Faculty Development Program

Title : Multi-Objective Optimization and Multi-Criteria Decision Making

Date : 08-Jan-2024 - 12-Jan-2024
Time : 10:00 - 13:15
Venue : SMV110

Discussion Points

- Introduction one hr
- Optimization Applications in Engineering
- MS Excel for Solving Optimization Problems
- Global Optimization
- Multi-objective Optimization
- Multi-Criteria Decision Making
- Discussion

Resource Person 1 - Details
Name : G P Rangaiah
Designation : Emeritus Professor, Chemical and Biomolecular Engineeribg
University/ Company : National University of Singapore, Singapore
Address : Singapore, 119618.

Resource Person 2 - Details
Name : Bandaru Kiran
Designation : Assistant Professor Sr. Grade 2, School of Chemical Engineering
University/ Company : VIT, Vellore
Address : India, 632014.

Resource Person's Profile :

1. Profile of G P Rangaiah

Education
Ph.D. (Chemical Engineering), Monash University
M.Tech. (Chemical Engineering), IIT Kanpur
B.Tech. (Chemical Engineering), Andhra University
Prof is listed in a world top two percent Scientist as per Stanford study

2. Profile of Bandaru Kiran

PhD-NUS Singapore
M.Tech IIT Chemical Engineering Kharagpur
B.Tech Chemical Engineering from JNTU, Hyderabad

Optimization finds applications in almost all fields. In fact, we all optimize our daily activities, career, investments, travel etc. using our experience, intelligence, and qualitative assessment. On the other hand, quantitative models and optimization techniques are used in businesses, companies and industries. Commonly available, MS Excel spreadsheet has a built-in tool for optimizing a variety of applications. This comprehensive course begins with the definition of an optimization problem followed by description of several applications and principles of optimization techniques for single objective. Finally, it covers principles, applications, and programs for multi-objective optimization. It also illustrates the use of MS Excel for solving optimization problems. This course will be of interest and use to academic staff and researchers in engineering. Participants should have mathematics background from engineering studies.

MS Excel

Coordinator's: **Prof. NIRMALA G S 10193 - Professor Grade 1 - SCHEME**
Prof. BANDARU KIRAN 15949 - Assistant Professor Sr. Grade 2 - SCHEME