

# **Workshop on Applied Optimization Models and Computation**

## **Program Overview**

### **Inaugural Session Details**

**January 28, 2015    Time: 10:00 -10:30    Venue: Auditorium**

**Welcome address, Opening Remarks, About Workshop**

**Tea Break: 10:30-11:00**

### **Sessions Details**

**January 28, 2015    Time: 11:00 -13:00    Venue: Auditorium**

**Invited Session I**

**Chairman : S. K. Neogy, Indian Statistical Institute Delhi Centre**

1.	<b>Lina Mallozzi</b> (University of Naples Federico II via Claudio 21, 80125 Naples, Italy) A Bilevel Location-Allocation Problem in the Planar Region
2.	<b>Sandeep Juneja</b> (Tata Institute of Fundamental Research, Mumbai) Ordinal Optimization in Simulation and Pure Exploration Multi-Armed Bandit Methods
3.	<b>T. E. S. Raghavan</b> (University of Illinois at Chicago, USA) Legal Disputes Resolved Via Game Theoretic Methods

**Lunch: Guest House Lawn            Time 13:00 – 14:00**

**January 28, 2015 Time: 14:00 -15:15 Venue: Auditorium**

**Invited Session II**

**Chairman : David Bartl, University of Ostrava, Czech Republic.**

1.	<b>S. K. Mishra</b> (Banaras Hindu University, Varanasi, India) On Minty Variational Principle for Nonsmooth Vector Optimization Problems with Approximate Convexity
2.	<b>B.K.Mohanty</b> (Indian Institute of Management, Lucknow), Multiple Attribute Decision Making in e-Business- A Fuzzy Approach

**Tea Break: 15:15-15:45**

**January 28, 2015 Time: 15:45 -18:00 Venue: Auditorium**

**Parallel session-I**

**Chairman : T parthasarathy, Chennai Mathematical Institute and Indian Statistical Institute Chennai**

1.	<b>Dipti Dubey</b> (Indian Statistical Institute Delhi Centre) On Linear Complementarity Problem with a Hidden-Z Matrix
2.	C.S. Lalitha and <b>Mansi Dhingra</b> (University of Delhi) Approximate Lagrangian duality for set-valued optimization problem
3.	<b>Syeda Darakhshan Jabeen</b> (Indian Institute of Technology Kanpur) Designing vehicle parameters using Split and discard decision making strategy
4.	<b>Deepmala</b> , Indian Statistical Institute, Kolkata, Solving Optimization Problems using Mathematica
5.	<b>J.K. Verma</b> and C.P. Katti (Jawaharlal Nehru University/School of Computer & Systems Sciences, New Delhi, 110067, India), Optimized Resource Utilization Techniques for Cloud Computing Environment

**January 28, 2015 Time: 15:45 -18:15 Venue: Conference Room**

**Parallel session-II**

**Chairman : B. K. Mohanty Indian Institute of Management, Lucknow**

1.	<b>Mahima Gupta</b> (Great Lakes Institute of Management, Chennai, India) Opinion mining using Internet Reviews: A Fuzzy MADM approach
2.	<b>Anjali Singh</b> , Anjana Gupta, Aparna Mehra An AHP-PROMETHEE II Method for 2-tuple Linguistic Multi-criteria Group Decision Making, Delhi Technological University, Delhi 110042, India
3.	<b>Mamata Sahu</b> , Anjana Gupta, Aparna Mehra Interval Valued Intuitionistic Fuzzy Multiple Criteria Decision Making Problem, Delhi Technological University, Delhi 110042, India
4.	<b>Pankaj Kumar</b> (Shiv Nadar University, India) Convex Optimization for Big Data in Finance
5.	<b>Shreya Khosla</b> (Shiv Nadar University, India) Task Scheduling in Cloud Computing Environments using Large Scale Linear Programming
6.	<b>Ashish Bhayana</b> (Shiv Nadar University, India) Classification of URLs based on malign/benign: An optimization approach
7.	<b>Akhilesh Kumar</b> , Anjana Gupta, Aparna Mehra (Delhi Technological University, Delhi, India) Multiobjective Vendor's Decision Problem on Contingent Demand Satisfaction
8.	<b>Shivi Agarwal</b> (BITS, Pilani) Fuzzy BCC Data Envelopment Analysis Model: A Credibility Approach

