

REGISTRATION FORM

Five-day Workshop

on

NONLINEARITIES IN STRUCTURAL ENGINEERING AND MECHANICS: CONCEPTS, APPLICATIONS AND RECENT DEVELOPMENTS (NSEM – 2014)

February 18-22, 2014

Name :

Designation :

Organization :

Phone : Mobile :

E-mail :

I would like to attend the NSEM-2014 organised by the Department of Civil Engineering to be held on February 18-22, 2014 at NIT Durgapur.

An A/c payee Multicity Cheque /Bank Draft no..... dated..... for Rs. drawn on Bank in favour of 'NIT Durgapur' payable at Durgapur.

Place:.....

Date:.....

Signature

REGISTRATION FEE

- 1) Participants from Industries: Rs. 8,000/-
- 2) Participants from Academic and Research Institutes: Rs. 5,000/-
- 3) Research scholars & PG students: Rs. 2,000/-

Registration fee includes workshop kit, study/lecture materials, refreshment and lunch for 5 days during the course.

Patron

Prof. T. Kumar, Director, NIT Durgapur

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Dr. A.K. Samanta, NITD
Dr. Diptesh Das, NITD

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February 18-22, 2014

Under TEQIP-II



Organized By:



Department of Civil Engineering

NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

Mahatma Gandhi Avenue, Durgapur - 713209, W.B., India

Website : www.nitdgp.ac.in

About NIT Durgapur

The National Institute of Technology Durgapur (formerly Regional Engineering College Durgapur) is a premier technical institution of national importance located in the huge industrial belt of Durgapur (also known as Steel City) in the eastern part of India and is offering B.Tech., M.C.A., M.Sc., M.B.A., M.Tech. and Ph.D. degrees in basic and applied research. The Institute has altogether 14 departments which offer various undergraduate and post-graduate degrees in engineering as well as non-engineering streams. It is fully residential and co-educational. The annual undergraduate intake is more than 1000 students. It was established by an Act of Parliament in 1960 as one of the eight such colleges aimed to function as a pace setter for engineering education in the country and to foster national integration. At present, it's a fully-funded leading Technological Institution of the Government of India and is administered by an autonomous Board of Governors. The Institute is located about 160 KMs north-west of Kolkata on the Howrah-Delhi Main Railway-Route and overlooking the NH-2 and spreads over an area of 187 acres of land surrounded by various PSUs and private industries, steel plants etc.

About the Workshop

Engineering structures are generally modeled and analyzed using linear elastic analysis procedures because of the inherent simplicity in the approach. However, many structures experience severe environmental loads like winds, earthquakes, etc. and undergo significant deformations as a result. State-of-the-art also shows that various advanced materials, which are highly inelastic in their behaviour, are being used to enhance the performance of structures. Under such circumstances, the linear theory assumptions are no longer applicable and inelastic analysis theories have to be implemented for realistic and meaningful results. Moreover, it has been found that structures

developed based on the nonlinear theories are considerably economic compared to those which are based on linear theories. Now-a-days, with the advancement of computing technologies, it has become possible to consider all the different types of complex nonlinearities involved in the process. In the present scenario, therefore, it is evident that nonlinear analysis will play a very significant role in the coming future and researchers and practicing engineers in the field of structural engineering will not be able to avoid adopting the nonlinear approach as their engineering philosophy. The workshop will be conducted by eminent experts in the field, having adequate teaching and research experience. This workshop will be beneficial to academia as well as industry people from different disciplines. The following may be the tentative list of the topics, which will be covered, but are not limited to, in the workshop:

- Geometric Nonlinearity
- Material Nonlinearity
- Contact Nonlinearity
- Nonlinear Dynamic Analysis
- Nonlinear Static Analysis
- Nonlinear Finite Element Analysis
- Nonlinear Stochastic Analysis
- Modelling of Structural Components
- Push-over Analysis & Performance Based Design
- Soil-structure interaction
- Fluid-structure interaction
- Advanced Materials
- Codal Provisions
- Solution Procedures
- Soft Computing Techniques
- Applications to complex nonlinear problems

Important Dates

Deadline for Application Submission	Feb 6, 2014
Notification of Selection	Feb 8, 2014

About Department of Civil Engineering

The Department is one of the oldest functioning Departments with UG course since inception. The Department started imparting instruction leading to M.Tech Degree since 1956 with its highly qualified faculties and well equipped state-of-the-art UG labs and one PG Laboratory. The Department is also engaged in regular testing and consultancy activities in various fields of Civil Engineering.

Accommodation

Limited shared accommodation is available in the Institute guest house. Several good hotels are available in and around Durgapur. Participants may contact directly or through the coordinator(s) for accommodation in Hotels. All boarding /lodging /travel expenses are to be borne by the participants.

Address for correspondence

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