# 10th ECCOMAS Thematic Conference on Smart Structures and Materials

Patras, Greece

# **Announcement and Call for Papers**

#### **SCOPE**

The SMART 2023 ECCOMAS Thematic Conference will be organized in Patras, at the Conference Center of the University of Patras. The conference is the 10<sup>th</sup> event in a series of successful international conferences which have followed the field of intelligent materials, smart structures and systems, since 2003 to its current rapid maturity. Its previous editions were held in Poland (2003, 2007), Portugal (2005, 2009, 2015), Germany (2011), Italy (2013), Spain (2017) and Paris (2019).



Ancient Olympia https://upload.wikimedia.org/wikipedia/cd

SMART 2023 aims at promoting research, development and applications of smart materials and structures through the exchange of scientific results and insight from leading international scholars and specialists from Europe, Americas, and Asia. The conference provides a forum for the discussion of recent advances in the highly interdisciplinary field of smart materials and structures, development of future ideas in a multidisciplinary level and encourages transfer of advanced scientific results from research to applications.

#### IMPORTANT DATES

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First call for papers	May 3, 2022	
Proposals for Special Sessions	Oct. 15, 2022	
Abstract submission	Jan. 15, 2023	
Abstract acceptance notification	Feb. 15, 2023	
Full paper submission (Mandatory)	Mar. 31, 2023	
Early Registration	Mar. 31, 2023	
Final program	May 15, 2023	
Conference	July 3-6, 2023	

Registration required to keep presentation in the program.

#### SUBMISSION OF PAPERS

Participants are kindly invited to submit by Jan. 15, 2023, an extended abstract (in English, max. 300 words) to the conference website. Abstracts and final papers can be submitted electronically at <a href="https://www.smart2023.eu">https://www.smart2023.eu</a>. Instructions will be provided on the website.

## **PROCEEDINGS**

A book of abstracts will be available upon registration. The Symposium Proceedings will be distributed at the

conference. Paper proceedings will be also available electronically.

## **SPECIAL ISSUES**

Selected papers may be published in the *Journal of Vibration Control* subject to the standard review procedures of the Journal.

### **SCIENTIFIC PROGRAM - TOPICS**

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, nano-reinforced, biomimetic, optic, characterization, etc.

**Smart structures:** Fundamentals, concepts, design, modelling, simulation, testing, etc.

*Smart systems:* Nano, micro, mechatronics, robotics, structural solutions, automation, integration, etc.

**Structural Control:** Active/semi-active vibration control, semi-active hybrid damping, active noise control, sensors and actuators, shape and position control, morphing, nano/microstructures and systems, etc.

*Health monitoring:* Sensor/actuator networks, vibration SHM, guided wave SHM, wireless communication, etc.

**Energy Harvesting:** Vibration EH, nonlinear EH, piezoelectric-based EH, thermal EH, etc.

**Tools and Methodologies:** Coupled-field mechanics, modelling, homogenization, numerical methods, structural integration of sensors and actuators, control methodologies, integrated system design, bioinspiration and biomimetics, embodying intelligence, etc.

*Manufacturing technology:* Bonding, embedding, connection, additive, 3D/4D printing, painting, smart manufacturing, etc.

**Applications:** Aerospace, mechanical, automotive and transportation, renewable energy, civil, sustainable buildings, medical and bioengineering, etc.



Nafpaktos https://commons.wikimedia.org/wiki/File:Naupacte\_port.jpg

## **CONFERENCE CHAIR**

- Prof. Dimitris Saravanos, University of Patras, Greece
- Prof. Ayech Benjeddou, ISAE-SUPMECA & SUA-UTC ROBERVAL, France

## **LOCAL ORGANIZING COMMITTEE**

- Dr. T. Theodosiou, University of Thessaly, Greece
- Dr. N. Chrysochoidis, University of Patras, Greece
- Dr. T. Loutas, University of Patras, Greece
- Dr. G. Sakellariou, University of Patras, Greece
- Prof. G. Stavroulakis, Technical University of Crete, Greece
- Dr. D. Varelis, HAFA, Greece

#### International Scientific Committee

- A. Araujo, IDMEC Instituto Superior Tecnico, Portugal
- A. Benjeddou, ISAE-SUPMECA & SUA-UTC ROBERVAL, France
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- o A. Cunha, Universidade do Porto, Portugal
- J.-F. Deü, Conservatoire national des arts et métiers, France
- J.B. Høgsberg, Danmarks Tekneske Universitet, Denmark
- L. Jankowski, Institute of Fundamental Technological Research, Poland
- o M. Krommer, Johan Kepler University, Austria
- o G. Kulikov, Tambov State Technical University, Russia
- R. Lammering, Universität der Bundeswehr Hamburg, Germany
- o N. Mechbal, Arts et Métiers Ensam, France
- o W. Ostachowicz, Polish Academy of Sciences, Poland
- o O. Polit, Université Paris Nanterre, France
- o J. L. Perez Aparicio, University of Valencia, Spain
- o J. Rodellar, Universitat Politècnica de Catalunya, Spain
- o D. Saravanos, University of Patras, Greece

#### REGISTRATION

You may register online at <a href="http://www.smart2023.eu">http://www.smart2023.eu</a>

#### Conference Fees:

Туре	Early	Late
Full	€ 600	€ 700
Student	€ 400	€ 450
Companion*	€ 100	€ 150

<sup>\*</sup>Includes admission to all social activities.

## **SOCIAL ACTIVITIES**

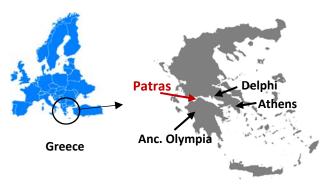
Welcome cocktail • Tour to Ancient Olympia • Visit to Archeological Museum • Conference Dinner





#### VENUE

Conference and Cultural Center
University of Patras, Patras, Greece
http://www.confer.upatras.gr/





## CONTACT

**The SMART2023 Organization Committee.** Dept. of Mechanical and Aerospace Engineering, University of Patras, Patras, GR 26500, tel.: +30-2610969238, attn.: Prof. D. A. Saravanos



smart2023@upatras.gr
https://www.smart2023.eu



