

Abstract submission: November 30, 2011

Notification of acceptance: January 15, 2012

8th European Solid Mechanics Conference July 9 - 13, 2012 Graz, AUSTRIA

EUROPEAN
MECHANICS
SOCIETY

ESMC 2012

2nd Announcement

Venue

The European Solid Mechanics Conference will take place at the Convention Center Graz.

The conference venue is located in the historic city center of Graz, a UNESCO listed World Cultural Heritage site and is at an easy walking distance from hotels, student accommodation, restaurants and sites of cultural interest. The city center is only a 20-25 minute taxi ride from the airport, and 10 minutes from the train station by tram or taxi.

Accommodation

A number of hotels and student residences are located within walking distance of the conference venue. Other hotels are conveniently reached by tram or bus. More detailed information is available on the conference homepage: www.esmc2012.tugraz.at

About EUROMECH

EUROMECH - The 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

Registration

Early registration before April 1, 2012 is advised.
The early registration fee is applicable up to April 1, 2012.

	Early Registration	Late Registration
EUROMECH members	550€	600€
Non-EUROMECH members	600€	650€
Students	300€	350€

The registration fees include the book of abstracts, participation in all sessions, coffee breaks, a reception and the conference banquet.

Social Programme

The social programme will include a reception on Monday evening. The conference banquet will be held on Thursday evening. A separate fee will apply for those accompanying persons who wish to attend the banquet. Optional programmes will be organized on the free afternoon, and details will be posted on the conference homepage.



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Secretariat

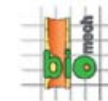
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Solid Mechanics Conference
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General Lecturer



James R. Rice
Harvard University, USA

Plenary Lecturers

Ferdinando Auricchio	University of Pavia, Italy
Norman Fleck	University of Cambridge, UK
Peter Hunter	University of Auckland, New Zealand
Robert M. McMeeking	Univ. of California Santa Barbara, USA
Michael Ortiz	California Institute of Technology, USA

Mini-Symposia

Adaptive and Smart Structures - **Paul Weaver**, UK
Advanced Composite Materials - **Pedro Camanho**, Portugal; **Javier LLorca**, Spain
Advances in Applied Mechanics for Vehicle Concept Modelling -
Niccolò Baldanzini, Italy; **Helmut Kühnelt**, Austria; **Bert Pluymers**, Belgium
Biomechanics from Cells to Tissues - **Patrick Chabrand**, France; **Damien Lacroix**, Spain
Cardiac Mechanics - **Gernot Plank**, Austria; **Natalia Trayanova**, USA
Computational Strategies for Waves in Solids: Direct and Inverse Problems -
Marc Bonnet, France; **Geert Degrande**, Belgium; **Martin Schanz**, Austria
Constitutive Modelling of Articular Cartilage - **David Pierce**, Austria;
Tim Ricken, Germany
Contact and Adhesion: Cohesive Zone Model - **Michel Raous**, France;
Viggo Tvergaard, Lyngby
Dynamics of Solid Systems with Friction - **Alexander Karapetyan**, Russia;
Alexey Kireenkov, Russia
Experimental Micromechanics and Nanomechanics - **Gerhard Dehm**, Austria;
Jon Molina-Aldareguia, Spain
Generalized Models of Continuum Mechanics - **Daya Reddy**, South Africa;
Paul Steinmann, Germany
Growth and Remodelling of Soft Tissues: Theoretical Frameworks and Numerics -
Rudy Gleason, USA; **Igor Karsaj**, Croatia
High Performance Computing of Biological Tissues - **Jörg Schröder**, Germany;
Wolfgang Wall, Germany
Homogenization Strategies for Multiphase Materials - **Issam Doghri**, Belgium;
Pierre Suquet, France
Image Processing and Visualization in Solid Mechanics - **João Manuel Tavares**,
Portugal; **Renato Natal Jorge**, Portugal
Mechanics of Biological Membranes - **Jean-Francois Ganghoffer**, France;
Ivailo Mladenov, Bulgaria
Mechanics of Biomedical Implants and Devices and their Interaction with Tissues and Cells
José Manuel García Aznar, Spain; **Patrick McGarry**, Ireland
Mechanics of Granular Media - **Erich Bauer**, Austria; **Felix Darve**, France;
Joe Goddard, USA
Mechanics of Nanoindentation - **Michelle Oyen**, UK; **Andreas Schneider**, Germany
Mechanics of (Nano)Porous, Fibrous and Cellular Materials - **Katia Bertoldi**, USA;
Patrick Onck, The Netherlands
Mechanics of Textile Composite Reinforcements and Fibrous Materials -
Philippe Boisse, France; **Stepan Lomov**, Belgium

