

Scientific Symposium

# Future Trends in Civil Engineering

17 - 18 February 2014

Zagreb, Croatia

Faculty of Civil Engineering, Kaciceva 26

Organizer  
University of Zagreb  
Faculty of Civil Engineering



# Symposium programme – Day 1

Monday, February 17, 2014 – the Main Hall (amphiteater)

08.00 – 09.00 REGISTRATION

09.00 – 09.15 OPENING CEREMONY

**I Session** **New trends in GEOTECHNICAL ENGINEERING**

**09.15 – 10.45** Session Chair: Assistant Prof. Danijela Marcic

09.15 – 10.00 **Geotechnical challenges facing the designer of offshore foundations**

Dr. **Kenneth Gavin**

School of Civil, Structural & Environmental Engineering, University College Dublin, Ireland

10.00 – 10.35 **Current and future trends of geotechnical engineering in Croatia**

Prof. **Meho Sasa Kovacevic**

University of Zagreb, Faculty of Civil Engineering, Department of Geotechnical Engineering

10.35 – 10.45 Discussion

Coffee break: 10.45 – 11.15

**II Session** **New trends in WATER RESEARCH**

**11.15 – 12.45** Session Chair: Assistant Prof. Damir Bekic

11.15 – 12.00 **Computational Fluid Dynamics - lustres and shadows**

Prof. **Jerzy M. Sawicki**

Politechnika Gdańska, Faculty of Hydro and Environmental Engineering, Poland

12.00 – 12.35 **Vision of civil and environmental engineering**

Prof. **Zivko Vukovic**

University of Zagreb, Faculty of Civil Engineering, Department of Water Research

12.35 – 12.45 Discussion

Lunch: 12.45 – 14.00 (Hall P2)

**III Session** **New trends in STRUCTURAL ENGINEERING**

**14.00 – 15.30** Session Chair: Prof. Vlatka Rajčić

14.00 – 14.45 **Design of glass structures**

Prof. **Juergen Neugebauer**

The University of Applied Sciences FH-Joanneum, Austria

14.45 – 15.20 **New passenger terminal construction at Zagreb airport**

Prof. **Jure Radic**

University of Zagreb, Faculty of Civil Engineering, Department of Structural Engineering

15.20 – 15.30 Discussion

Coffee break 15.30 – 16.00

**IV Session** **New trends in APPLIED MATHEMATICS AND BUILDING DESIGN**

**16.00 – 17.30** Session Chair: Assistant Prof. Sonja Gorjanc

16.00 – 16.45 **An engineering application of non-unique factorisation**

Associate Prof. **Hans-Peter Schröcker**

University Innsbruck, Austria

16.45 – 17.20 **Building skin**

Dr. **Silvio Basic**

University of Zagreb, Faculty of Civil Engineering, Department of Buildings

17.20 – 17.30 Discussion

# Symposium programme – Day 2

Tuesday, February 18, 2014 – the Main Hall (amphiteater)

**V Session**      **New trends in CONSTRUCTION MATERIALS**

**09.00 – 10.30**      Session Chair: Dr. Marijana Serdar

09.00 – 9.45      **Minimising carbon footprints of concrete construction**

Prof. emeritus **Ravindra K. Dhir** OBE  
Director Applying Concrete Knowledge, UK

9.45 – 10.20      **Construction materials roadmap for R&D**

Prof. **Ivana Banjad Pečur**

University of Zagreb, Faculty of Civil Engineering, Department of Materials

10.20 – 10.30      Discussion

Coffee break: 10.30 – 11.00

**VI Session**      **New trends in CONSTRUCTION MANAGEMENT**

**11.00 – 12.30**      Session Chair: Prof. Ivica Završki

11.00 – 11.45      **Impact of BIM on construction field productivity**

Prof. **Miroslaw J. Skibniewski**  
University of Maryland, A.J. Clark School of Engineering, USA

11.45 – 12.20      **The world's leading standards of project management**

Prof. **Mladen Radujkovic**

University of Zagreb, Faculty of Civil Engineering, Department of Construction Management and Economics

12.20 – 12.30      Discussion

Lunch: 12.30 – 14.00 (Hall P2)

**VII Session**      **New trends in TRANSPORTATION INFRASTRUCTURE**

**14.00 – 15.30**      Session Chair: Prof. Tatjana Rukavina

14.00 – 14.45      **State of the art and new trends in GPR applications to transportation infrastructures**

Prof. **Andrea Benedetto**  
University of Roma, Faculty of Civil Engineering, Italy

14.45 – 15.20      **From idea to new technologies in transportation infrastructures**

Prof. **Stjepan Lakusic**

University of Zagreb, Faculty of Civil Engineering, Department of Transportation Engineering

15.20 – 15.30      Discussion

Coffee break: 15.30 – 16.00

**VIII Session**      **New trends in MODELLING OF STRUCTURES**

**16.00 – 17.30**      Session Chair: Dr. Sanja Hak

16.00 – 16.45      **Experimental and numerical researches in support of seismic design of masonry buildings**

Dr. **Paolo Morandi**  
University of Pavia, Department of Civil Engineering and Architecture, Eucentre, Italy

16.45 – 17.20      **Contemporary approaches to testing and modelling of structures**

Prof. **Mladenko Rak**

University of Zagreb, Faculty of Civil Engineering, Department of Engineering Mechanics

17.20 – 17.30      Discussion

**17.30 – 17.45**      **CLOSING SYMPOSIUM**