Call for presentation abstracts

Dear colleagues,

The European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS Congress 2016) will be held next June 2016, in Crete Island, Greece. Please visit the **ECCOMAS** website: http://www.eccomas2016.org/.

If travel is among your favorite interests, don't miss this occasion! The **Creta Maris Conference Centre** (lieu of the congress) is situated a hundred meters away from the Creta Maris Beach Resort, as it can be seen below.

You are invited to submit your abstract in the Minisymposium 1008 "Ultrasonic Guided Waves Testing and Monitoring". **Please note that presentations are not limited to guided waves and other nondestructive testing techniques are welcome.** A description of this session is given at the end of this email.

We remind you that the first **deadline** for Abstract submission is **November 29, 2015.**

The session organizers will be pleased to welcome you to participate in this International event.

Please don't hesitate to forward this email to colleagues and students at your institute, and your professional organizations.

Note for your students that the 6th PhD ECCOMAS Olympiad will run in parallel with the ECCOMAS Congress 2016.

We apologize for an eventual reception of this email more than one time.

Best regards
The UGW minisumposium organizers,
Slah Yaacoubi and Nico F. Declercq

Instructions for Abstract Submission

*In order to submit your abstract, first you need to register on the Congress website. After completing this pre-registration form (alternatively click **Register** at the top-right of the Congress webpage), you will receive an email to validate your Account. After validation, you*

will receive a second email with your Username and password, which will be used to login to *your ECCOMAS Congress 2016 Account. From your* ***Account Overview Menu*** *click* ***My Abstracts/My Papers*** *and then click* ***Submit an abstract****. Choose* ***Submit to Minisymposium****, then* ***Select MS*** *and proceed with the Abstract Submission.*

Description of this minisymposium

Ultrasonic guided waves (UGW) have significant potential for structural health monitoring (SHM) and nondestructive testing (NDT). Techniques involving UGW are expanding rapidly to many different areas of manufacturing and in-service inspection. This is due to their relatively long propagation distance and sensitivity to anomalies along the propagation path. Despite these advantages, UGW techniques are often complicated by the existence of a multitude of propagating modes, wave dispersion, attenuation, etc.

Nowadays, computational methods are widely adapted for the simulation of UGW propagation to help improve in-situ experimental results, to contribute to the reduction of false alarms, and consequently to make better decisions. Different methods have already been developed and are currently in use; they allow for:

- *an understanding of waves' behavior even in complex waveguides,*
- *the simulation of interactions between waves and realistic defects (with arbitrary forms and sizes),*
- *the simulation of the generation of a pure mode,*
- *the optimization of the size and sensitivity of sensors and actuators,*
- *…*

This mini-symposium is an opportunity for NDT and Monitoring researchers to present (or held) presentations concerning computing (development, simulation and validations) in UGW and linked techniques. It is also the occasion for other researchers coming from wide fields in computing to discover ultrasonic guided waves.

Slah YAACOUBI
Ingénieur R&D CND/Monitoring
Responsable de projets
s.yaacoubi@isgroupe.com
Tél. +33 (0)3 82 88 79 54
Fax +33 (0)3 82 59 86 45
Assistante +33 (0)3 82 59 13 82
www.isgroupe.com
www.essa-eaps.isgroupe.com

Institut de Soudure
Espace Cormontaigne
4, bd Henri Becquerel
57970 Yutz
France