#### Venue

The EUROMECH Solid Mechanics Conference takes place in the Instituto Superior Técnico (IST) Conference Center. IST Campus is located at a convenient distance from hotels, restaurants and diverse cultural sites. Being close to the center of Lisbon, IST is easily reached by metro, bus, taxi or car from any location in town, including the airport, which is only a 10 minute taxi ride.

## **Accommodation**

A wide range of hotels are located at walking distance from Instituto Superior Técnico. Two metro stations are located in the vicinity of IST (Saldanha and Alameda), which make other hotels in town good alternatives. More detailed information is available on the conference homepage:

www.dem.ist.utl.pt/esmc2009

# **About EUROMECH**

EUROMECH - European Mechanics Society is an international non-governmental non-profit scientific organization. The OBJECTIVE of the Society is to engage in all activities intended to promote in Europe the development of mechanics as a branch of science and engineering. Mechanics deals with motion, flow and deformation of matter, be it fluid or solid, under the action of applied forces, and with any associated phenomena. More detailed information is available on the Society homepage: www.euromech.org

# **Sponsors and Supporting Organizations**

EUROMECH - European Mechanics Society

APMTAC - Portuguese Association for Theoretical, Applied and Computational Mechanics

**UTL** - Lisbon Technical University

IST - Instituto Superior Técnico

**IDMEC** - Mechanical Engineering Institute

FCT - Foundation for Science and Technology

FCG - Calouste Gulbenkian Foundation

FLAD - Luso-American Development Foundation

# Registration

Early registration before June 1, 2009 is advised. The following fees apply:

	Early	Late
	Registration	Registration
EUROMECH members:	400€	450€
Non-EUROMECH members:	450€	500€
Students	200€	250€

The registration fees include the book of abstracts, participation in all sessions, lunches and coffee breaks, reception, half day tour and banquet. The lunches for participants will be organized at IST.

# **Social Programme**

A social programme for accompanying persons will be arranged during the days of the conference. A half day tour, reception and banquet will be organized for delegates and registered accompanying persons. Costs for the optional programmes will be posted on the conference home page.



# **Secretariat**

Miss Paula Jorge IDMEC Instituto Superior Técnico Av. Rovisco Pais 1 1049-001 Lisboa Portugal Tel: +351 218419044 Fax: +351 218417915 e-mail: esmc2009@dem.ist.utl.pt



1<sup>st</sup> Announcement

**ESMC2009** 

7<sup>th</sup> EUROMECH Solid Mechanics Conference

**September 7-11, 2009** 

Instituto Superior Técnico, Lisbon, Portugal



## General

Following the very successful Conferences in Munich, Genova, Stockholm, Metz, Thessaloniki and Budapest, the 7th EUROMECH Solid Mechanics Conference will be held at Instituto Superior Técnico, Lisbon, Portugal, under the auspices of EUROMECH, during September 7-11, 2009. The purpose of this Conference is to provide opportunities for scientists and engineers from all of Europe to meet and to discuss current research, new concepts and ideas and establish opportunities for future collaborations.





# **Conference Topics**

#### **Continuum Mechanics**

General theories

Elasticity

Plasticity

Homogenization & localization

Geomechanics

Micromechanics

Multiscale problems

Multifield problems

Contact mechanics

#### **Material Mechanics**

Damage and fracture

Fatique

Viscoelastic materials Composite materials

Smart materials

Material modelling Biomaterials

## **Structural Mechanics**

Beam structures

Plates & shells Stability

Structural impact

Composite structures

Reliability and safety

Forming processes

Casting processes

Inverse problems

Biostructures

## **Dvnamics**

Noise and vibrations

Nonlinear dynamics

Kinematics

Multibody dynamics

Control of structures &

mechanisms

Biomechanics of motion

#### **Experimental Mechanics**

Hybrid techniques

Experimental analysis

Non-destructive control techniques

Noise and vibration

Instrumentation

#### **Computational Mechanics**

Finite elements

Boundary elements

Stochastic methods

Meshless methods

Optimization

High performance computing

## **Coupled Problems**

Fluid-structures interaction

**Thermomechanics** 

Aeroelastic problems

Earthquake & wind engineering Magnetomechanical problems

Electromechanical problems



# **Conference Scientific Committee**

D. Bigoni (University of Trento, Italy)

R. De Borst (Technical University of Delft, The Netherlands)

C. Glocker (ETH Zurich, Switzerland)

P. Gudmundson (Royal Institute of Technology, Sweden)

H. Irschik (University of Linz, Austria)

M. Kurutz (Technical University of Budapest, Hungary)

N. Morozov (St. Petersburg University, Russia)

R.W. Odden (University of Glasgow, United Kingdom)

G. Stépán (Technical University of Budapest, Hungary)









# **Local Organizing Committee**

- J. Ambrósio, Chaiman (IST)
- J. César Sá (FEUP)
- J. M. Cirne (FCTUC) P. Flores (U. Minho)
- J. Martins (IST)
- P. Martins (IST)
- C.A. Mota Soares (IST)
- A. Ramalho (FCTUC)
- H.C. Rodrigues (IST)
- J. Sá da Costa (IST) M.Seabra Pereira (IST)
- M. Silva (IST)
- J. Silva Gomes (FEUP)
- L. Sousa (IST, Portugal)



# **Call for Contributions**

Authors wishing to contribute to the conference are invited to submit a two-page abstract (see format in the conference web page). Authors will receive notification of acceptance of their proposed contribution. The conference publication will include only the accepted abstracts and no full papers will be required. However, organizers of invited symposia and special sessions may invite contributors to deliver full length papers to be reviewed, and if accepted, published in special issues of international journals. Applicants that intend to submit contributions must meet the following deadlines:

Abstract submission: January 31, 2009 Notification of acceptance: March 15, 2009

Confirmation of participation in the conference by the authors will be required when abstracts are accepted. Only confirmed presentations by registered participants will be included in the proceedings and final programme.

Author's instructions are found on the Conference Home Page: www.dem.ist.utl.pt/esmc2009



# **Conference Format**

The Conference will last five days, including the half-day tour. during which one general and eight plenary lectures will be delivered and working sessions organized, including the "EUROMECH Solid Mechanics Prize" lecture. In each working day two invited lectures will be delivered and four periods of 90 minutes sessions will take place for the organized sessions and invited mini-symposia. Poster sessions are also planned.

An award ceremony for EUROMECH Fellows will be held and the best oral and poster presentations by Young Researchers, age under 35, will be recognized with prizes.

Those who wish to organize mini-symposia in specialized, emergent or interdisciplinary topics should contact the Conference chairman before June 1, 2008.