

# ICAST2011



22<sup>nd</sup> International Conference on Adaptive Structures  
Technologies  
October 10-12, 2011, Grecotel Corfu Imperial Hotel, Corfu, Greece

## SCOPE

The ICAST 2011 is the 22<sup>nd</sup> event in a series of successful international conferences which have followed the field of intelligent materials and adaptive structures and systems, from its emergence to its current rapid maturity. The ICAST 2011 aims at promoting research, development and use of adaptive structures and technologies through the exchange of scientific results and insight from leading international scholars and specialists from the Americas, Europe and Asia. The conference provides a forum for discussion of recent advances in the highly multidisciplinary field of smart materials and structures, and encourages transfer of advanced scientific results from research to application. ICAST is a single session conference with limited attendance.

## IMPORTANT DATES

October 6, 2010 First Call for papers.

**May 15, 2011 Extended Abstract submission**

June 15, 2011 Notification of acceptance

July 31, 2011 Early Registration

Sept. 10, 2011 Final Conference program

Oct. 10, 2011 Final paper submission

## SUBMISSION OF PAPERS

Participants are kindly invited to submit by May 1<sup>st</sup> 2011, an extended abstract (in English, max. 300 words) to the conference website. Abstracts and final papers can be submitted electronically at <http://www.icast2011.eu>

## PROCEEDINGS

A book of abstracts will be available upon registration. The Symposium Proceedings will be printed in CD and distributed after the conference. Paper proceedings will be also available electronically.

## SPECIAL ISSUES

Selected papers may be published in the Journal of Intelligent Material Systems and Structures, as well as, in Smart Materials and Structures, subject to regular review procedures of each Journal.

## SCIENTIFIC PROGRAM

### Materials:

- Active or field dependent materials • Shape Memory alloys • Ferroelectrics & piezoelectrics • Electroactive polymers • Electrostrictive and magnetostrictive materials • Electrorheological and magnetorheological fluids • Multifunctional materials • Smart composites • Smart textiles

### Structural Systems and Solutions:

- Adaptive or smart structural systems • Active vibration control and reduction • Active/semi active/hybrid damping • Active noise control • Sensors and actuators • Shape and position control • Variable geometry structures • Nano/Micro structures/systems

### Tools and Methodologies:

- Coupled-field mechanics • Modeling and simulation • Numerical methods • Structural integration of sensors and actuators • Control methodologies • Integrated system design • Bioinspiration and biomimetics • Embodying intelligence

### Applications:

- Aerospace, military, automotive and transportation • Renewable energy and sustainable buildings • Energy conversion • Energy harvesting • Compact hybrid actuation • Morphing structures • Structural health monitoring • Mechatronics and robotics • Measurement and manufacturing systems • Medicine and bioengineering

*Papers on applications related to energy and Sustainability are especially welcome.*

