

## **Contribution of Kalyani Govt. Engineering College to the Advancement of Knowledge in Last One Year**

### **A. Conference held :**

"National conference on networking of machines, microprocessors, IT and HRD - Need of the nation in the next millennium" November 25-26, 1999.

*Organising Secretary :* Dr. Swapan Kumar Mondal, Dept. of C.S.T.

*Co-ordinator :* Dr. Achintya Das

*Sponsor :* A. I. C. T. E.

### **B. Symposium held :**

Symposium on Intelligent Systems for Science and Technology, May 10, 2000.

*Convenor :* Dr. Ujjwal Maulik, Dept. of C.S.T.

### **C. R & D Projects, scholarships, awards etc. :**

- i) "Stepped threading for self-locking of screw and nut", Coordinator : Dr. Santanu Das, Asst. Prof., Dept. of Mechanical Engineering.

*Sponsor :* A. I. C. T. E.

- ii) "Doppler effect imaging for safety and rescue".

*Co-ordinator :* Dr. Swapan Kumar Mondal, Dept. of Computer Science & Technology.

*Sponsor :* A. I. C. T. E.

- iii) "Channel engineering for deep sub-micron MOSFETs".

*Co-ordinator :* Dr. Abhijit Mallik, Dept. of Electronics and Communication Engineering.

*Sponsor :* A. I. C. T. E.

- iv) "Modern application of process control in industry",

- v) "Region classification in remote sensing and satellite images - soft computing approach".

*Co-ordinator :* Dr. Ujjal Maulik.

*Sponsor :* A. I. C. T. E.

- vi) Dr. Ujjwal Maulik has been awarded the BOYSCAST fellowship of Govt. of India for the year 2000-2001.

- vii) Dr. Swapan Kumar Mondal, acted as a guide (jointly with Prof Samir Roy) of the project on "Web-based Multi-tiered heterogeneous distributed office automation and decision support system," which is awarded the innovative Potential of Students Projects award 2000 by the Indian National Academy of Engineering.

- viii) Samir Roy, acted as the guide of the project on "GANANAA : A BANGLA PROGRAMMING ENVIRONMENT"

### **D. Published works of research :**

- i) Dr. Santanu Das, "Grinding Performance through effective application of grinding fluid", International Conference of manufacturing (ICM 2000), February 24-28, 2000. Dhaka, Bangladesh.
- ii) U. Maulik, "Fault tolerant permutation mapping in multistage Interconnection Network", Int. Journal of System Architecture — vol. 46, pp. 297-300, 2000.

- iii) U. Maulik, "An Improved Evolutionary Algorithm as Function optimizer", IETE Journal of Research, vol. 46, 2000.
- iv) U. Maulik, "Genetic Algorithm Based clustering Technique", Pattern Recognition, 2000.
- v) U. Maulik, "An Efficient Evolutionary Search Directed by Parallel Genetic algorithm", Indian J. of Engineers, vol. 28, No. 1/2, pp. 15-25, 1999.
- vi) U. Maulik, "Simulated Annealing Based Partitional clustering", Inst. Conf. on Advances in Pattern Recog. and Digital Technique, pp. 397-400, 1999, ISI, Calcutta.
- vii) U. Maulik, "Semi-Automotive Feature Extraction using Simulated Annealing", Int. Symposium on Photogrammetry and Remote Sensing (ISPRS), Amsterdam, 2000
- viii) M. K. Pakhira, U. Maulik and S. Bandyopadhyay, "Simulated Annealing Based Partitional Clustering". Proc. of the fourth International Conf. on Advances in Pattern Recognition and Digital Techniques, pp. 397 - 400, 1999. (ISI, Calcutta)
- ix) M. K. Pakhira, S. Bandyopadhyay and U. Maulik, "Cluster Evolution Using Genetic Algorithm", Accepted for Poster Presentation in the International Conf. on Communication, Computer and Devices, Dec 14 - 16, 2000 (IIT, Kharagpur)
- x) M. K. Pakhira and U. Maulik, "An Automatic Approach to Unsupervised Pattern Classification", Accepted at the National Conf. on Intelligent Computing and VLSI, to be held at Kalyani Engg. College, WB, during 16-17 February 2001.
- xi) M. K. Pakhira and S. Bandyopadhyay, "In search for optimal non-Convex Clusters", Accepted at the National Conf. on Intelligent Computing and VLSI, to be held at Kalyani Engg. College, WB, during 16 - 17 Feb, 2001.
- xii) Debajyoti Mitra, "Some Aspects on Calibration Standards of Water Meter." Global Conference of Flow Metering and control for New Millennium, 20-22 September, 2000.
- xiii) Debajyoti Mitra, "Pressure Variation Past A Sphere In Free Set" International Symposium on Recent Advances In Experimental Fluid Mechanics, December 16-18, 2000.
- xiv) Debajyoti Mitra, "Effect of Surface Tension on Coefficient of Discharge of Weirs" Indian Journal of Physics, Vol. 74 A (3), pp. 227 - 229, May 2000.
- xv) Debajyoti Mitra, "Study of Flow Past Bluff Bodies In Isolation And In Tandem", 3rd International conference of Advances in Fluid Mechanics, 2000, Montreal, Canada (23-25 May, 2000).
- xvi) S. Roy, S. Bandyopadhyay, U. Maulik, S. Das, "A Fast Hardware - Software Partitioning Scheme Using A Greedy Simulated Annealing Method", Accepted at National Conf. on Intelligent Computing & VLSI, Kalyani.
- xvii) S. Roy, S. Bandyopadhyay, U. Maulik, B. K. Sikdar, S. Chakrabarty, "The Graph Embedding Approach to Solve the State Assignment Problem of Finite State Machines," Accepted at National Conf. on Intelligent Computing & Co. VLSI, Kalyani.