

❖ SINHGAD TECHNICAL EDUCATION SOCIETY (STES)

While the need for professionals was gathering momentum in the early 90's in India, Prof. M.N. Navale with visionary objective established Sinhgad Technical Education Society (STES) to provide quality education in the field of Engineering & Technology, Health Science, Management, Architecture, Pharmacy, Law, Arts, Science, Commerce and School Education. There are 75 institutes under the aegis of STES offering full-fledged primary, secondary and higher education & Ph.D. programs in various branches of Engineering, Science & Management.

All the institutes under STES are recognized by the concerned statutory authorities and meticulously fulfill the norms and standards laid down by them. To serve the interest of the student community as well as the corporate industrial sectors, STES maintains a close liaison with the industry and other leading organizations.

❖ SINHGAD COLLEGE OF ENGINEERING

Sinhgad College of Engineering was established in the year 1996 under STES. The campus is located at Vadgaon (Bk), Pune. The college offers eight AICTE approved degree courses in Engineering - Chemical, Computer, Biotechnology, Civil, IT, Mechanical, E & TC and Production. The College also offers Post-Graduate courses in Chemical, Civil, Computer, IT, Mechanical and E & TC disciplines. SCOE is recognized research center of university of Pune. This center offers Ph.D. programmes in many disciplines.



❖ DEPARTMENT OF CHEMICAL ENGINEERING

The Department of Chemical Engineering was established in 1996. Ours is the only Department of Chemical Engineering under Pune University accredited for 5 years by the National Board of Accreditation (NBA), New Delhi. We are running masters and Ph. D Program too. The aim of the department is to establish a state of the art knowledge center in Chemical Engineering and Research. This helps in producing engineers imbued with the spirit of professionalism and responsible citizenship.

❖ OBJECTIVE

The Chemical Industry has undergone significant changes during past decade due to increased cost of energy, stringent environmental regulations and global competition in product pricing and quality. Optimization is one of the most important Engineering tools for addressing these issues. Modifications in plant design and operating procedures can be implemented via optimal operating conditions to reduce costs and meet constraints. With the development of high speed computers the size and complexity of problems that can be solved by optimization techniques have correspondingly expanded. Effective optimization techniques are now available to solve large scale real life industrial problems. The proposed program aims to cover various techniques of optimization for chemical engineers. Hands on sessions will help the participants to gain an insight into optimization techniques which can be useful for them in their teaching and also help them undertake research on industrial problems.



❖ CONTENTS OF THE PROGRAMME

1. Techniques for Optimization based on function values and gradients
2. Unconstrained Single/Multi Variable Optimization
3. Constrained Optimization Algorithms
4. Mixed Integer Linear and non-linear programming
5. Optimization for Process Control
6. Application to Diagnostics
7. Non-Dominated Sorting Genetic Algorithms and its Modified Versions (NSGA, NSGA-II, NSGA-a-JG) Simulated Annealing,
8. Pattern recognition/ Support Vector Machine
9. Parallel Computing Techniques
10. Various Industrial Case Studies
11. Exhaustive Demo Sessions

❖ SPEAKERS FOR THE SDP

1. Dr. Sharad Bhartiya, IIT, Bombay
2. Dr. Nitin Padhiyar, IIT, Gandhinagar
3. Dr. Kishalay Mitra, TRDDC, Pune
4. Dr. Saptarshi Majumdar, TRDDC, Pune
5. Dr. V. K. Jayraman, C- DAC, Pune
6. Dr. V. Sundarajan, C- DAC, Pune
7. Dr. V.S. Sathe, BATU, Lonere
8. Dr. Yogesh Mahajan, BATU, Lonere
9. Dr. S. M. Chavan, SCOE, Pune

❖ ADVISORY COMMITTEE

Prof. P.W. Wani
Dean faculty of Engg., UoP

Dr. A. V. Deshpande
Director, Vadgaon Campus

Prof. M. G. Bhat
Director, Engineering

Prof. R. W. Gaikwad
Chairman, BOS, Chem, Engg.

❖ ORGANIZING COMMITTEE

All the faculty members of Department of Chemical Engineering.