## ORGANIZATION AND TECHNICAL SPONSORS

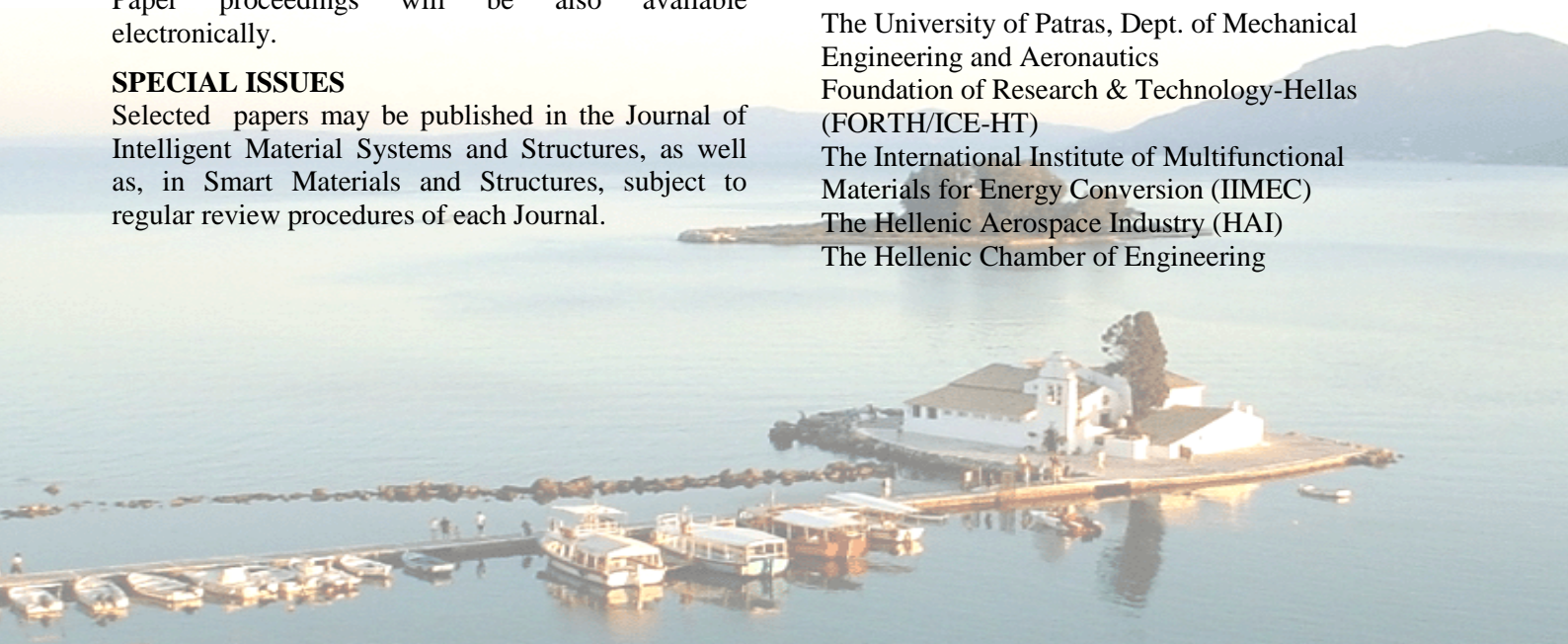
The University of Patras, Dept. of Mechanical Engineering and Aeronautics

Foundation of Research & Technology-Hellas (FORTH/ICE-HT)

The International Institute of Multifunctional Materials for Energy Conversion (IIMEC)

The Hellenic Aerospace Industry (HAI)

The Hellenic Chamber of Engineering



## CONTACT

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<http://www.icast2011.eu>

## VENUE

GrecoTel Corfu Imperial Hotel  
Corfu, Greece  
(Reservation instructions at the Conference website)

## LOCAL ORGANIZING COMMITTEE

Prof. D. Saravanos, U. Patras (Conference Chair)  
Prof. C. Galiotis, FORTH/ ICE-HT & U.Patras  
(Co-Chair)  
Prof. D. Lagoudas, IIMEC  
Dr. Z. Riga, HAI  
Prof. A. Tzes, U. Patras

## INTERNATIONAL ORGANIZING COMMITTEE

H. Abramovich	Technion Israel Institute of Technology, Israel	G. A. Lesieutre	The Pennsylvania State University, USA
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J. Cagnol	Ecole Centrale Paris, France	M. Martinez	National Research Council Canada, Canada
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P. Ermanni	ETH Zurich, Switzerland	F. Nitzsche	Carleton University, Canada
A. Flatau	University of Maryland, USA	R. Ohayon	Conservatoire National des Arts et Métiers, France
M. I. Friswell	Swansea University, UK	H. Okubo	Osaka Prefecture University, Japan
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P. Gaudenzi	University of Rome, Italy	N. Takeda	University of Tokyo, Japan
Z. Gurdal	Delft University of Technology, The Netherlands	H.S. Tzou	Zhejiang University, China
D. Guyomar	INSA Lyon, France	D. H. Wang	Chongqing University, China
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S. J. Kim	Seoul National University, Korea	A. Wickenheiser	George Washington University, USA
C. K. Lee	National Taiwan University, Taiwan		
I. Lee	Korea Advanced Institute of Science and Technology, Korea		