**Cultural Programme: Classical Music**

**Dinner : Guest House Lawn      Time 20:30 – 21:30**

**January 29, 2015    Time: 10:00 -11:20    Venue: Auditorium**

**Invited Session III**

**Chairman : R. B. Bapat**, Indian Statistical Institute Delhi

1.	<b>N. Hemachandra</b> (Indian Institute of Technology Bombay) When are Some Queues (Not) in Equilibrium?
2.	<b>David Bartl</b> , University of Ostrava, Czech Republic, Farkas Lemma and Linear optimization in abstract spaces: the infinite case

**Tea Break: 11:20-11:45**

**January 29, 2015    Time: 11:45 -13:00    Venue: Auditorium**

**Invited Session IV**

Chairman : **Lina Mallozzi**, University of Naples Federico II via Claudio 21, 80125 Naples, Italy

1.	<b>Reshma Khemchandani</b> , (South Asian University, New Delhi) Support Vector Machines and its Extension.
2.	<b>Reshma Khemchandani</b> , (South Asian University, New Delhi) Solving Optimization Models Using MATLAB

**Lunch: Guest House Lawn      Time 13:00 – 14:00**

**January 29, 2015 Time: 14:00 -15:15 Venue: Auditorium**

**Invited Session V**

**Chairman : David Bartl, University of Ostrava, Czech Republic.**

1.	<b>Suresh Chandra</b> (Indian Institute of Technology Delhi) Application of Quadratic Programming in Portfolio Optimization
2.	<b>Valeriu Ungureanu</b> (State University of Moldova) Mathematical Theory of Pareto-Nash-Stackelberg Game-Control Models

**Tea Break: 15:15-15:45**

**January 29, 2015 Time: 15:45 -18:30 Venue: Auditorium**

**Parallel session-III**

**Chairman : T. E. S. Raghavan, University of Illinois at Chicago, USA**

1.	<b>Prasenjit Mondal</b> & Sagnik Sinha (Jadavpur University, Kolkata-700032, India) One Player Control Semi-Markov Games With Limiting Average Payoffs
2.	<b>Kalpana Shukla</b> (GLA University, Mathura-281406 India) Optimality and Duality of Variational Programming Problems
3.	S. K. Mishra and <b>B. B. Upadhyay</b> (Banaras Hindu University, Varanasi-221005, India) On Relations between Vector Variational Inequality and Nonsmooth Vector Pseudolinear Optimization Problems
4.	<b>Amit K. Bardhan</b> (Faculty of Management Studies, University of Delhi) On Computation of Minimal Forecast Horizon for a Stochastic Dynamic Lot-Size Problem
5.	<b>Debasish Ghorui</b> (Jadavpur University, Kolkata) Use of Maple to Solve Optimization Problem
6.	<b>Rwitam Jana</b> , (Jadavpur University, Kolkata), On computation using MATLAB

