

University of Novi Sad | Faculty of Sciences Department of Mathematics and Informatics

99th European Study Group with Industry



3-7 February 2014



We are pleased to announce that registration is open for 99th European Study Group with Industry (ESGI) which will be hosted by Department of Mathematics and Informatics, Faculty of Sciences, University of Novi Sad in February 2014.

What is ESGI?

European Study Group with Industry is intensive week-long workshop which aim is to promote interaction between academic mathematicians and industrial companies. In order to straighten the links between mathematics and industry mathematical modelling is used to address unsolved and relevant industrial problems. These innovating problem solving meetings attract and gather together industry representatives, academic researchers and PhD students with from all over the world.

Study groups of this nature have been organized for over 50 years in many countries around the world. They were pioneered in Great Britain in 1968 when Professor Alan Taylor established Oxford Study Group with Industry. The coordinator of study groups is now European Consortium for Mathematics in Industry (ECMI) and the name is currently European Study Group with Industry. ESGI concept has become successful and internationally recognized model worldwide. There are about 5-7 meetings annually.

ESGI will be held in Serbia for the first time by Department of Mathematics and Informatics.

ESGI structure

Study groups have standardized format. On the first day of the meeting, the representatives from each company outline their industrial problems to the participating mathematicians. The mathematicians allocate themselves into teams so that each problem is taken by one group of mathematicians. Intensive workshop session is then started with meeting the industrial partners. This way teams can be informed in detail about all relevant issues related to the chosen problem. Ideally, at the end of a first workshop day teams should have defined wider goals for whole week. The rest of the week is devoted to brainstorming, analysis, discussions, modelling and working towards the solutions. The last day of the meeting is designed for presenting the results. A written report detailing the results should be prepared soon after the meeting and published on official group's website.

ESGI aim

The aim of the study groups is to provide a forum for sharing new ideas and using the expertise of mathematicians to investigate and find potential solutions for industrial problems. Furthermore, important purpose of organizing meetings of this kind is to provide business improvement for industry with clarifying and structuring a problem and bringing new and fresh perspectives. Last but not least goal is to demonstrate the power of applied mathematics. Workshops character keeps tradition of providing great research opportunities and establishment of long term cooperation between participating mathematicians and companies.

ESGI topics

Previous study groups' experiences have been shown that there is no limit in problems that can be approached with mathematical modelling. Presented problems on previous meetings covered wide industrial area such as: engendering, pharmaceutical, medicine, food processing, telecommunication, agriculture, transport, finance...

Success of these unique workshops which use industrial problems as basis for mathematical research shows that mathematics is a modern business language. Thus reasons for continuing organizing them are simple. The industrial companies' benefits are reflected in getting mathematical tools for solving their problems while academic participants are challenged with real-world problems that can be inspiration for future research and education.

We are looking forward to welcome all professors, researchers, PhD students and companies interested to contribute to the realization of upcoming study group.

Department of Mathematics and Informatics Faculty of Sciences University of Novi Sad

Organisers:

- Prof Natasa Krejic, DMI
- Prof Marko Nedeljkov, DMI
- Prof Andreja Tepavcevic, DMI

Venue and dates:

Monday 3 Feb 2014 9am - Friday 7 Feb 2014 2pm

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Information for academic participants:

Fees: free of charge for all professors, researchers and PhD studentsMeals and overnight accommodation: provided and free of charge for all professors, researchers and PhD studentsRegistration deadline: 1 January 2014

Information for companies:

Deadline for submitting a problem: 1 January 2014 Contacts for submitting a problem:

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All other relevant information as well as registration form for academic participants will be posted on official website of Department of Mathematics and Informatics: <u>www.dmi.uns.ac.rs</u>.