# Research Workshop on Optimization in India
## Joydeep Dutta
## Department of Mathematics and Statistics
## Indian Institute of Technology, Kanpur

Very recently from September 3rd to the 6th of September 2008 a " Research Workshop on Optimization and Applications" was held at the Indian Institute of Technology, Kanpur. This was sponsored by the Department of Science and Technology, Government of India. The research workshop was based on some lectures by Indian researchers in optimization and operations research who work in various diverse areas in theory and applications. The participants were research students from various Indian universities and the other Indian Institutes of Technology and the Indian Institutes of Management, who either directly work in optimization theory or applications or use optimization in their area of research. It was indeed an attempt to popularize optimization as a subject.

Professor Suresh Chandra of the Indian Institute of Technology, Delhi, spoke on support vector machines and Professor Aparna Mehra of the same institute spoke on convex and nonsmooth optimization. Professor Diptesh Ghosh from the Indian Institute of Management spoke on using heuristic techniques in combinatorial optimization while Professor N. Rangarajan of the Indian Institute of Technology, Bombay spoke on the difficult combinatorial optimization problems that arise in optimal train planning on the complex suburban train network of Mumbai (erstwhile Bombay). Professor T. Parthasarathy of the Chennai Mathematical Institute spoke on linear complementarity problems and semidefinite linear complementarity problems. I spoke on variational inequalities, MPEC and bilevel programming and C.S. Lalitha of the University of Delhi spoke on vector optimization and the last talk of the workshop was delivered by Professor Bhaskar Dasgupta who showed the application of optimization in robotics.