Input-Output Analysis.* Presented at the XIth International Conference on Input-Output Technique held at New Delhi during November 27 - December 1. 1995. Shanna. S.P. and Saxena. K.K.
7. *Structural Change in Employment of Indian Industries: An Input-Output Approach.* Presented at the XIth International Conference on Input-Output Technique held at New Delhi during November 27 - December 1. 1995, Misra. Dhawan Sangeeta and Saxena. K.K.
8. *Structural Change Cost Shares of Primary Inputs of Indian Industries.' An Input-Output Approach,* Presented at the XIth International Conference on Input-Output Technique held at New Delhi during November 27 - December 1, 1996. Misra. Dhawan Sangeeta and Saxena. K.K.
- Factors Influencing Changes in Energy Consumption in India between 1984-85 to 1989-90, Presented at the 32nd Annual Conference of Indian Econometric Society organised by*

Indian Statistical Institute. Bangalore during 21-23 March. 1996. Dash. U.K. and Saxena. K.K.

- 10. Input-Output Analysis of Energy Cost: A Case Study of India. Presented at the 32nd Annual Conference of Indian Econometric Society organised by Indian Statistical Institute. Bangalore during 21-23 March 1996. Dash. U.K. and Saxena. K.K.*
- 11. Trends in Modern Indian Fiction, XVIth Triennial' Conference of International Association of University Professors of English. held at Copenhagen. Denmark in July - August /1995. R.K. Gupta.*
- 12. On a Certain RA in Oriya. 23rd All India Dravidian Linguists Conference. Trivandrum 27-29 June. 1995. B.N. Patnaik.*
- 13. Remarks on Vyākṛti. International Seminar on Themes of Signification in India and Europe. JNU. New Delhi. 20 - 25 Feb .. 1996. B.N. Patnaik. and Achla M. Raina.*
- 14. Note on Diction in Journalistic Discourse. National Symposium on Language: A Multidisciplinary Approach. Osmania University, Hyderabad. 15-16 March. 1996. B.N. Patnaik. and Achla M. Raina.*
- 15. On Syntax Pragmatics Interface Seminar on Sociolinguistics of Address and reference. Telugu University 1995. Achla M. Raina.*
- 16. On a non-argument question particle in content question. 23rd Dravidian Linguistics Association Conference 1995. Achla M. Raina*
- 17. Remarks on Vyākṛti International Seminar on Theories of Signification. JNU. Delhi /1996. Achla M. Raina. and B.N. Patnaik.*
- 18. A note on diction National Symposium on Language. Osmania University. Hyderabad. Achla M. Raina. and B.N. Patnaik,*
- 19. Socialization-Antecedents of Justice, Symposium on Socialization. Rule Preferences in India . . U.S. University. Baroda. Dec. 15 to 18. 1995, L. Krishnan.*
- 20. Indian Women and Environmental responsibility, Barkatullah University, Bhopal. Dec. 21-22, 1995,- L. Krishnan*
- 21. Inter Group Harmony, Social Disadvantage & Social Justice, Canadian Studies Development Program on Ethnic Harmony, BHU, Varanasi, Feb. 21 - 22, 1996. L. Krishnan.*

22. *Role of mass media in controlling violence. Second Biennial Conference of Community Psychology Association of India. K.S. Saket P.G. College. Ayodhya, April 13-15. 1995. N.K. Shanna*
23. *Using cognitive psychological principles in education, Second International Symposium on Cognition and Education: A Multidisciplinary Perspective, BHU, Varanasi, December 14-18, 1995, NK. Shamza.*
24. *Quality of Life: Of pigs, goats, and other objects of wonder. Faculty of Management Studies Dept. of Applied Psychology, University of Delhi South Campus, 12 - 13 April 1996, A.K. Sinha.*
25. *Family Planning in India: Some Lessons from the National Family Health Survey 1992-93. Nineteenth All India Conference of the Indian Association for the Study of Population Research Centre. M.S. University, Baroda. A.K. Sharma.*
26. *Dynamics of Social Justice at National Conference on Justice, Democracy and Society at A.N. Sinha Institute. Patna, Bihar. Raka Saran.*
27. *Gender Equity at Giri Institute of Social Science, Lucknow. Raka Saran.*
28. *Psychology in Years to Come, St. Johns College. Agra. April 1995. NK. Sharma.*
29. *Organizational Stress and its Management. Institution of Engineers (Kanpur Local Centre. HBTI). August 7. 1995. NK. Shamza.*
30. *Learning and the Human Learning Process in Organizations. UPSIDC. Kanpur. September 26. 1995. NK. Sharma.*
31. *Measurement of Stress in Organizations, Parachute Factory. Kanpur. December 4. 1995. NK. Sharma.*
32. *Effective Technical Writing, SAIL. Ranchi. February 26 & 27. 1996. NK. Sharma.*

DEPARTMENT OF APPLIED THEMATICS

Progressive waveforms vs optimal energy considerations' in peristaltic transport Int. Conf Phys. Fluid Dyn. IV, Jiwaji Univ. Gwalior, Dec. 1995, B. V. Rathish Kumar.

A finite element analysis of blood flow in dilated vessels Int. Conf Phys. Fluid Dyn. IV, Jiwaji Univ. Gwalior. Dec. 1995. B. V. Rathish Kumar.

A SUPC/FEM scheme for NS. equations STAM. 40th Congress of Mathematics & Mechanics, MACT Centre. Bhopal. Dec. 1995, B. V. Rathish Kumar

4. *FEM analysis of natural convection in thermally stratified fluid in porous enclosure ISTAF, 40th Congress of Mathematics & Mechanics. MACT Centre. Bhopal. Dec. 1995. B.l Rathish Kumar. P. Singh. S. Datta and P. Murhu*
5. *Comb. arc tolerance analysis for network flow problems 28th Annual Conventional (Operational Research Society of India. India International Centre. Delhi. Dec. 27-29. 199. Delhi, P. T. Sokalingam and P. Shanna.*

DEPARTMENT OF ELECTRICAL ENGINEERING

1. *Fiber Optic Signal Processing, invited talk. National Symposium on Fiber Optic Communication. Networking and Sensors. IIT Kanpur. Dec. 8-9. 1995. A.K. Ghosh.*
2. *Role of IEEE, invited talk. XI National Convention of Electronics and Telecommunication Engineers and National Seminar on Need of Interaction for the Growth of Electronics and Telecom Industry. Lucknow. Nov. 4. 1995. A. K. Ghosh.*
3. *Alignment of Gaussian in Opto-electronic Packages. XXIII National Symposium of the Optical Society of India, I.R.D.E. Dehra Dun. March 14-16. 1996. A.K. Ghosh and P. Paul.*
4. *Computational Aspects of Fractional Fourier Transforms. in above conference. A.K. Ghosh and R. Tiwari.*
5. *Calculation and Visualization of Optical Fields in Transmitter Packages conference. A.K. Ghosh and R. Tiwari.*
6. *Dispersion Characteristics of Optical Fiber with Laser Etched Taps on Cladding. in above conference. A.K. Ghosh and M. Basha.*
7. *Design of Fiber Optic Transversal Filters with Nonuniform Tap Spacings using Prony's Method. in above, A.K. Ghosh and M.R. Abidi.*
8. *Design of a Fiber Optic Tapped Delay Line Spectrum Analyzer. in above conference. A.K. Ghosh & S. Bhattacharjee.*
9. *Modem VAR Compensators and their Application in FA CIS, National Workshop on Voltage Instability in Electric Power System Networks. I.I.T. Kanpur. July 21, 1995. G.R. Dubey.*
10. *Switch Mode Rectifiers, IEEE UP Section, December. 1995. G.K. Dubey.*
11. *Switch Mode Rectifier, IETE Kanpur Section, January, 1996. G.K. Dubey.*