Metal Forming - **Jean-Philippe Ponthot**, Belgium; **Robertt Valente**, Portugal
Methods to Predict the Structural and Mechanical Properties of Dense Granular Media
Robert Behringer, USA; **Lou Kondic**, USA; **Corey O'Hern**, USA
Modelling and Computation of Inelastic Microstructures
Klaus Hackl, Germany; **Dennis Kochmann**, USA
Modelling and Simulation of Aneurysm Mechanics - **Anne Robertson**, USA;
Paul Watton, UK
Multiphase Models for Concrete and Soils - **Günter Hofstetter**, Austria;
Tony Jefferson, UK
Multiscale Mechanics of Interfaces - **Marc Geers**, The Netherlands;
Siegfried Schmauder, Germany
Multiscale Mechanics of Smart Material Systems and Structures -
Ayech Benjeddou, France; **Marc Kamlah**, Germany; **Yasuhide Shindo**, Japan
Multiscale Mechanobiology - **Seungik Baek**, USA; **Arturo Valentin**, Austria
Multiscale Modelling of Bones -
Jean-Marie Crolet, France; **Udo Nackenhorst**, Germany
Multiscale Modelling of Polycrystalline Plasticity - **Alexander Butz**, Germany;
Javier Segurado, Spain
Multiscale Muscle Mechanics: Theory and Experiment - **Antonio DiCarlo**, Italy;
Walter Herzog, Canada
Nonlinear Elasticity - **Roger Bustamante**, Chile; **Luis Dorfmann**, USA
Nonlinear Guided Waves in Solids: Theory and Experiments -
Karima Khushnutdinova, UK; **Alexander Samsonov**, Russia
Nonlinear Waves in Modern Materials and Acoustodiagnostics -
Igor Andrianov, Germany; **Alexey Porubov**, Russia
Optimization in Nonlinear Solid Mechanics - **Helder Rodrigues**, Portugal;
Jonas Stålhand, Sweden
Phase transformations - **Andreas Menzel**, Germany;
Stanislaw Stupkiewicz, Poland
Refined Theories of Plates and Shells - **Victor Eremeyev**, Germany;
Wojciech Pietraszkiewicz, Poland
Science and Technology of Composites Manufacturing Processes -
Remko Akkerman, The Netherlands; **Arnaud Poitou**, France
Shape Memory Alloys and Functional Materials - **Thomas Antretter**, Austria;
Petr Šittner, Czech Republic
Stability and Nonlinear Behavior of Steel Structures - **Leroy Gardner**, UK;
Nuno Silvestre, Portugal
Surface and Interface Acoustic Waves in Solids - **Sudhakar Nair**, USA;
Dimitrios Sotiropoulos, Greece
Surface Effects in Nano-Mechanics - **Holm Altenbach**, Germany;
Nikita Morozov, Russia
Theoretical and Numerical Modelling of the Function of the Eye - **Anna Pandolfi**,
Italy; **Peter Pinsky**, USA
Trends in Phase-Field Modelling - **Samuel Forest**, France; **Bernd Markert**, Germany
Virtual Testing of Composites - **Carlos González**, Spain; **Stephen Hallett**, UK
Viscoelastic Behavior of Soft Tissues and Polymers - **Sanjay Govindjee**, USA;
Vicky Nguyen, USA
Wave Propagation in Saturated and Partially Saturated Porous Media
Bettina Albers, Germany; **Krzysztof Wilmanski**, Germany

For e-mail addresses of the co-organizers see the website
www.esmc2012.tugraz.at

General (Contributed) Lecture and Poster Sessions

Continuum Mechanics	Structural Mechanics
Material Mechanics	Experimental Mechanics
Computational Mechanics	Dynamics
Multifield Problems	

Conference Scientific Committee

R.W. Ogden	Chairman; University of Aberdeen, UK
D. Bigoni	University of Trento, Italy
P.P. Camanho	University of Porto, Portugal
R. De Borst	Eindhoven Univ. of Technology, The Netherlands
J. LLorca	Polytechnic University of Madrid, Spain
P.E. McHugh	National University of Ireland Galway, Ireland
N. Morozov	St. Petersburg University, Russia
M. Raous	University Aix-Marseille, France
S. Reese	RWTH Aachen, Germany
O. Sigmund	Lyngby, Denmark

Local Organizing Committee

G.A. Holzapfel	Chairman	D.M. Pierce	TUG
	TUG, KTH	M. Schanz	TUG
T. Antretter	MUL	O. Steinbach	TUG
E. Bauer	TUG	A. Valentin	TUG
G. Hofstetter	UIBK	P.K. Zysset	TUWien
H. Irschik	JKU		

Abstract Submission

Authors wishing to contribute to the conference are invited to submit a two-page abstract. This should be submitted online using a template which can be downloaded from the conference homepage. The conference programme will include only the accepted abstracts. Organizers of minisymposia may invite contributors to submit full length papers for publication in special issues in international journals.

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Confirmation of participation in the conference by the authors will be required after abstracts are accepted. Only confirmed presentations by registered participants will be included in the book of abstracts and the final programme. Instructions for authors may be found on the conference homepage www.esmc2012.tugraz.at

Conference Format

The Conference will last five days (Monday to Friday). One afternoon will be reserved for optional organized trips. In addition to the invited lectures there will be the "EUROMECH Solid Mechanics Prize" lecture. An award ceremony for EUROMECH Fellows will be held and the best oral and poster presentations by Young Researchers, aged under 35, will be recognized with prizes.