

**MEMSCON Workshop**  
**Structural Monitoring and Status-Dependent  
Maintenance and Repair of Constructed Facilities**

7 October 2010

Pullman Hotel, World Trade Center, Bucharest, Romania

**8.30 Registration**

**9:00 Welcome Address**

*Dr. Dumitru Ulieru* (Workshop Organiser, SITEX 45, Romania)

*Dr. Angelos Amditis* (Coordinator of MEMSCON project, ICCS, National Technical University of Athens, Greece)

*Dr. Iulia Mihai* (Director of Romanian Office for Research and Technology/ Ministry of Education and Research, Romania)

*Prof. Horea Sandi* (Romanian Academy of Technical Sciences, Romania)

**9:30 Key Note Speech**

*Prof. Anne Kiremidjian* (Stanford University, USA)

**“Wireless Structural Health Monitoring and the Civil Infrastructure Systems:  
Current State and Future Applications”**

**10:00 Construction Platform ECTP: Strategic Agenda “Monitoring and  
assessment in the strategic plans of ECTP agenda”**

*Dr. Doru Vladimir Puscasu* (CEPROCIM S.A. Bucharest, Romania)

**10:30 MEMSCON Project: Presentation of the concept, objectives and potential  
impact**

*Dr. Angelos Amditis* (ICCS, National Technical University of Athens, Greece)

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**11:00 Coffee Break**

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## **11:20 Structural Monitoring Systems in Construction**

Chairman: *Tom Torfs* (IMEC, Leuven ,Belgium)

*Sean Neylon* (CEO Colibrys S.A., Switzerland)

“MEMS based seismic and vibration sensors in Building & Structural Health Monitoring systems”

*Markus Krüger* (University of Stuttgart, Germany)

“Wireless Structural health monitoring - from research to reliable application”

*Carmen Moldovan* (IMT Bucharest, Romania)

“INTEGRAM Project and Use Cases”

*Mikael Colin* (MEMSCAP S.A., France)

“3-axis Accelerometer for Building Applications”

*Juan Santana* (IMEC-NL, Netherlands)

“3-Axis accelerometer and strain sensor readout for MEMS-based capacitive sensors”

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## **13:00 Lunch**

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## **14:00 Monitoring-Based Assessment of Structural Condition and Maintenance/Repair Management in Construction**

Chairman: *Daniele Zonta* (University of Trento, Italy)

*Dimitris Bairaktaris* (DBA, Greece)

“Monitoring-Based Assessment of the Structural Condition of a Building under Operating Loads and of the Seismic Damage in Reinforced Concrete Buildings”

*Vasilis Kallidromitis* (TECNIC, Italy)

“Condition-Based Maintenance Management”

*Stefanos Camarinopoulos* (RISA, Germany)

“Decision-Support-System for the Rehabilitation of Buildings: The MEMSCON Project”

**Roberto Walder** (Smartec SA, Switzerland),

“Integrated Structural Health Monitoring Systems for Buildings”

**Jose Vicente Fuento** (ALDICO, Spain)

“Integration of technologies applied to the structural assessment”

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### **15:40 Coffee Break**

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### **16:00 Laboratory Evaluation of SHM technologies**

Chairman: **Ion Vlad**, *Technical University of Civil Engineering (TUCB), Bucharest*

**Javier Molina** (ELSA Laboratory, Joint Research Centre, EU)

“Severe loading tests on large-size structures at ELSA laboratory”

**Daniele Zonta** (University of Trento, Italy),

“Laboratory validation of intelligent structure technologies”

**Emil Sever Georgescu** (INCERC, Romania)

“Current State of monitoring structures in the seismic areas of Romania”

**Horea Sandi** (Romanian Academy of Technical Sciences, Romania)

“A view on current needs of structural health monitoring in Romania”