Radical developments in telecommunications and sensor technologies are about to change the way that civil engineering design and infrastructure maintenance are conceived and carried out. Indeed, within the next ten years smart structural elements with embedded sensors and systems capable of self-diagnosis will be a normal part of buildings. These elements will be permanently connected to a distributed management network so that owners, users, and in general, all those involved in the production/management process - connected via the Internet - can check element conditions during production, transport, installation and operation.

Of special importance is the monitoring of civil infrastructure during an earthquake. During such an event structures may exceed their functional or structural limits and this can be visible. On the other hand, they can also suffer enormous damage to their capacity without producing any apparent visible signs. Such damage can result in life threatening conditions evolving in the structure long after the earthquake has happened. Monitoring systems can provide a quick and accurate estimate of the level of seismic damage that can be used to indicate loss of function and a quick and reliable assessment of the capacity of the structure to survive expected aftershocks.

The goal of this workshop is to provide a state-of-the-art report on recent research activities, technological utilisation and commercialisation activities in structural monitoring systems and software for the status-dependent maintenance and repair of constructed facilities.

This event, which is organized by the partners in the EC funded project MEMSCON, will bring together the Structural Health Monitoring community, European construction companies, owners of constructed facilities, insurance companies, policy makers and sector experts.

# **MEMSCON**





#### VENUE

#### Athenian Capitol Mall, Ioulianou and Triti Septemvriou Corner, Athens, Greece

Athens, is the capital and largest city of Greece. Athens dominates the Attica periphery and it is one of the world's oldest cities, as its recorded history spans around 3.400 years. The heritage of the classical era is still evident in the city, represented by a number of ancient monuments and works of art, the most famous of all being the Parthenon, widely considered a key landmark of early Western civilization. The city also retains a vast variety of Roman and Byzantine monuments, as well as a smaller number of remaining Ottoman monuments projecting the city's long history across the centuries.

The workshop will be held at the Conference Center of the Athenian Capitol Mall of the Charagionis Foundation in the city of Athens, Greece. The Athenian Capitol Mall also contains a 3D cinema, some 30 shops, and 10 restaurants and cafes and Greece's first Motor Museum. This museum, part of the Foundation, hosts 110 antique and top-of-the-line vehicles, with the oldest on display being a 1895 Hungarian-made fire engine and the newest a 1980 Ferrari 308 GTS.

#### Accommodation:

Participants are to settle their own bill directly prior to departure.

#### Suggested Accommodation:

# Park Hotel Athens

10, Alexandras Av. 10682 Athens, Greece Tel: 0030 210 88.94.500 Fax: 0030 210 82.38.420 www.athensparkhotel.gr

## Titania Hotel

52, Panepistimiou Str, 10678 Athens, Greece Tel: 0030 210 33.26.000 Fax: 0030 210 33.00.700 www.titania.gr









## MEMSCON Workshop Call For Papers

MEMSCON workshop will cover, but is not limited to, the following topics:

- Advanced sensing technologies for civil structures: MEMS, fiber optic sensors, bio-inspired sensors, multifunctional materials.
- Wireless Sensor Networks and distributed systems for real-time evaluation of civil structures.
- Monitoring-based assessment of structural condition and maintenance/repair management in construction.
- Field applications: buildings, bridges, tunnels, heritage structures, wind turbines.

Authors are invited to submit a 200-word abstract by email workshop@memscon.com by 1 Oct 2011.

#### **Key Dates**

Abstract submission deadline: Acceptance of abstracts: Full paper submission: Acceptance of full papers: Registration deadline: 1 October 2011 31 October 2011 20 December 2012 1 February 2012 10 March 2012

#### Contact:

## Daniele Zonta

University of Trento, 38123 Trento, Italy Phone Number: +390461282537 Fax Number: +390461282537 Email: daniele.zonta@unitn.it

## Manthos Bimpas

Institute of Communication and Computer Systems 15773, Athens, Greece Phone Number: +302107722467 Fax Number: +302107722291 Email: mbibas@iccs.gr



## Scientific Advisory Committee

Prof. Angelos Amditis, ICCS, Greece

Prof. Konrad Bergmeister, BOKU, Austria

Prof. Dionisio Bernal, Northeastern University, USA

Dr. Nicolas Bertch, Memscap, France

Prof. James Brownjohn, University of Sheffield, UK

Prof. Pedro A. Calderon, Universidad Politecnica de Valencia, Spain

Prof. Fabio Casciati, University of Pavia, Italy

Prof. Spilios Fassois, University of Patras, Greece

Prof. Claus-Peter Fritzen, University of Siegen, Germany

Dr. Stamatia Frondistou-Yannas, SEPTE CO, Greece

Prof. Branko Glisic. Princeton University, USA

Prof. Christian Grosse, TU Munich, Germany

Dr. Daniele Inaudi, Smartec SA, Switzerland

Prof. Anne Kiremidjian, Stanford University, USA

Dr. Markus Kruger, University of Stuttgart, Germany

Prof. Francesco Lanza di Scalea, UCSD, USA

Prof. Hui Li, Harbin Institute of Technology, China

Prof. Yong Lu, University of Edimburgh, UK

Prof. Jerome P. Lynch, University of Michigan, USA

Prof. Ayaho Miyamoto, Yamaguchi University, Japan

Prof. Wieslaw M. Ostachowicz, Polish Academy of Science, Poland

Dr. Nicolas Saillen, Thermo Fisher Scientific Inc., Netherlands

Dr. Juan Santana, IMEC-NL, Eindhoven, Netherlands

Prof. Alessandro De Stefano, Politecnico di Torino, Italy

Prof. Hoon Sohn, KAIST, Korea

Prof. Kenichi Soga, University of Cambridge, UK

Prof. Michael Todd, UCSD, USA

Dr. Tom Torf, IMEC, Belgium

Prof. Ming Wang, Northeastern University, USA

Dr. Helmut Wenzel, Vienna Consulting Engineers, Austria

Dr. Daniele Zonta, University of Trento, Italy

# Keynote Speakers

Prof. James Brownjohn, University of Sheffield, UK Prof. Branko Glisic, Princeton University, USA Prof. Christian Grosse, TU Munich, Germany Prof. Jerome P. Lynch, University of Michigan, USA Prof. Kenichi Soga, University of Cambridge, UK





# **Towards Intelligent Civil Infrastructure**

March 29, 2012, Athens, Greece
ATHENIAN CAPITOL

# **REGISTRATION FORM**

Please provide the following information to Despoina Kaneti by fax or email by 10 March 2012:

Phone Number: +30 210 7721663 Fax Number: +30 210 7722291 Email: workshop@memscon.com

The registration to the conference is free of charge.

Organizational costs are covered by
the MEMSCON project

## CONTACT INFORMATION

NAME	
SURNAME	
INSTITUTION	
ADDRESS	
COUNTRY	
TEL.	
FAX	
E-mail	