Special Session on

Recent Advances in the development Particle Swarm Optimization for Global Optimization Problems

World Congress on Nature and Biologically Inspired Computing (NaBIC'09), Coimbatore, India,

Call for papers

Most of the real life problems occurring in the field of science and engineering may be modeled as nonlinear optimization problems, which may be Unimodal or multimodal. Multimodal problems are generally considered more difficult to solve because of the presence of several local and global optima. Generally the user is interested in determining the global solution of the problem. Particle Swarm Optimization is an attractive global optimization method inspired the socio-cooperative behavior shown by various species. It is a relatively a newer addition to the class of evolutionary computation family. This method has been successfully applied to a wide range of real-world application problems. This special session seeks to bring forward and highlight the latest developments in this promising research area by bringing together researchers and practitioners. Authors are invited to submit their original and unpublished work to this Special Session.

Topics of interest include, but are not limited to:

- Theory of Particle Swarm Optimization
- Parameter settings
- Adaptive Particle Swarm Optimization
- Multi-objective Particle Swarm Optimization
- Particle Swarm Optimization for noisy problems
- Particle Swarm Optimization for constrained optimization
- Hybridization of Particle Swarm Optimization with local search and other soft computing approaches
- Comparison of Particle Swarm Optimization with other Techniques
- Parallel implementation
- Real world/ novel applications

Organizers
Professor Kusum Deep, Mathematics Department, IIT Roorkee
Dr. Millie Pant, Assistant Professor, Department of Paper Technology, IIT Roorkee
Email: millifpt@iitr.ernet.in