



3-6 July, 2011



Algarve, PORTUGAL

5th INTERNATIONAL CONFERENCE
ON ADVANCED COMPUTATIONAL
ENGINEERING AND EXPERIMENTING

ACE-X 2011

4, 5 & 6 JULY, 2011 ALGARVE - PORTUGAL

www.ace-x2011.com

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**LAST DATE FOR
ABSTRACT SUBMISSION:
20 JANUARY, 2011**





SCIENTIFIC VISUALIZATION AND IMAGING SYSTEMS (SS1)

Organizer:

Prof. Fabiana R. Leta
Fluminense Federal University,
Brazil
fabiana@ic.uff.br

PUBLICATION:

Papers submitted to ACEX2011 and accepted after review process will be published in: one of the following Journals:

- **MATERIALS SCIENCE AND ENGINEERING TECHNOLOGY**
<http://www.wiley-vch.de/publish/en/journals/alphabeticalIndex/2012/>
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http://www.elsevier.com/wps/find/journaldescription.cws_home/405928/description
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selected papers related to (multiscale) modelling of novel phenomena in materials
- **KEY ENGINEERING MATERIALS**
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- **COMPUTATIONAL THERMAL SCIENCES**
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- **INTERNATIONAL JOURNAL OF STRUCTURAL INTEGRITY**
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SCIENTIFIC VISUALIZATION AND IMAGING SYSTEMS (SS1)

Scientific visualization and imaging processing are multidisciplinary areas, with applications in many knowledge fields such as engineering, medicine, physics, geology, among others. This special session aims to stimulate discussions on research involving the use of digital images as an understanding approach for analysis and visualization of phenomena, experiments and cases. We encourage paper submission considering any imaging topic and scientific visualization, which brings technological innovation on its methods and applications.

TOPICS OF THE SESSION:

- Physics and Biophysical imaging
- Computer vision
- Biomedical imaging
- Microscopy
- Multidimensional image processing
- Optical imaging
- Pattern recognition
- Remote sensing, Radar and synthetic aperture imaging
- Astronomy and Geology Imaging
- Scientific visualization
- Image analysis
- Thermal imaging

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Dear Colleagues,

It is our great pleasure to invite you to participate in the **5th International Conference on Advanced Computational Engineering and Experimenting**, ACE-X 2011, which will be held in Algarve, Portugal, from 3-6 JULY, 2011.

The major purpose of the ACE-X CONFERENCE is to provide a platform for discussion, interactions and exchange between researchers, scientists and engineers from industry, research laboratories and academia. The event will provide ample opportunity for conference delegates to network and improve their knowledge in an attractive, friendly and sunny environment: Algarve, Portugal.

Looking forward to welcome you there!

Prof. Dr.-Ing. Andreas Öchsner, D.Sc. (Chair)
www.ace-x2011.com



ACEX2001- ALGARVE (PORTUGAL)
03—06 JULY, 2011

AREAS:

Material modelling and constitutive relationships
Homogenisation and localisation
Plasticity
Impact and crash
Damage and fracture
Transport phenomena
Fluid-structure interaction
Nanomechanics
Dynamics
Biomechanics

MATERIALS:

Composites and multiphase materials
Porous and cellular materials
Adhesive Science and Technology
Advanced Materials
Nanomaterials
Biomaterials

METHODS:

Numerical methods
Mathematical foundations
Experimental methods
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The conference will be held at
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Advanced Course N.5
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