12. *Recent Advances in VAR Compensators. Institution of Engineers. Kanpur Centre. February, 1996. G.K. Dubey.*
13. *Tutorials on Recent Advances in the Area of Power Electronics and Drives. Univ. of Technology, Malaysia. Sept. 29 to Oct. 11, 1995, G.K. Dubey.*
14. *A Model Pli-D. Program, Univ. of Technology, Malaysia, Oct. 11, 1995. G.K. Dubey.*
15. *Idea in Making Fiber Optic Components. ITI Ltd., Rae Bareilly. Oct. 14, 1995. A.K. Ghosh.*
16. *Basic Optics, Training Programme on Laser Techniques. Semiconductors, and Satellites for the Faculty of Polytechnics of U.P. at IIT Kanpur, December 15, 1995, A.K. Ghosh.*
17. *Holography, in above, Dec. 16, 1995. A.K. Ghosh.*
18. *Free Space Photonic Switching. Technical Panel on Photonic Switching. Dept. of Electronics. New Delhi. August. ~ I. 1995. A.K. Ghosh.*
19. *Emerging Trends in Fiber Optic Communications. (4 lectures). Short Course on Telematics. IIT Madras. December 21-22, 1995. A.K. Ghosh.*
20. *Fiber Optic Sensors. (2 lectures in Short Course on Fiber Optics and Its Applications. IIT Kanpur. Feb. 19-23, 1996. A.K. Ghosh.*
21. *Emulsion: An Alternative Perspective in Concordia University. Montreal, Canada. on 21st September, 1995. G.C. Ray.*

DEPARTMENT OF MATERIALS AND METALLURGICAL ENGINEERING

Hydrogen embrittlement formation in Pd-V and Pd-Mo alloys. Gordon Research Conference on Metal-Hydrogen Systems. Henniker, USA. 17-21 July, 1995. W. Zhang, H. Noh, W. Seifert, B. Flanagan and R. Balasubramaniam.

Hydrogen solubility in Pd containing internally oxidized ceramic precipitates. Gordon Research Conference on Metal-Hydrogen Systems. Henniker, USA. 17-21 July, 1995. H. Noh, B. Flanagan, R. Balasubramaniam and Y. Sakamoto.

Mystery behind the corrosion resistance of the Delhi iron pillar, Annual Technical Meeting of the Indian Institute of Metals, Vishakapatnam, India, 15-17 November, 1995, R. Balasubramaniam.

Solute distribution analysis in directionally solidified Al-5.7 wt. % Ni eutectic alloy. ASM/TMS Materials Week '95. Cleveland, Ohio, USA. October 30 - November 02, 1995. M.N. Shetye and V. Bansal.

5. *Social Justice in higher technical education. 16th U.P. Sociological Conference. Meerut University, Meerut, India. 6-8 October, 1995, N.K. Shanna and V. Bansal.*
6. *Kinetics and mechanism of reaction of carbon with carbon dioxide - a reappraisal (Invite lecture). National Seminar on 'high-temperature reaction and interactions in materials REC Rourkela, India, 18-19 January, 1995, A. Ghosh.*
7. *Metallurgical curriculum. National workshop on 'Human resources development', IIT Calcutta, India. 21 March, 1996, A. Ghosh.*
8. *Prediction of A_{e3} temperature of steel using neural network and genetic algorithm. 37th International Mechanical Working and Steel Processing Conference. ISS, Hamilton Canada. 22-25 October, 1995, Brallna Deo. A. Gupta. B. V.S. Girish and A.K. Jena.*
9. *Mathematical modelling of mass-transfer rates in gas stirred metallurgical reactions. ATM 95. Indian Institute of Metals, Calcutta, India. 14-17 November, 1995, D. Mazumdar and A.K. Singh.*
10. *Rheological behaviour of SiC reinforced borosilicate composites. 7th Annual Meeting ~ HRST. Indian Institute of Science, Bangalore, India. 1-3 February, 1996. Santanu Das (IIT F.S.R. 'Furth').*

DEPARTMENT OF MECHANICAL ENGINEERING

1. *Non-linear Aspects of Vibration Control-Golden Jubilee Memorial Lecture at IISc Bangalore. May 31, 1995. A.K. Mallik.*
2. *Introduction to Genetic Algorithms. MNREC, Allahabad. 19 March 1996. K. Deb*
3. *Genetic Algorithms. IIT BHU. Oct. 4-5, 1995. K. Deb.*
4. *Optimization in Engineering, CSI, Dehradun, 2 Nov. 1995. K. Deb.*
5. *Design and Development of Regenerative Brakes for Man Powered Vehicles, Institute of Mechanisms and Machine Dynamics, Technical University Aachen, Germany, July 1995. A. Ghosh.*

DEPARTMENT OF PHYSICS

1. *Correlated pinning disorder and radiation damage in single crystal thin films of Tl cuprates. Invited. International Workshop on Vortex Dynamics, Lake West College, Chicago, July 1995. R C Budlani*

2. *Photo-induced effects and infrared detector applications of high T_c superconductors.*
Invited. presented at J C Bose Memorial Symposium on microwave and light waves. Delhi University, Dec 1995. R C Budhani
3. *Interlayers coupling and transport in magnetic superlattices Two lectures delivered at SIN?*
Calcutta, Sept 1995. R C Budhani .
4. *Monte Carlo simulation of association colloids (Invited talk) International Conference on Complex Fluids and Monte Carlo Methods (Satellite Meeting of IUPAP Statistical Physics 19), Hong Kong (1995), D Chm ... delivery.*
5. *Quantum Temporal Logic. Dynamical evolution and symmetries in the histories approach to quantum theory, XVIII Conference of the Indian Association for General Relativity and Gravitation. Tulsi Dass and Yogesh Joglekar.*

DEPARTMENT OF INDUSTRIAL AND MANAGEMENT ENGINEERING

1. *Planning of Management Education. IIT Delhi. July 22-23. 1995.*
2. *6th International Conference on Manufacturing Engg., Melbourne. Nov. 29 - Dec. 1. 1995.*
3. *Workshop on Strategic Management. IIT IIT Pow Jan. 22~27. 1996 .*
4. *Quality Create Forum of India. Kanpur Chapter Convention 10-12 October. 1995.*
5. *Elise XIV Conference. Jerusalem Israel June 3-6. 1995.*

DEPARTMENT OF CENTRE FOR LASER TECHNOLOGY

1. *Fiber optic Signal Processing, invited talk. National Symposium on Fiber Optic . Communication Networking and Sensors. IIT Kharagpur. Dec 8-9. 1995. A.K. Ghosh.*
2. *Role of IEEE. invited talk. XI National Convention of Electronics and Telecommunication Engineers & National Seminar on Need of Interaction for the Growth of Electronics and Telecom Industry. Lucknow. Nov 4. 1995. A.K. Ghosh.*
3. *Alignability of Gaussian Beams in Opto-electronic Packages. XXIII National Symposium of the Optical Society of India. I.R.D.I.. Dehra Dun. Mar 14-16. 1996. A.K. Ghosh and P.K. Paul.*
4. *Computational Aspects of Fractional Fourier Transforms. In above conference. A.K. Ghosh and R. Tiwari.*
5. *Calculation and Visualization of Optical Fields in Transmitter packages. In above conference. A.K. Ghosh. A.K. Mohanty, S. Joshi and S. Jit.*

