One day workshop on

5th March, 2015

Queueing theory and Optimization: Computational aspects and applications

School of Basic Sciences, IIT Bhubaneswar, Odisha- 751007

Patron

Prof. S. K. Nayak
Head, School of Basic Sciences

Conveners

Dr. A. D. Banik
School of Basic Sciences
Dr. D. Basu
School of Infrastructure
IIT Bhubaneswar

Organizing Committee

Dr. A. K. Ojha
Dr. S. Pani
Dr. T. Nayak
School of Basic Sciences
Dr. A. Satapathy
School of Humanities, Social Sciences & Management
IIT Bhubaneswar

Queueing Theory and Optimization: Computational Aspects and Application

Queueing theory is a mathematical method of analyzing the congestions and delays of waiting lines. Its real-life applications includes providing faster customer service, improving traffic flow, designing telecommunication systems, call centers, cloud computing centers etc. Roots of equations play an important role in many stochastic processes such as queueing, reliability and random walks. Kleinrock in his book ``Queueing Systems" states that "one of the most difficult parts of this method of spectrum factorization is to solve for the roots".

In numerous practical decision making situations, conflicted as well as inter-related objectives need to be optimized simultaneously under a common set of constraints and such problems are termed as multi-objective optimization problems. Multi-objective Geometric programming is a recent development, used to obtain the best compromise solution of an optimization problem. Non-traditional methods like Ant colony optimization, particle swarm optimization, invasive weed optimization etc. are widely used methods in the field of optimization. Variational inequalities provides a broad platform for a set of optimization problems.

Major topics to be covered:	Speaker
Roots of Problematic and High Degree Polynomials and Transcendental Equations that Occur in Queueing and Computer Related Problem	**Prof. M. L. Chaudhry Professor** Department of Mathematics and Computer Sciences Royal Military Collage of Canada
Optimum Service Times in a Bernoulli Schedule Vacation Interruption Queue with Balking and Reneging using Ant Colony Optimization	**Dr. P. Vijaya Laxmi** Assistant Professor Department of Applied Mathematics Collage of Science and Technology Andhra University, Viskhapatnam
Application of Queueing Model	**Dr. Veena Goswami** Professor and Dean School of Computer Application KIIT University, Bhubaneswar
Multiple-objective Geometric Programming Problem	**Dr. A. K. Ojha** Associate Professor School of Basic Sciences IIT Bhubaneswar
Variational Inequalities and Optimization Problem	**Dr. S. Pani** Assistant Professor School of Basic Sciences IIT Bhubaneswar
Working Vacation Queueing Model with Batch Arrival and its Application to Ethernet Passive Optical Network and VoIP H.323	**Dr. A. D. Banik** Assistant Professor School of Basic Sciences IIT Bhubaneswar

REGISTRATION FEE:
Research Scholars/ Students: 700 INR,
Faculty: 1000 INR

***The duly filled up registration cum application form may please be sent through e-mail to the address qtoworkshop@iitbbs.ac.in for selection purposes. The selected participants are requested to pay the registration fee in cash to the beside convener address along with the signed-up registration form much prior to the workshop date. Registration charges include participation to the workshop sessions and workshop lunch.**

**** The workshop is beneficial for the B. E./B.Tech./M. Sc./M. Tech./MCA students, Research Scholars and Faculty members working in the field of queueing and performance evaluation, optimization problems, inventory control, computer networks, supply chain management , transportation problems etc.**

Contact Us

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REGISTRATION FORM

Workshop on

Queueing Theory and Optimization: Computational Aspects and Application

(5^{th} March, 2015)

School of Basic Sciences
IIT Bhubaneswar
Toshali Bhawan, Satyanagar
Odisha- 751007, India

Name : _____

Designation & Affiliation : _____

Address of communication : _____

_____

_____

E-mail : _____

Tel. No. : _____

Mob. : _____

Preference of food
(please tick) : Vegetarian / Non-vegetarian

Date: _____ Signature: _____