

First Announcement



International Conference on Modelling, Optimisation and Computing (ICMOC 2010)

Dates: October 28-30, 2010

Venue: National Institute of Technology Durgapur

Organized by: National Institute of Technology Durgapur, Mahatma Gandhi Avenue, Durgapur 713209, West Bengal, INDIA, www.nitdgp.ac.in

About the Institute

National Institute of Technology (NIT) Durgapur is a leading technical institute offering undergraduate, postgraduate and doctoral programmes in various disciplines of engineering, technology, science, social science and management. The education system is holistic with equal importance being attached to all-round development of the students. NIT Durgapur was established as a Regional Engineering College (REC) in 1960 as a joint venture of the Government of India and Government of West Bengal. REC Durgapur was converted to NIT Durgapur under the full administrative and financial control of the Ministry of Human Resource Development of Government of India with a 'Deemed to be University' status on 3rd July, 2003. The Institute was declared an 'Institute of National Importance' by the Government of India on August 15, 2007.

Location

NIT Durgapur is located in the heartland of industrial activities and mineral-rich region of West Bengal, also known as 'The Ruhr of India'. The city of Durgapur is well connected by rail with Kolkata, 158 km away, and is an important railway station on the main New Delhi-Kolkata route. It is a two and a half hours' drive from Kolkata airport along Durgapur Expressway and NH 2, though there is a military airport at Panagarh, only 20 km from Durgapur. The place is only an hour's drive from Tagore's Santiniketan and has quite a few tourist spots nearby. The climate is moderate.

Conference Scopes and Objectives

The phenomenal increase in computing capability has helped the researchers and the engineers achieve solutions to complex problems with ever-increasing accuracy and make significant progress in the solution of previously unsolved problems. This trend is particularly significant in fluid and thermo-fluid mechanics, energy and environment systems, software engineering, drug delivery systems, system biology and bioinformatics, where computer-based simulation and optimisation (online and offline) have found their extensive applications. The primary goal of the conference is to promote the applications of modeling and optimization methods in the general area of science and engineering leading to accurate and optimal prototyping of processing systems.

Another goal is to provide an international forum for scientists, researchers, engineers, software developers, and practitioners to exchange ideas and approaches, to present research findings and high-spec solutions, to share experiences on potentials and limits, and to open new avenues of research and developments, on all issues and topics related to mathematical modelling, optimization and computing with a special reference to optimal energy usage and safe environments. The conference includes keynote/plenary lectures, invited talks, contributed papers, tutorial sessions, and industrial exhibits. The organizing committee of ICMOC 2010 cordially invites the contributors to submit papers for the conference in following relevant tracks. Papers on the issues related to theoretical developments and applications in the areas mentioned below are welcome. The paper does not necessarily restricts to the following areas; it may also include the allied areas.

TRACK-1: Modelling and Numerical Methods

- **Discrete and continuous system modelling**
- **Stochastic System Modelling**
- **Solutions of differential equations**
- **Delay-differential equations**
- **Moving boundary problems**
- **Nonlinear dynamics**
- **Computational fluid dynamics**
- **Computational heat transfer**
- **Spectral methods**

TRACK-2: Optimisation

- **Linear and nonlinear optimization**
- **Gradient-based methods**
- **Dynamic programming**
- **Multi-objective optimization**
- **Combinatorial optimization**
- **Optimization techniques for game problems**
- **Evolutionary computations**
- **Real-time optimisations**
- **Linear quadratic control**
- **Model predictive control**

TRACK-3: Computing

- **Soft computing**
- **Software engineering**
- **Computational geometry**
- **Model-based systems**
- **Grid computing**

With applications in the following areas:

- **Operations research and supply chain management**
- **Real-time simulation systems and operator training**
- **Oil and gas**
- **Petrochemicals**

- Power plants
- Alternate energy resources
- Multiphase phase flow with and without chemical reactions
- Boiling two-phase flows
- Environmental systems
- Ecosystem modelling
- Drug delivery systems
- System biology
- Bio informatics

Important dates

Abstract Submission Closes	May 16, 2010
Notification of Acceptance	July 16, 2010
Submission and registration of full-length paper	August 30, 2010
Tutorial	October 28, 2010
Conference	October 28-30, 2010

Submission of Paper

Extended abstract

An extended abstract of about 1000 words with 12 pt Arial narrow font and single spacing on A-4 size paper with one inch margin on each side may be sent by e-mail. **The authors are requested to indicate the preferred track # at the top of the first page.**

Full-length paper

The full length papers will be limited to 4 A-4 pages content (10 pt Arial narrow font, single spacing) which will be published in the form of proceedings with ISSN/ISBN. All papers submitted to ICMOC 2010 will be refereed by the experts in relevant areas. **Copyright transfer from the authors and co-authors is essentially required to include the papers in the conference proceedings.**

Local tour

A tour to Santiniketan may be conducted depending on the number of interested participants. The Nobel Laureate Rabindranath Tagore lived here and penned many of his literary classics and set up Visva-Bharati, a university ÷where the world makes a home in a single nestö.

Accommodations

Limited accommodation on first come first serve basis will be available on 2-4 occupancy on charge basis @ Rs. 650 per head per day (approx) at NIT Durgapur Guest house. Delegates are encouraged to make their own arrangements in hotels in the city of Durgapur with hotel charge @ Rs. 700-2000 per day. Accommodation outside the campus may be arranged on request. Further details on accommodation will be furnished later.

Registration

While submitting the full-length papers, the contributing authors are requested to register for presenting the papers in the conference. The papers without registration will not appear in the proceedings. The registration may be confirmed on the receipt of duly signed registration form along with **Demand Draft / Wire-Transfer** (swift codeí .) for registration fees, in favour of "ICMOC 2010 Secretariat" payable at **SBI, R. E. College, Durgapur-713209**.

Participants	Registration fees	
	Indian participants	Foreign participants
Persons from academia	Rs. 6000/-	USD 175
Persons from Industries	Rs. 12000/-	USD 275
Research Scholars	Rs. 5000/-	USD 125
Students	Rs. 4000/-	USD 100
Registration fees for the half-day Tutorial	Rs. 1000/-	USD 50

For accompanied persons, participants are required to pay 50% of the registration fee in addition. The registration fee of the participants includes registration kit, the hard copy of proceedings, tea, lunch and dinner during the conference. **Separate registration is required to attend the tutorial.**

Conference features

- Tutorial by experts in the areas
- Plenary lectures
- Keynote lectures
- Technical paper presentations
- Best-paper awards for the student participants
- Best-paper awards for other participants
- Hard copy of conference proceedings with ISBN/ISSN
- Interactions with the experts from academia and industries

For correspondence:

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