6. *Dispersion Characteristics of Optical Fibers with Laser Etched Taps on Cladding* ", il above conference. A.K. Ghosh and M. Basha.
7. *Design of Fiber Optic Transversal Filters with Nonuniform Tap Spacings using Prony's Method*. in above conference. A.K. Ghosh and M.R. Abidi ..
8. *Design of a Fiber Optic Tapped Delay Line Spectrum Analyzer*, in above conference. A.K Ghosh and S. Bhattacharjee.
9. *Ideas in Making Fiber Optic Components*. ITI Ltd .. Rae Bareilly. Oct 14. 1995, A.K. Ghosh.
10. *Basic Optics. Training Programme on Laser Techniques. Semiconductors, and Satellites for the Faculty of Polytechnics of U.P. at IIT Kanpur*. Dec 15, 1995. A.K. Ghosh.
11. *Holography*. in above. Dec 16, 1995. A.K. Ghosh.
12. *Free Space Photonic Switching, Technical Panel on Photonic Switching, Dept. of Electronics*. New Delhi, Aug 21, 1995. A.K. Ghosh.
13. *Emerging Trends in Fiber Optic Communications. (4 lectures), Short Course on Telematics, IIT Madras*. Dec 21-22. 1995. A.K. Ghosh.
14. *Fiber Optic Sensors. (2 lectures), Short Course on Fiber Optics and Its Applications. In Kanpur*. Feb 19-23. 1996. A.K. Ghosh.
15. *Some Recent Experiments in Lasers* CELT. IIT Kanpur .. March 26. 1996. Bansi Lal

BIOMATERIALS SCIENCE PROGRAMME

1. *Preparation and characterization of Powders for ZrO₂-Gd₂O₃ Tetragonal Polycrystals*. Engineering Foundation Conference on Particle Science and Technology in the 21st Century, TRDDC PUNE, Dec. 18-21. 1995. S. Bhattacharyya and D.C. Agrawal.
2. *Relaxor Ferroelectric Materials*, DAE-BRNS Symposium on Electroceramics, Saurashtra University, Rajkot, March 13-15, 1996, D.C. Agrawal.

CONFERENCE ATTENDED OUTSIDE IIT KAIVPUR

DEPARTMENT OF AEROSPACE ENGINEERING

1. 1st International Conference on Fiber Reinforced Structural Plastics in Civil Engg. IIT Madras. Dec. 1995, - Chairman, Technical Session, N.G.R. Iyengar.
2. 47th Annual General Meeting of the Aeronautical Society of India, IIT Madras. Jan. 6-8. 1996
Chairman - Technical Session. N.G.R. Iyengar.
3. Fifth National Seminar on Aerospace Structures IIT Bombay. Jan. 18-19. 1996. Chairman Technical Session. N.G.R. Iyengar.
4. XI National Convention of Aerospace Engineers, A.P. State Centre of I.E. (I) Feb. 8-9. 1996.
Chairman - Invited paper session. N.G.R. Iyengar.
5. AIAA Atmospheric Flight Mechanics Conference. Baltimore. MD. USA. Aug. 7-10. 1995.
S. C. Raisinghani.
6. Emerging Technologies and Indigenisation in Aerospace Industry". Air Force Station.
Chakeri. Kanpur. Dec. 1-2. 1995. Chairing Session. A.K. Gupta.
7. International Exhibition cum Seminar on Helicopter Development and Utilization in South Asia
Pacific. Bangalore, Oct. 30-31. 1995. C. Venkateshan.
8. International Workshop on Dynamic and Aeroelastic Stability Modelling of Rotorcraft
Systems. University of California. Los Angeles, USA. Nov. 8-10. 1995. C. Venkateshan.
9. 5th National Seminar on Aerospace Structures. IIT, Bombay, Jan. 18-19. 1996. - C.
Venkateshan.
10. Presented a paper @ 3rd US National Congress in Dallas US in June. 1995. Sanjay Mittal.
11. 47th AGM of Aeronautical Society of India. I.I.T. Madras. Jan 6-8. 1996. presented 2 papers. K.
Poddar.

DEPARTMENT OF CHEMICAL ENGINEERING

1. Indian Membrane Society, XIV National Symposium on 'Membranes and Biochemical Industries', IIT
Delhi. February 16-17, 1996 - Plenary Lecture on 'Limiting flux phenomena for pressure driven
membrane processes', P.K. Bhattacharya.

2. *11th APOSHO Conference on Safety, Health and Environment- Workable Solutions. New Delhi, Nov. 16-18, 1995. Participant. J.P. Gupta.*
3. *Workshop on Need Analysis of Short - term Courses. Agra. Jan. 6, 1996 (Panelist), D. Kulkarni.*
4. *International Congress on Adhesion Science & Technology. Amsterdam. October 1995. Invited Lecture on Thin Films, Ashutosh Sharma.*

DEPARTMENT OF CHEMISTRY

1. *Invited Speaker in "Modern Trends in Inorganic Chemistry" held at University of Hyderabad in August 1995. Chandrasekhar V.*
2. *10th National Symposium on Thermal Analysis. Dec. 21, 1996 DMSRDE-Kanpur (i) Chairing the session (ii) contributed paper, Gajbhiye NS.*
3. *Symposium on Modern Trends in Inorganic Chemistry. School of Chemistry, University of Hyderabad. Hyderabad 500046. August 17-19, 1995. A New Dicopper Chemistry with Nitrogen Donor Ligand: Inorganic and Bioinorganic Perspectives. Mukherjee R.N.*
4. *National Symposium on Perspectives of Inorganic Chemistry. Department of Inorganic Chemistry, Indian Association for the Cultivation of Science. Calcutta 700 032. December 21-22, 1995 New Copper(I) complexes of Interesting Structural Varieties using Bidentate and Tridentate Pyrazole/Pyridine Ligands. Mukherjee R. N.*

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

1. *7th National Seminar on Theoretical Computer Science. Chaired a session, S. Biswas.*
2. *Chaired a session in Asian Test Conference. Bangalore. November 1995. Ajai Jain.*
3. *Participated as a panelist in discussion in First Conference on Fault-Tolerant Systems, Madras, December, 1995, Ajai Jain.*
4. *High Performance Computing, New Delhi. Dec. 27-30, 1995, Speaker. S.K. Aggarwal.*
5. *Networks 96, Bombay, January 1996 presented a paper, S.K. Aggarwal*
6. *Computing an ordinary line: Department of Mathematics. Hiroshima University, -Hiroshima, Japan. 11th July, 1995. A. Mukhopadhyay.*
7. *Computing an ordinary line: Department of Operations Research. Kyoto University, Kyoto, Japan, 30th June, 1995, A. Mukhopadhyay.*

8. *Computing an ordinary line: Department of Business Administration, Kobe University of Commerce. Kobe. Japan. 8th June. 1995. A. Mukhopadhyay*
9. *Foundation of Software Technology and Theoretical Computer Science, Dec 18-20. Bangalore, India Participant, A. J. Mukhopadhyay.*
10. *Workshop on Algorithms. Japan. Chaired a session, A. Mukhopadhyay.*

DEPARTMENT OF CIVIL ENGINEERING

1. *Chaired a session II th Int. Conference on Solid Waste Technology and Management. Philadelphia. U.S.A .. 12-15 Nov .. Dayal U.*
2. *International Seminar on Civil Engineering Practices in the twenty first Century, Roorkee. Feb.26-28. 1996. contributed a paper. Gupta Vinay K.*
3. *Asian Regional Conference on Soil Techniques and Foundation Engineering, Beijing. China. Aug.29-Sept. 3. 1995: Chairman. Session on Foundations and presented a contributed paper. Jadhav M.R.*
4. *Workshop on Environmental Geotechnical Engineering, New Delhi. Nov. 23. 1995. Invited Speaker. Madhav M.R.*
5. *Indian Geotechnical Conference. Bangalore. Dec. 20-22. 1995. Co-Chairman. Session on Computer & Numerical Methods in Geotechnical Engineering & presented a contributed paper .. Hadhav M.R.*
6. *6th Conf on Piling & Deep Foundations. Bombay. Jan. 1996. contributed paper. Madhav M.R.*
7. *National Seminar on "Performance Degradation Behaviour of Soils" Vadodara, Feb. 1996. Keynote Speaker, Madhav M.R.*
8. *Attended the All India Seminar on Hydraulic Engineering held at Nagpur from 27th to 28th January, 1996, b.s. Murthy.*
9. *Some Views on Code for Ductile Detailing for Seismic Design of R. C. Structures (IS: 13920:1993), Proceedings of the National Seminar on "Codes of Practice for Reinforced Concrete in JNTU Hyderabad. 28-29. July 1995, Jain S.K. and Murthy C. V.R.*
10. *Sixth World Conference on Transport Research. July 16-20, 1995, Sydney, Australia. PaLan iswamy.*