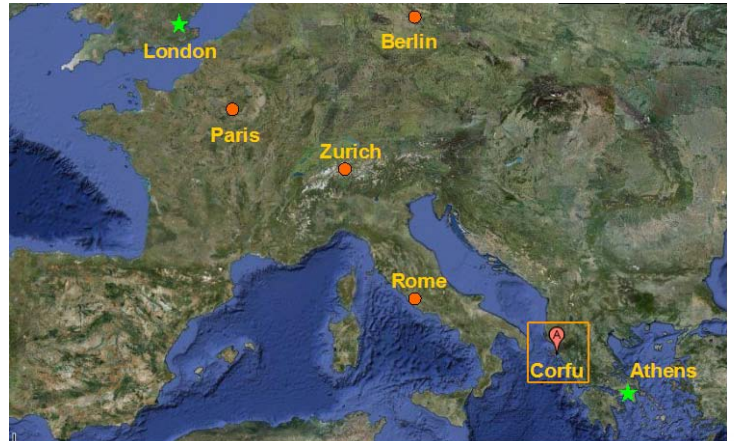
## REGISTRATION

Please register online at <http://www.icast2011.eu>  
Register by July 31, 2011 and save €50

### Conference Fee (tentative)

Early registration	500€
Regular	550€
Student	300€

*Includes:* CD-ROM proceedings, receptions, daily lunch, banquet, coffee breaks.





## ICAST History

1st Joint U.S.A.-Japan Conference on Adaptive Structures	Maui, HI (USA)	November 13-15, 1990
2nd Joint Japan-U.S.A. Conference on Adaptive Structures	Nagoya (Japan)	November 12-14, 1991
3rd International Conference on Adaptive Structures	San Diego, CA (USA)	November 9-11, 1992
4th International Conference on Adaptive Structures	Cologne (Germany)	November 2-4, 1993
5th International Conference on Adaptive Structures	Sendai (Japan)	December 5-7, 1994
6th International Conference on Adaptive Structures	Key West, FL (USA)	November 13-15, 1995
7th International Conference on Adaptive Structures and Technologies	Rome (Italy)	September 23-25, 1996
8th International Conference on Adaptive Structures and Technologies	Wakayama (Japan)	October 29-31, 1997
9th International Conference on Adaptive Structures and Technologies	Cambridge, MA (USA)	October 14-16, 1998
10th International Conference on Adaptive Structures and Technologies	Paris (France)	October 11-13, 1999
11th International Conference on Adaptive Structures and Technologies	Nagoya (Japan)	October 23-26, 2000
12th International Conference on Adaptive Structures and Technologies	College Park, MD (USA)	October 15-17, 2001
13th International Conference on Adaptive Structures and Technologies	Potsdam (Germany)	October 7-9, 2002
14th International Conference on Adaptive Structures and Technologies	Seoul (Korea)	October 7-9, 2003
15th International Conference on Adaptive Structures and Technologies	Bar Harbor, ME (USA)	October 25-27, 2004
16th International Conference on Adaptive Structures and Technologies	Paris (France)	October 10-12, 2005
17th International Conference on Adaptive Structures and Technologies	Taipei (Taiwan)	October 16-19, 2006
18th International Conference on Adaptive Structures and Technologies	Ottawa (Canada)	October 3-5, 2007
19th International Conference on Adaptive Structures and Technologies	Ascona (Switzerland)	October 6-9, 2008
20th International Conference on Adaptive Structures and Technologies	Hong Kong (China)	October 20-22, 2009
21st International Conference on Adaptive Structures and Technologies	State College, PA (USA)	October 4-6, 2010