



NATIONAL PROGRAMME ON DIFFERENTIAL EQUATIONS THEORY, COMPUTATION & APPLICATION NPDE-TCA-2012 (Sponsored by DST)



INDO-EUROPEAN MODELLING WEEK AND STUDY GROUP MEETING ON INDUSTRIAL PROBLEMS (IEMWSGMIP-2012)

Modeling Week : 3rd - 8th December, 2012
Study Group Meeting : 10th - 15th December, 2012

Venue : Dept. Of Applied Mathematics, M.S. University of Baroda, (MSU) Vadodara, India.

The center for Industrial Mathematics at MSU in collaboration with Industrial Mathematics Group at IITB and Lappeenranta University of Technology, Finland will be hosting Modeling Week (MW) during December 3rd - 8th and Study Group Meeting (SGM) during 10th -15th December, 2012 at MSU.

One of the objectives of the MW & SGM is to give exposure to Research Scholars and young faculty members to live industrial problems requiring mathematical solutions. This can be achieved through.

- MW - Modeling of some sample case studies from industrial problem emphasizing its importance in real life problems.
- SGM - Problem solving activity pertaining to specific raw problems coming from industries.

TARGET AUDIENCE

Post-graduate (Mathematics) Students, Research Scholars, Young Researchers from Academic Institutes and universities. Engineers and scientists from Research and Development organizations and Industry.

Plan for the Meeting

Scientists, Engineers, Economists, Managers, Financial Analysts and other user community will be invited to present their technical problems. It will be the endeavor of the participants to provide useful directions toward viable solutions for problems through intense sessions of brainstorming.

There will be emphasis on :

- Generating ideas which will eventually lead to a tangible methodology for problem solving as a short term objective.
- Evolving long term interaction between academic and industry with respect to research & development perspective.
- Developing a network of mathematicians and computational scientists dealing with industrial problems.

Problems on

Ship Dynamics, Wind Energy, Tyre modeling, Power Transformer, Scrubber design, Wrinkled fabrics, Drug Delivery, Portfolio allocation, Crop yielding, load forecasting of electric networks.

Programme :

Problem presentation by Industry participants. Formation of working groups, problem solving sessions, preparation of mid-term progress report by each group, feedback analysis, presentation of final solution.

We, therefore, invite all those who are interested, to apply for participation in these important academic events. Efforts will be made to provide financial support for travel, boarding and lodging for all selected participants. Selection will be based on merit.

RESOURCE PERSONS :

M.K. Abeyratne (University of Ruhuna, Sri Lanka), Andrew Lacey (Heriot-Watt University, United Kingdom); Dhanesh Patel (M. S. University of Baroda), Ewald H. Lindner (Johannes Kepler University, Austria); Francisco Manuel Bernal Martinez (Instituto Superior Tecnico, Portugal); Hilary Ockendon (Univesity of Oxford, United Kingdom); Mads Peter Sorensen (Technical University of Denmark, Denmark); Matti Heilio (University of Technology, Finland); C.W. Mehra (University of Dar es Salaam, Tanzania), Mohan C. Joshi (IITB), Morten Willatzen (University of Southern Denmark, Denmark); S. Panda (NIT, Calicut), Passi Franti (University of Eastern Finland School of Computing, Finland); Peregrina Quintela (Santiago De Compostela, Spain); V.D. Pathak (M. S. University of Baroda), S. Ramamohan (M. S. University of Baroda), B.V. Ratish Kumar (IITK), Russell Davies (Cardiff University, United Kingdom); Sergey Lupuleac (Saint Petersburg State Polytechnic University, Russia); S.Sundar (IITM), Susana Serna (Universitat Autonoma De Barcelona, Spain); Tuomo Kauranne (University of Technology, Finland); D.C.Vakaskar (M. S. University of Baroda), A.S.Vasudeva Murthy (TIFR Bangalore), Wil H.A. Schilders (Eindhoven Univesity of Technology, Netherlands);

LOCAL ORGANISING COMMITTEE :

A. N. Mishra (Chair Person), Dhanesh Patel (Convener), A. S. Patel, M. R. Yadav, Shishir Raval, S. Ramamohan, D.C. Vakaskar, Nilima Shah (Local Organizing Secretary).

CO-ORDINATORS :

Amiya K. Pani (akp@math.iitb.ac.in, (O): +91 (022) 576 7481), IMG, IITB; Dhanesh Patel (pdhanesh@yahoo.com, (M): +91 (0) 9879335246), MSU, Vadodara; Matti Heilio (matti.heilio@lut.fi, (M): +358 40 5000396), LUT, Lappeenranta, Finland.

PARTICIPATION :

To participate in this program, fill in the required registration form which can be downloaded from the website:

<http://www.math.iitb.ac.in/~npde-tca> & email to: npde.2012@gmail.com. You can also mail the form by post to the following contact address.

CONTACT :

Convener, NPDE-TCA, Department of Mathematics, Industrial Mathematics Group,

IIT Bombay, Powai, Mumbai 400 076. E-mail: npde-tca@math.iitb.ac.in; npde.2012@gmail.com. Phone: 022-25767481.

REGISTRATION :

Registration fee : Participants from Industry and R & D organizations: Rs.6,000/- or GBP 100 or EURO 90 or USD 160
Participants from Academic Institutions, Research Scholars and Students : NIL
Draft should be sent in the name of 'IEMWSGMIP2012' payable at 'Baroda'.

Last Date of Receipt of Application: 4th November 2012

Selection of participants will be based on academic record and recommendation letters.

List of Selected Participants will be put on the web page: 7th November 2012

Details can be found on the IESGMIP 2012 website: <http://www.msubaroda.ac.in/iemwsgmip2012> or <http://www.math.iitb.ac.in/~npde-tca>.

Contact at MSU Baroda:

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Nilima Shah ([Nilima91@yahoo.com](mailto:nilima91@yahoo.com), (M): (+)91 (0) 9824058549).