11. *Conference on Urban Transport in Developing Countries, Feb. 12-16, 1996, New Delhi* Pa Ian iswamy, S.P.
12. *1st International Conference on Earthquake Geotechnical Engg., Tokyo, Japan, 14-16 Nov 1995* contributed paper. Rao Kameswara N.S.
13. *XI Convention of Indian Association of Sedimentologists. Roorkee, 1995 (contributed paper) by Dr. R. Sinha.*
14. *XII Convention of Indian Association of Sedimentologists. Goa, India, 1995 (contribute, paper) by Dr. R. Sinha.*
15. *Attended a conference on "Pollution Control of Ganga at Varanasi and Ganga Action Plan" at Varanasi on 11- 12. March 1996 and chaired a technical session by Dr. C. Venkobachar.*

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

1. *23rd All India Conference of Dravidian Linguistics. 27 - 29 June, 1995 held in Trivandrum. B.N. Panai.*
2. *All India Linguistics Conference. 5 - 7 Oct. 1995 at Mysore. Chaired the Session on Comparative Linguistics on Oct. 6. 1995. B.N. Panai.*
3. *International Seminar on Theories of Signification in India and Europe. JNU, New Delhi. Feb. 20 - 25, 1996. B.N. Panai.*
4. *Workshop on South Asian Anaphora. Delhi University. 2 - 4 Jan. 1996, B.N. Panai.*
5. *23rd Dravidian Linguistics Association Conference. 27 - 29 June, 1995. Trivandrum. Achla, M. Raina.*
6. *International Seminar on Theories of Signification, 20 - 25 Feb. 1996, Achla, M. Raina.*
7. *Workshop on Anaphora 2 - 4 January 1996. Delhi University, Achla. M. Raina.*
8. *Symposium on Socialization. M.S. University, Baroda (Paper presented & chaired a session), L. Krishnan.*
9. *Indian Women and Environmental Responsibility, Barkatullah University, Bhopal. (Paper presented and chaired a session). L. Krishnan.*
10. *Ethnic Harmony and Intergroup Conflict: Lessons from India and Canada, CSDP, BHU, Varanasi. (Paper presented), L. Krishnan.*

11. Second Biennial Conference of the Cognitive Psychology Association of India. KS. Saki Degree College. Ayodhya. April 13 - 15. 1995. (Presented all invited paper and chaired session), NK. Sharma.
12. Second International Symposium on Cognitive and Educational: A Multidisciplinary Perspective, BHU, Varanasi, December 14 - 18. 1995. (Presented all invited paper), NR Shamsa.
13. Chaired a session in the Annual Conference of the U.P. Psychological Association. Deptt. of Psychology, P.N College, Kanpur. December 29 - 30, 1995. A.K. Sinha.
14. Invited to participate the Regional Workshop on Reproductive Health. 6-8 Feb. 1996, Hotel Clarks Avadh. Lucknow, Organized by Centre for Operations Research and Training (CORT), Sponsored by the Ford Foundation. A.K. Shanna.
15. National Conference on Women and Society at A.M. U. on March 18 - 19. 1996. Raka Saran.
16. National Conference on Population of India at Allahabad on March 11 - 15. 1996. (Chaired and organised a session) Raka Saran.

DEPARTMENT OF MATHEMATICS

1. 1st International conference on Physiological fluid dynamics Jawahar University. Gwalior. Dec. 8-10. 1995. - session co-chaired all invited lecture 1. B. Shukla
2. 3rd International conference on Physiological fluid dynamics Jawahar University. Gwalior. Dec. 8-10. 1995. B. V. Rarhish Kumar.
3. ISTAM 40th Congress of Applied Mechanics and Mechanics WACT Centre. Bhopal. Dec. 1995. B. V. Rarhish Kumar
4. Annual conference of Sharada Ganira Parishad. Lucknow Univ. Lucknow, Dec. 1995. chaired a session. M. Gupta.
5. Annual conference of Indian Mathematical Society, Aligarh Muslim Univ., Aligarh Dec. 1995. chaired a session. M. Gupta.
6. 28th annual conference of IAS. Delhi. Dec. 27-29, 1995. P. Shanna

DEPARTMENT OF MECHANICAL ENGINEERING

1. Chaired a session and presented all invited talk at Inew-Us Symposium on Vibration and Noise Engineering at IIT. Delhi, March 18-20, 1996, A.K. Malik.

2. *International Workshop on Problems in Cosmology and Relativity, University of Munich, July 1-2. 1995, Delivered a lecture on "Proposed Experiments to Verify the Hypothesis of Velocity Dependent Inertial Induction", A. Ghosh.*
3. *International Conference on Advances in Mechanical Engineering, Organized to celebrate the Golden Jubilee of the Mechanical Engineering Department, I.I.Sc. Bangalore, December 20-22, 1995, A. Ghosh.*
- 4.- *Delivered on invited lecture "Electrochemical Discharge Machining: Principle and possibilities" (To be published in Sadhana, Indian Academy of Sciences).*
 - *Chaired a Session.*
5. *National Conference on Machines and Mechanisms (NACOMM), Central Mechanical Engineering Research Institute, Durgapur, Jan. 20-21. 1996, A.G. Ghosh.*
 - *Chaired a session*
 - *Received the honorary life membership from the President, Association Machines and Mechanisms.*
6. *Attended the 2nd ISHMT-ASME Conference at Silratkal in December 1995 and presented a paper, K. Muralidhar.*
7. *One day Project Monitoring Workshop of Extramural Research Schemes of Engineering Sciences Research Committee of CSIR, National Aerospace Laboratories. Bangalore. 26th Oct. 1995. P.S. Ghoshdastidar.*
8. *Seventh National Conference on Machines and Mechanisms. Durgapur. January 1996. S. Mukerjee.*
9. *Science Congress. Patiala. Jan. 1996. S. Mukerjee.*

DEPARTMENT OF ELECTRICAL ENGINEERING

1. *IEEE International Conference on Power Electronic Drive and Energy System for Industrial Growth (PEDES '96), Hyatt Regency, New Delhi, Jan. 8-11, 1996 - S.R. Doradla. (This International Conference was sponsored by three IEEE Societies, the Industry Applications Society, the Power Electronic Society and the Power Engineering Society.*

S.R. Doradla was the Technical Programme Chair, Session Chair, coauthor of three contributed papers as listed in Section 2, and above all one of the Organisers of the Conference.)
2. *IEEE Conference on Power Electronics, Drives and Energy Systems, January 1996, New Delhi,*

*Chaired a session. and presented
3 papers - G.K. Dubey.*

3. *XI National Convemion of ElecTronics and Telecommunication Engineers & Nationa Seminar on Need of Imeraction for the Growth of Electronics and Telecom Industry, Taj Hotel. Lucknow. Nov. 4, 1995, delil'ering invited inaugural talk- A.K. Ghosh.*

-I. IEEE Workshop on Parameter Idemificationfor Condition Monitoring of Electrical Systems (PICMES-95), /rztst. of Tecmzology. Banaras Hindu University, Dec. 11-12. 1995, invited talk - A.K. Ghosh.

5. *XXIII National SymposiLUn of the Optical Society of India, I.R.D.E., Dehra Dun, March 1416. 1996. chairing a session on Fiber mullmegrated Optics II and delivering six contributed papers - A.K. Ghosh.*

DEPARTJIENT OF JfATERIALS AND ,lfETALLURGICAL ENGINEERING

1. *Gorden Research Conference on Meral-Hydrogen SYSTems. Heniker. USA. 17-21 July. 1995. R. Balasubra11lania11l.*

2. *A.111wal Technical MeeTing of the Indian InsTitute of Merals, Vishakapamam. India. 15-17 NOl'ember. 1995. R. Balasubra11laniam.*

3. *Nazional Metallurgist Day/Annual Technical AI eetin g of IIM. Calcutta. 14-16 November. 1995 .. Y.K.BaTra.*

-I. ImemaTional Conference on 'Altemative routes to iron and Steel '. Jamshedpur. IH3 January. 1996. A. Ghosh.

