

**Title of proposed Special Session:**

Computational intelligent Algorithms and Techniques and its application to real world problems.

**Brief description of area of coverage:**

Computational intelligent Techniques are attractive global optimization methods inspired by the various phenomena arising in nature and man-made problems. They include Bat algorithm, Teaching and Learning based algorithm, Artificial Neural Networks, Fire fly, Simulated annealing, Tabu search, Variable neighborhood search, Support vector machine, Genetic Algorithms, Memetic Algorithms, Differential Evolutions, Particle Swarm Optimization (PSO), Glowworm Swarm Optimization, Bee Algorithms, Bacterial Foraging, Ant Colony Algorithms, Chaotic algorithm etc. These are relatively a newer addition to the class of numerical optimization algorithms. These methods have been successfully applied to a wide range of real-world application problems. Natural disasters and made chaotic problems partially can be solve by classical optimization techniques. Modern optimization algorithms are capable to handle and tackle these problems with higher level of degree of satisfaction.

**Area of coverage**

Imperialist competitive algorithm  
Black Hole algorithm  
Biogeography Based Optimization  
Teaching and Learning Based Optimization  
Cuckoo Optimization Algorithm  
Shuffled Frog Leaping Algorithm  
Gravitational Search Method  
Fire Fly Algorithm  
Harmony Search Algorithm  
Quantum-Inspired Binary PSO  
Chaotic PSO

**Real Word Applications problems**

Plug-in-Hybrid Electrical Vehicle  
Thermo Electric Coolers  
Economic dispatch  
Production planning  
Robotics, Mechatronics and Control

Distribution Generation  
Process optimization  
Manufacturing industrial optimization

**Name and contact information of Special Session Organizers**

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