**January 29, 2015    Time: 15:45 –18:30    Venue: Conference Room**

**Parallel session-IV**

**Chairman : T parthasarathy**, Chennai Mathematical Institute  
and Indian Statistical Institute Chennai

1.	<b>R. K. Arora</b> , Amit Sachdeva, V Ashok, Abhay Kumar, S Pandian,(Vikram Sarabhai Space Centre, Trivandrum) Multi-objective Shape Optimization of a Re-entry Capsule
2.	<b>Sadia Samar Ali</b> (New Delhi Institute of Management, New Delhi) Exploring Green Manufacturing antecedents: A MICMAC Analysis
3.	<b>M. Upmanyu</b> , R. R. Saxena (University of Delhi) On Solving a Multiobjective Fixed Charge Problem with Imprecise Fractional Objectives
4	<b>Pulkit Dwivedi</b> (Shiv Nadar University, India) Portfolio Optimization Problem involving Big Data Analytics
5	<b>Abhinav Banerjee</b> (Shiv Nadar University, India) Pricing Decision Optimisation Using Data for Online Retailers
6	<b>Rupakshi Bhatia</b> (Shiv Nadar University, India) On Optimizing Resource Consumption and Crowd-based pick-up and delivery for a distribution network
7.	<b>Premanjali Rai</b> and Kunwar P. Singh, (CSIR-Indian Institute of Toxicology Research, Lucknow) Optimization of Tetracycline Adsorption By Magnetic Carbon from Water Using Box-Behnken Design and Response Surface Modeling

**January 30, 2015    Time: 10:00 -11:20    Venue: Auditorium**

**Invited Session VI**

**Chairman : R. B. Bapat**, Indian Statistical Institute Delhi

1.	<b>T. Parthasarathy</b> (Chennai Mathematical Institute, Chennai, India & Indian Statistical Institute, Chennai, India) Completely Mixed Stochastic Games
2.	<b>Pranab Muhuri</b> (South Asian University, New Delhi) Optimization Under Fuzzy Uncertainty For Time And Safe-Critical Systems

**Tea Break: 11:20-11:45**

**January 30, 2015 Time: 11:45 -13:00 Venue: Auditorium**

**Invited Session VII**

**Chairman : Valeriu Ungureanu, State University of Moldova**

1.	<b>Aparna Mehra</b> (Indian Institute of Technology Delhi) Data Envelopment Analysis Approach to 'Green' Efficiency
2.	<b>A. K. Das</b> (Indian Statistical Institute, Kolkata) Role of Principal Pivot Transform in Optimization

**Lunch: Guest House Lawn Time 13:00 – 14:00**

**January 30, 2015 Time: 14:00 -15:15 Venue: Auditorium**

**Invited Session VIII**

**Chairman : S. K. Neogy, Indian Statistical Institute Delhi Centre**

1.	<b>C. S. Lalitha</b> (University of Delhi) Solution Concepts in Vector and Set Optimization
2.	<b>Pankaj Gupta</b> (University of Delhi) Portfolio Optimization: Some Recent Advances

**Tea Break: 15:15-15:30**

**January 30, 2015    Time: 15:30 -17:30    Venue: Auditorium**

**Invited Session IX**

**Chairman : A. K. Das**, Indian Statistical Institute, Kolkata

1.	<b>P. C. Jha</b> (University of Delhi) Sustainable Supply Chain Management
2.	<b>Sagnik Sinha</b> , (Jadavpur University, Kolkata 700032, India) Semi-Markov Decision Processes with Limiting Average Rewards

**January 30, 2015    Time: 15:45 -17:30    Venue: Conference Room**

**Parallel session-V**

**Chairman : T parthasarathy**, *Chennai Mathematical Institute  
and Indian Statistical Institute Chennai*

1.	<b>B.S. Panda, Arti Pandey</b> (Indian Institute of Technology Delhi New Delhi) Open Neighborhood Locating-Dominating Set In Graphs: Complexity And Algorithms
2.	<b>Amita Sharma</b> (Indian Institute of Technology Delhi New Delhi) An overview of Index Tracking and Enhanced Index Tracking
3.	<b>Meenal Chauhan</b> (Visva-Bharati University, Shantiniketan) On Solving Optimization problem in R
4.	<b>Desai Trunil Shamrao</b> (ICGEB, New Delhi) Metabolic Modelling through Optimization Strategies
5.	<b>S. Krishnakumar</b> (ICGEB, New Delhi) Genome Scale Metabolic Model Development and Flux Analysis of Thermophilic Organism: An <i>In Silico</i> Optimization Approach

**High Tea: 17:30-18:00**