5, *Seminar on 'Selected topics in Mineral Processing' Indian Institute of Technology, Bombay. N.K. Batra.*

5. *Perspectivs in Materials Science. Indian Institute 6f Scieece, Bangalore, India, 18-20 December. 1995. V.S.R. Murthy and R.K. Ray.*

'JEPARTIvIENT OF PHYSICS

Intemational Workshop on vortex dynamics, Chicago, June 1995, Invited speaker and Session chair, R. C. Budhani.

J.e. Bose Memorial Symposium, Invited Speaker, R.C. Budhani.

National Workshop on Ph.\sics of Sensors, PULle, Invited speaker and chair session. R. C. Budhani.

4. *Plasma 95, BHU, Oct. 16-19, 1995, R.K. Thareja.*
5. *National Symposium on Plasma Science, Nov. 8-10, 1995. R.K. Thareja.*
6. *International Conference on Spectroscopy: perspective and Frontiers. BARC. Jan 3-5, 1996 (R.K. Thareja.*
7. *National Laser Symposium, BARC, Jan. 17-19, 1996. R.K. Thareja.*

DEPARTMENT OF CENTRE FOR LASER TECHNOLOGY

1. *XI National Convention of Electronics and Telecommunication Engineers & Nation. Seminar on Need of Interaction for the Growth of Electronics and Telecom Industry, I. Hotel, Lucknow, Nov 4, 1995, delivering invited inaugural talk, A.K. Ghosh.*
2. *IEEE Workshop on Parameter identification for Condition Monitoring of Electrical System (PICMES-95), Inst. of Technology, Banaras Hindu University, Dec 11-12. 1995. invited talk A.K. Ghosh.*
3. *XXIII National Symposium of the Optical Society of India. I.R.D.E.. Dehra Dun. Mar 14- 1996. chairing a session on 'Fiber and Integrated Optics II and delivering contributed papers, A.K. Ghosh.*
4. *Plasma 95, BHU, Oct. 16-19. (1995), R.K. Thareja.*
5. *National Symposium on Plasma Science, Nov. 8-10, (1995), R.K. Thareja.*
6. *International Conference on Spectroscopy: Perspective and Frontiers, BARC. Jan. 3(1996), R.K. Thareja and Bansi Lal.*
7. *National Laser Symposium, BARC. Jan. 17-19. (1996), R.K. Thareja.*

MATERIALS SCIENCE PROGRAMME

1. *Engineering Foundation Conference on Particle Science and Technology in 21st Century TRDDC, Pune, Dec. 18-21, presented contributed paper, D.e. Agrawal.*
2. *DAE- TRNS Symposium on Electroceramics Saurashtra University, Rajkot. March 13-19 1996. Presented invited paper, Chairing a session, panelist in discussion, D.e. Agrawal.*

OTHER ACTIVITIES

A. TECHNOLOGY DEVELOPED

DEPARTMENT OF AEROSPACE ENGINEERING

1. *Improvement of Withering Trough - for Tea Research Association.*
(Kunal Ghosh)

DEPARTMENT OF CHEMICAL ENGINEERING

1. *Process for the recovery of water and inorganic chemicals from Kraft black liquor. Further R&D needed.*

(P.K. Bhanacharya)

..., *Coke Inhibitors for Pyrolysis Fumaces (Further development needed),*

(D. K. Wazru)

DEPARTMENT OF CIVIL ENGINEERING

1. *Defluoridation of Water using Activated Alumina Technology. UNICEF is getting 1000 filters fabricated on our design and these are being distributed for field trials in Andhra Pradesh, Rajasthan etc.*

(C. Venkobachar)

DEPARTMENT OF MECHANICAL ENGINEERING

, *Regenerative Brake for Cycle Rickshaws. ready for transfer*

(Dr. A. Ghosh)

DEPARTMENT OF ELECTRICAL ENGINEERING

"Vaneeshree" - *a speech synthesizer for the vocally handicapped and spastics.*

(G. C. Ray)

ADVANCED CENTRE FOR MATERIALS SCIENCE

Computer controlled DTA (1600^oc operation), transferred to A/MIL

2. *Computer controlled TGA (12000C operation), transferred to A/MIL*

3. *Computer controlled TGC (16000C operation).*

B. SOFTWARE DEVELOPED

DEPARTMENT OF CHEMICAL ENGINEERING

1. *HAZOP (2) DOW - These relate to Hazard Analysis in Chemical Industry, Ready for Transfer. (DOW may need copyright release).*

(J.P. Gupta)

DEPARTMENT OF CHEMISTRY

1. *Time dependent quantal studies software.*

(Sathyamurthy N)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

1. *HPF Compiler; further development needed.*

(Davi Gupta and S.K. Aggarwal)

2. *DiET: A framework for distributed Extended Transaction Processing Framework, with (T. Nayak) further development needed.*

(R.K. Ghosh)

3. *Parallel GA: with (C. Sudhakar) Ready.*

(R.K. Ghosh)

4. *MS Window Interface for CFD package COSMOSS; (with D. Mazumdar and H. Singh) : Ready.*

(R .. K. Ghosh)

5. *Simulation for ATM Networks. further development needed.*

(Dheeraj Sanghi)

6. *Railway Information System. Ready for Transfer.*

(Dheeraj Sanglzi)

7. *Whiteboard on Windows, Ready for Transfer.*

(Dheeraj Sanglzi)

8. *Blsttwe Timetable, Ready for Transfer.*

(Dheeraj Sanghi)

9. *Automatic submission of Assignments. Ready for Transfer.*

(Dheeraj Sanghi)

10. *Software Developed: A surface reconstruction algorithm for applications in medical imaging and 3-D viewing from terrain contours. Development needed.*

(A. Mukhopadhyay)

DEPARTMENT OF JtJA THEIATICS

i. *Developed a software titled FEEM software for collection in porous media.*

(B. V. Rarhish Kuma,,)

DEPARTMENT OF MECHANICAL ENGINEERING

RealGA : Real-Coded Genetic Algorithms for Engg. Design.

(K. Deb)

, *GeneAS: Mixed-integer programming opr. software.*

(K. Deb)

DEPARTMENT OF ELECTRICAL ENGINEERING

Software for "Visualization of optical fields in Opto-electronic packages", further development needed.

(A.K. Ghosh)

2. Software 011 "Expert System for Fiber Optic Data Link Design", further development needed.

(A.K. Ghosh)

3. Software for 2-D Simulation- of semiconductor devices, needs more development before making it available to industry or research labs.

(M.B. Patil) -

DEPARTMENT OF MATERIALS AND METALLURGICAL ENGINEERING

1. Computation of metal-hydrogen equilibrium distance using the Hartee-Fock SCF method.

(R. Balasubramaniam)

3. Indexing of Laue back reflection patterns for BCI crystals.

(V; Bansal)

3. D-Mill-Simulation of charge dynamics in tumbling mills.

(B.K. Mishra)

DEPARTMENT OF CENTRE FOR LASER TECHNOLOGY

1. Software for .. Visualization of Optical fields in Opro-electronic packages ". further development needed.

(A.K. Ghosh)

2. Software on "Expert System for Fiber Optic Data link Design". further development needed.

(A.K. Ghosh)

C. INDUSTRIES VISITED VISIT TO OTHER INSTITUTE FOR RESEARCH INDUSTRY/INSTITUTE NAME, PURPOSE, PERIOD.

JEPART, JENT OF AEROSPACE ENGINEERING

Visited Gulma Tea Estate for Consultancy work on Withering Tmugh, 3 days in May, 3 days in iu Iy . .Jdays in Dec. 1995.

(Kwwl Ghosh)

, ADRE. Agra, Oct. 95, Discuss the Direction of Research Regarding Parachute Performance in India.

)EPART, JENT OF CHEMICAL ENGINEERING

Engineers India Ltd .. R&D Centre Gurgaon. Jan 96.

(J.P. Gupta)

IBP Co .. R&D Lab. Gurgaon. for R&D Collaborations. Jan 96. rJ.P. Gupra!

Fished: NOell. BaYer Industries. HPCL. Excel Ind .. BARe. Goodlass Nerolac. Terene Fibres Ltd. as parr of the Industrial Tour for B. Tech. students.

(R. Ravi)

Hindustan Lever, R&D Celltre (Bombay), To give a Seminar (Invited), 3 days in May, 1995.

(Ashotosh Shanna)

'EPART, JENT OF COI\IPUTER SCIENCE AND ENGINEERING

U of}rfaryland, College Park. A1ay-July 1995 Research.

(Dheeraj Sanghi)

Places visited for seminars / courses / consultancy include: (1) TITI, Chandigarh (2) RSC, Vadodra (3) Riverrun Software, Noida (4) Directorate of Industries, Kanpur.

(Dheeraj SanghiJ

DEPARTMENT OF CIVIL ENGINEERING

1. *nvo days program discussion meeting on BRNS projects organized by Reactor Engg Division. BARC from August 23 to 24. 1995 (on invitation for reviewing one of the BRN~ projects).*

(V.K. Gupta)

2. *Ministry of Rural Development; New Delhi. Erpert. Committee Meeting on "Fluoride In Ground water". July 31. 1995*

(B. C. RaymaJzashay)

3. *National University of Singapore. Seminar 20th Nov. 1996 Discussion on Collobrative projects.*

(N.S. V.KamenJ,,-ara RaiJ)

DEPARTMENT OF ELECTRICAL ENGINEERING

1. *TISEo. Jamshedplr. To discuss possible research projects. June 3-4, 1995.*

(A.K. Ghosh)

2. *Dept. of Electronics. Gove. of India. New Delhi. technical Panel on Photonic Switching. Aug. 21, 1995.*

(A.K. Ghosh)

3. *SAMEER. IIT Bombay Campus. Technical Panel on Photonic Switching and discussions on integrated optics packaging. Nov. 10, 1995.*

(A.K. Ghosh)

4. *Optel Telecom Ltd., Bhopal, To discuss possiblecollab-orations, Nov. 25, 1995.*

(A.K Ghosh)

5. *IT! Ltd., Rae Bareli, To discuss possible projects, Oct. 14, 1995.*

(A.K. Ghosh)

6. CSIO. Chandigarh. To discuss possible projects. Jan. /2-/4. /1996.

(A. K. Ghosh)

7. HAL Lucknow. To discuss possible projects. Feb. /1. /1996.

(A.K. Ghosh)

8. Visited CSC Group. TIFR. under INSA Visiting Fellowship. May-June 1995.

(P. Rao)

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

I. Visited for discussion Population Council Office in Baroda: CORT in Baroda; Population Council Office in Lucknow; NSSO. Hans Bhawan. New Delhi. UGC Office in New Delhi.

(A.K. Shamza)

' Editorial board of the Journal of Quantitative Economics published by the Indian Econometric Society. was nominated

(Rao T. V.S.)

DEPARTMENT OF MATHEMATICS

1. CDAC, Pune. June /1995.

(B. V. Rathish Kumar)

DEPARTMENT OF MECHANICAL ENGINEERING

1. CDAC, Pune (Dec. 16-24. 1995) to use PARAM, TELCO, Pune (Dec. 17. 1995) to discuss Project, TISCO, Jamshedpur (Many times) to present results of Project. ONGC. Dehradun (Nov. 3. /1995) to deliver lecture.

(K. Deb)

2. HAL, Lucknow to discuss project. for one year from Dec. '94 to Dec. '95, HAL. Lucknow to discuss project (continuing) for 9 months. Starting from March /1996.

(S.K. Choudhury)

3. *Larsen alld Toubro Co .. Bomba To see their experimental facilities in Sn;ess Analysis Area*

(P. Kwnar)

4. *Eicher Research Centre, Eicher Good Earth Ltd .. March 10-12, 1996. Discuss & emluat their proposed Chalenet Light Car for India.*

(Prodyut Das)

DEPART-fENT OF MATERIALS & METALLURGICAL ENGINEERING

1. *Department of Chemistry, University of Vennont, Burlington, USA, Feb-July 1995 fe research activities under BOYSCAST Fellowship.*

(R. Balasubramaniam)

2. *Materials egnineering Department. Rensselaer Polytechnic Institute. Troy. NY 12180. USr 13 April 1995. to present seminar on "Corrosion resistance of the Delhi iroll pille according to the mixed potential theory".*

(R. BalasubramaniamJ)

3. *Wright Patterson Air Force Base \Materials Directorate, Dayton, Ohio 04265. USA 16 Jla 1995 to present seminar o11 "High Temperature Oxidation of Ti3Al Based Intennetallics ".*

(R. Balasubramaniam)

4. *CSIRIHRD Group meeting at NPL Campus New Delhi, for selection of seminar researc associates.*

(N.K. Batra)

5. *Tedco. and precision tools & castings Ltd., Lucknowas an industrial visit.*

(N.K. Batra)

6. *Mukund Iron and Steel Ltd., amd BARC, Naval Materials Research Laboratory, Bombay c an industrial tour.*

(N.K. Batra)

7. *TRDC, Pune visited as a research consultant.*

(A. Ghosh)

~. TISCO. Jamshedpur for Oil ladle refining of liquid metal.

(A. Ghosh)

Department of Mechanical and Industrial Engineering. University of Manitoba. Canada for collaborative research.

(A.K. Ghosh)

J. Composites Centre. University of Utah. USA for collaborative research.

(B.K. Mishra)

K. National Research Council (CNPq). National Steel Company (CSN). Fluminense Federal University (UFF). Brazil to deliver a series of invited lectures.

(N. Chakraborty)

L. Regional Research Laboratory. Bhopal to deliver a lecture on 'Metal-Ceramic Composites via Liquid-gas reactions'.

(I.S.R. Murthy)

Glass Factory at Firozabad for Technical Cooperation on Glass Joining methods.

(R. Tandon, S. Bhargava and S. Swzgal)

PART II OF PHYSICS

SINP, Calcutta. Sept 1995.

(R. C. Budhani)

Brookhaven National Laboratory. June 1995.

(R. C. Budhani)

Nuclear Science Centre. Delhi, four times.

(R.C. Budhani)

VISIT FOR LASER TECHNOLOGY

TISCO, Jamshedpur, To discuss possible research projects, June 3-4, 1995.

(A.K. Ghosh)

2. *Dept. of Electronics. Govt. of India. New Delhi. Technical panel on Plzotonic Switching. All~ 21. 1995.*

(A.K. Ghosh)

3. *SAMEER. liT Bomba,v Campus. Technical panel on Photonic SU'itching and discussions o1 integrated optics packaging, Nov 10, 1995.*

(A.K. Ghosh)

4. *Optel Telecom Ltd .. Bhopal. To discuss possible collaborations. NOU 25. 1995.*

(A.K. Ghosh;

5. *ITI Ltd .. Rae Bareli. To discllss possible projects. Oct 14. 1995. (A.K. Ghosh)*

6. *CSIo. Clzandigarh. To discuss possible projects. Jan 12-14. 1996. (A.K. Ghosh)*

7. *HAL. Lucknow. To discuss possible projects. Feb 1. 1996. (A.K. Ghosh)*

D. PATENTS

DEPARTMENT OF CHEMICAL ENGINEERING

1. Process for the recovery of inorganic chemicals from Kraft black Liquor: Patent Application No: 814/DEI/95/1936 dated. 3.5.1995.

(P.K. Bhattacharya)

E. AWARDS AND HONOURS

DEPARTMENT OF AEROSPACE ENGINEERING

1. Gold Medal. Marine Engg. Div. Institution of Engineers (I), 1994-1995. for paper "Revival of Wind Energy Application in Ship Propulsion with Implication for Indian Shipping". Award Ceremony Dec. 95. at Jaipur.

(Kunal Ghosh)

Elected Vice-President of the Aeronautical Society of India for 1996.

(N.G.R. Iyengar)

DEPARTMENT OF CHEMICAL ENGINEERING

Invited to get listed in the directory of Marquis "Who's Who in the World". 14th edition. 1997. for men of achievement.

(P.K. Bhattacharya)

Amar D.ve Chem Award of Indian Institute of Chemical Engineers.

(Ashurosh Sharma)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Young Faculty Research Support Grant by IIT Kanpur.

(Dheeraj Sanghi)

2. *Dept. of Electronics. Gov. of India. New Delhi. Technical panel on Photonic switching. Aug 21, 1995.*

(A.K. Ghosh)

3. *SAMEER. IIT Bombay Campus. Technical panel on Photonic Switching and discussions on integrated optics packaging, Nov 10, 1995.*

(A.K. Ghosh)

4. *Optel Telecom Ltd .. Bhopal. To discuss possible collaborations. Nov 25. 1995.*

(A.K. Ghosh)

5. *IT! Ltd .. Rae Bareilly. To discuss possible projects. Oct 14. 1995.* *(A.K. Ghosh)*

6. *CSIO. Chandigarh. To discuss possible projects. Jan 12-J+. 1996.* *(A.K. Ghosh)*

7. *HAL. Lucknow. To discuss possible projects. Feb 1. 1996.* *(A.K. Ghosh)*

D. PATENTS

DEPARTMENT OF CHEMICAL ENGINEERING

1. Process for the recovery of inorganic chemicals from Kraft black Liquor: Patent Application No: 814/DEL/95/1936 dated. 3.5.1995.

(P.K. Bhattacharya)

E. AWARDS AND HONOURS

DEPARTMENT OF AEROSPACE ENGINEERING

1. Gold Medal. Marine Engg. Div. Institution of Engineers (I), 1994-1995. for paper "Revival of Wind Energy Application in Ship Propulsion with Implication for Indian Shipping". Award Ceremony Dec. 95. at Jaipur.

(Kwail Ghosh)

Elected Vice-President of the Aeronautical Society of India for 1996.

(N.G.R. Sengupta)

DEPARTMENT OF CHEMICAL ENGINEERING

Invited to get listed in the directory of Marquis "Who's Who in the World". 14th edition. 1997. for men of achievement.

(P.K. Bhattacharya)

Amar D.ve Chern Award of Indian Institute of Chemical Engineers.

(Ashutosh Sharma)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Young Faculty Research Support Grant by IIT Kanpur.

(Dheeraj Sanghi)

2. *Mentioned as Outstanding core-course instructor by IIT Kanpur Senate.*

(Dlzeeraj Sanglzi)

DEPARTMENT OF CHEMISTRY

1. *Young Scientist Medals of Indian National Science Academy, 1995.*

(Chandra A)

DEPARTMENT OF CIVIL ENGINEERING

1. *AICTE Career Award (1995-1998).*

(C. V.R. Murty)

DEPARTMENT OF ELECTRICAL ENGINEERING

1. *For being adjudged as one of the outstanding tutors for 1995/96-1 Semester. Commendatory letter from the Director, Prof. R.C. Malhotra.*

(Aloke K. Durta)

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

1. *Award of Rs. 10,000/- on symphony-II at the 67th All India Exhibition of AIFACS. New Delhi, March 1996.*

(R.K. Bhatnagar)

2. *Two recent paintings exhibited at the 67th All India Exhibition organised by AIFACS New Delhi. Exhibited at Panchsala and New Delhi in the month of March 1996.*

(R.K. Bhatnagar)

DEPARTMENT OF MATHEMATICS

1. *Received Jacob Wolfowitz Prize for the outstanding theoretical advances paper of the year 1995 by American J. Math & Management Sci.*

(J.D. Dhariyal & R.K.S. Rathore)

DEPARTMENT OF MECHANICAL ENGINEERING

1. Elected as a fellow of the Indian National Academy of Engineering, January, 1996.

(A.K. Maliik)

2. Honorary Life Membership awarded by the Association of Machines & Mechanisms (affiliated to the International Federation of Mechanisms and Machines).

(A. Ghosh)

3. Awarded the Institution Prize of Institution of Engineers (India) for paper entitled. 'Numerical Simulation of Enhanced Oil Recovery using Water Injection Method'. Dec. 1995.

(K.M. Piliai. K. Muralidhar and P.S. Ghoshdastidar)

4. JSPS Im'itationfellow for 10 1110llthsfrom March, 96.

(K. Muralidhar)

Elected Fellow of the Institution of Engineers (India) H'.e.f Dec. 12. 1995.

(Keshav Kant)

A/CTE Career Awardfor Young Teacher.

(S. Mukherjee)

DEPARTMENT OF MATERIALS AND METALLURGICAL ENGINEERING

Distinguished Alumnus Award, Banaras Hindu University.

(A.K.Jena)

Best oral presentation award in the non-ferrous section at the 49th meeting of Indian Institute of Metals, Calcutta.

(D.Mazumdar)

SAIL gold medal for best publication in Transaction of Indian Institute of Metals.

(N.K. Batra)

4. *Member. International Editorial Advisory board of Iron and Steel Society Transaction~ USA.*

(A. Ghosh)

DEPARTMENT OF PHYSICS

1. *Elected Member Accelerator user committee, NSC, New Delhi.*

(R C Budhani)

2 *Accepted an invitation of the chairman of the computational physics group of the European Physical Society to serve as a member. of the Scientific Advisory Committee of the International Conference "Physics Computing 96", organized jointly by the European Physical Society and the American Physical Society, to be held in Europe in 1996.*

MATERIALS SCIENCE PROGRAMME

1. *Appointed Member, Editorial Board, Tr. Jr. Indian Ceramic Society.*

(D. C. Agrawal)

F. CONTINUING EDUCATION ACTIVITIES

DEPARTMENT OF CHEMICAL ENGINEERING

1. Membrane and its Applications ". FIIT & Industry sponsored. IIT-Delhi. Feb. 13-15. 1996. around 60 participants from academics and industry; Delivered two lectures.

(P.K. Bhattacharya)

2. Lectured on Hazard and Operability Analysis in Refresher Course for Top Executives on 'Management of Chemical Accidents'. A/arell 26-27. 1996 organized by Disaster Management Institute. Bhopal Under the Sponsorship of the Ministry of Environment and Forests. Govt. of India. New Delhi.

(I.P. Gupta)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

1. Cadence Training Programme. 1995. Sponsored by Cadence. IIT Kanpur. June 15-July 15. 1995. 30 participants.

(Srinjeet K. Aggarwal)

2. Offered a short term course from October 4-10. 1995 on VLSI Testing and Design for Testability for participants from Industries and Academic Institutes.

(Ajai Jain)

3. Topics in Networking. Self-sponsored. Noida. U.P. Dec 1995. 18 persons from River Water S/W.

(Dheeraj Sanghi).

4. Computer Orientation course for Directorate of Industries' Kanpur. Jan. 1996 (self-sponsored).

(Dheeraj Sanghi)

5. Computer Orientation Course for Directorate of Industries. Kanpur. Feb. 1996 (self-sponsored).

(Dheeraj Sanghi)

DEPARTMENT OF CHEMISTRY

1. *Organised a two-day Workshop on the Art of x-ray Crystallography, March 31-April 1, 1995. at IIT Kanpur with participation from scientists from Universities/Research Organisation in India.*

(Bharadwaj P.K.)

DEPARTMENT OF CIVIL ENGINEERING

1. *Coordinated a 3-week self-financed industry course on "Building Construction and Allied Civil Works" for the engineers of U.P. Projects and Tubewells Corporation Ltd., during Jul 10-30, 1995.*

(S.K. Chakrabarti)

2. *Organized a Conference on "Pollution Control of Ganga at Varanasi and Ganga Action Plan in a Joint Collaboration of I.I.T. Kanpur and Mahatma Gandhi Kashi Vidyapeeth Varanasi on 11 & 12th March, 1996.*

(Umesh Dayal)

3. *Natural Resource Monitoring Using Remote Sensing June 5-12, 1995. approximately 30 attended the course.*

(Onkar Dikshit and Dr. Nitin Tripathi)

4. *Technical Developed: Dry Flue Gas Desulphurisation (Further development needed).*

(D.K. Ghosh)

5. *Software Developed: Two (for the design of particulate and gaseous pollutants control equipment).*

(D.K. Ghosh)

6. *Random Response of Structures to Winds and Earthquakes, Self-sponsored, Kanpur, June 5-9, 1995, 14 people.*

(Vinay K. Gupta)

7. *Seismic Risk in India, Self-sponsored, New Delhi. Dec. 12 to 14, 1995, 34 people attended by*

(Dr. Vinay K. Gupta).

Seismic Design of Reinforced Concrete Buildings N.Del/zi, May 15-19. 1995.

(Sudhir K. Jain and C. V.R. Murty)

Seismic Design of Reinforced Concrete Buildings N. Delhi. May 22-26. 1995; 121 participants mostly from Industry.

(Sudhir K. Jain and C. V.R. Murty)

Seismic Design of Reinforced Concrete Buildings Imphal. October 16-20. /1995: 57 participants from Industry.

(Sudhir K. Jain and C. V.R. Murty)

Seismic Design of Reinforced Concrete Buildings Bombay. December 11-15, /1995: 108 participants from Industry.

(Sudhir K. Jain and C. V.R. Murty)

Coordinated a workshop on "Disaster Mitigation" at IIT Kanpur during June /1995 sponsored by CA.PART .. New Delhi for NGOs to develop a national plan to cope with natural and man-made disasters.

(C. V.R. Murty)

Geological Interpretation of Aerial Photographs. QIP Course on "Natural Resources Monitoring using Remote Sensing. IIT Kanpur. June. /1995.

(B. C. Raymahashay)

Mineral Water Interaction in River Sediments. QIP course on "River Morphology Processes and Engineering", IIT Kanpur. July, /1995.

(B.C. Raymahashay)

River Morphology, Processes and Engg., QIP Short Course. IIT Kanpur. July 3-8, 1995. Participants: 16 (academic), 2 (R & D).

(R. Sinha)

Inter Institutional Collaboration: Developed an MOU with the Center for Water Resources Studies. Patna Univ. in the area of Geohydrology and water resources.

(C. Venkobachar)

17. Workshop on "Defluoridation of water based on Activated Alumina", Dec, 13-15. 1995 held at Allalpur (A.P.) sponsored by UNICEF, Hyderabad.

(C. Venkobachar)

18. Workshop on "Defluoridation of water using Activated Alumina" March 7-8. 1996 held at IIT Kanpur sponsored by UNICEF, New Delhi.

(C. Venkobachar)

DEPARTMENT OF MATHEMATICS

1. Conducted a self-financed course titled 'Quantitative Methods for Process Improvement' conducted at IIT Kanpur during Jan.15-18. 1996. The course was attended by 22 participants from Industry.

(Santokh Singh and P.e. Joshi)

2. Conducted a summer school titled 'Mathematics training and talent search programme', sponsored by NBHM during May 8 - June 3, 1995. About 25 participants attended.

(P. Shrivastava)

DEPARTMENT OF MECHANICAL ENGINEERING

1. Robust Design Methodologies, (Self-sponsored), HAL, Lucknow. Oct. 13-14. 1995.

(K. Deb.)

2. Genetic Algorithms for Engg. Design (self-sponsored) IIT. Kanpur, Nov, 22-25. 1995.

(K. Deb.)

3. Genetic Algorithms for Engg. Design (ONGC Sponsored) IIT. Kanpur, April 15-19. 1996.

(K. Deb.)

4. Delivered lectures in the short course "Intelligent Manufacturing" organized by Prof Kripashanker, Dec. 1995.

(A. Ghosh)

DEPARTMENT OF ELECTRICAL ENGINEERING

1. *Fiber Optics and Its Application. CDTE. Kanpur, 19-23, 1996. 15 from Industries.*

(Rajendra K. Dwivedi)

2. *A short course on Fiber Optics and Its Applications (jointly with Dr. A.K. Dutra). CD Sponsored. for Industry. IIT Kanpur. Feb. 19-23. 1996. 15 participants from Gov. Labs and Industries.*

(A.K. Ghosh)

DEPARTMENT OF INDUSTRIAL AND MANAGEMENT ENGINEERING

1. *An Intensive Course on Intelligent Manufacturing System. Dec. 5-16. 1995 .*

2. *A Short Term Course on Power. Planning & Human Resource Development Dec. 10-2. 1995.*

3. *Statistical Methods and ISO 9000 A. Five-day Intensive Workshop, Feb. 5-9, 1996.*

4. *The month course on Small and Medium Industrial Enterprise Management. Sponsored by SIDBI. March • August. 1995.*

DEPARTMENT OF CENTRE FOR LASER TECHNOLOGY

1. *A short course on Fiber Optics and Its Applications (A.K. Ghosh and Dr A.K. Dutra). CD Sponsored. for Industry. IIT Kanpur. Feb 19-23. 1996. 15 participants from Gov. Labs and Industries.*

2. *Training Programme on Laser Technologies: Semiconductors and Satellites. (Dr. Bansi Lal), Sponsored by Institute of Research and Training, Kanpur for the facility of the Polytechnics of UP. No. of Participants: 12. Dec 11-22. 1995*

DEPARTMENT OF MATERIALS AND METALLURGICAL ENGINEERING

1. *Short term course Oil "Corrosion and its prevention", 12-16 Feb. 1996. at IIT Kanpur.*

(R. Balasubramanian)

2. *Short term course Oil "Modelling of modern steelmaking processes" 8-12 Jan. 1996. at IIT Kanpur.*

(D. Manoj Kumar and Brajendra Deo)

3. *Short tenn course on "Modelling and simulation of Mineral Processing Units 7-/2 Apr /1995 at IIT Kanpur.*
(B.K. Mishra)
4. *Short tenn course on "Engironmemal audit and Environmemal impact assessment" /3-1 Nov. 1995 at IIT Kanpur.*
(R. Slzekar and V. Tare)

*G. PARTICIPATION IN HIGH LEVEL INDUSTRY ACADEJIIA INTERACTIOJ
PROGRAMJFE DURING SU.U.'vfEj*

DEPARTI'vfENT OF AEROSPACE ENGINEERING

1. *Invited by the Helicopter Design Bureau. Hindustan Aeronautics Ltd .. Bangalore to Provia Expert Opinion and to Write a Brief Repon on a Question related to the Modification in tll Rotor System of the Advanced Light Helicopter (AIR) Industry: H.:.L. Bangalore. Period: ~ 12 JulY. 1995.*
(C. Venketesan)
2. *Visited University of Minnesota. Minneapolis. USA for two months at the Aml," Hig Perfonnance Computing Research Cemer (AHP CRC).*
(Sanjay Mittal)
3. *Comrol of wing rock (rolling oscillationj on occurs on delta wings .*
. (Kamal Poddar)

DEPARTMENT OF MECHANICAL ENGINEERING

1. *Visited Technical University Aachen. Gennany as a Fellow of the A.alexander von Humbol(Foundation. 1995.*
(A. Ghosh)
2. *Consulting Project:· Designed a special Cam machine, Lohia Starlinger, Panki, Kanpur*
(P. Kumar)
3. *Consulting Project: Software Development for Dynamic Crack Propagation (with N.J Kishore. P.M. Dixit and R. Sethuraman). NSn. Vishakhapatnam.*
(P. Kumar)