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Scientific Partners and Sponsors









Conference Themes

Techniques:

<u>Surface imaging techniques</u>: Digital image correlation, Speckle interferometry, Digital holography, Moiré interferometry, Grid methods, Photoelasticity, Microscopy, Hyperspectral imaging.

<u>3D volume measurements</u>: X-ray tomography, Neutron tomography, Optical coherence tomography, 3D photoelasticity, Magnetic resonance imaging, Computated tomography, Digital volume correlation.

Non-destructive testing: Thermography, Shearography, Ultrasonic and related techniques, Fibre optic sensors.

Applications:

- Mechanical behaviour of metal and composite materials and structures
- Stress and strain field analysis
- Nanoscale and microscale metrology and application to micromechanics
- Detection and characterization of cracks, damage and fatigue
- Thermomechanics
- Biomechanics
- Applications in transport engineering, e.g. aerospace, automotive, rail
- Applications in civil engineering, e.g. buildings, bridges
- Structural health monitoring

Conference Website www.photomechanics2015.nl



LOOKING BEYOND THE SURFACE

Delft, the Netherlands

May $26^{th} - 29^{th}$, 2015







Conference Secretariat

Phone: +31 (0)6 42 89 77 31

Email: info@photomechanics2015.nl URL: http://www.photomechanics2015.nl



Aim and Scope

Photomechanics 2015 conference follows on from highly successful Photomechanics conferences in 2013, 2011, 2008 and 2006, held in Montpellier (France), Brussels (Belgium), Loughborough (UK) and Clermont-Ferrand (France), respectively. Each of these events have attracted over 120 delegates from typically 17 different countries.

In 2015, the Photomechanics conference comes for the first time to the Netherlands, to Delft University of Technology and will be hosted jointly by the Department of Aerospace Structures & Materials and the Department of Imaging Physics. These Departments with their links to both the scientific and engineering communities represent the scientific innovation of the Photomechanics techniques and their application in experimental mechanics.

Innovation is one of the key themes of Photomechanics15 as developments in advanced materials and structures, and the increased interest in biomechanics brings increasing challenges for measurement. Nowadays, nano- to microscale surface measurement techniques, provide surface stress/strain information under typical in-service loading conditions. Volume measurement techniques, operating in the microto millimetre scale, provide detailed 3D information for comparison with analytical and FEM models. Non-destructive testing is also rejuvenated by the new challenges of composite materials and the demands of process control, maintenance and repair of advanced materials.

We look forward to welcoming you to Delft in 2015 to our city of culture, knowledge and innovation.

Important Dates

November 26^{th} , 2014 - Abstract submission deadline November 26^{th} , 2014 - Start of Early Bird Registration February 26^{th} , 2015 - Abstract acceptance notification March 26^{th} , 2015 - End of Early Bird Registration April 26th - 29^{th} , 2015 - Final programme May 26th - 29^{th} , 2015 - Photomechanics 2015

Conference Venue

The conference will take place in the theatre De Veste in the historic city centre of Delft, within 5 minutes walking distance of hotels, restaurants and cultural activities.









Conference Format

All contributions will be presented either as oral or poster presentations. The conference follows a single session format, with an exhibition and a poster session. A book of abstracts will be available for the conference.

Conference Fee

The conference fee of \leq 550 grants access to the conference, morning and afternoon refreshments during the breaks, the welcome reception and the conference dinner. A reduced fee of \leq 350 is available for PhD, students.

Abstract Submission

All abstracts will be reviewed by the scientific committee. Abstracts must follow the template on the conference website and be submitted online at http://www.photomechanics2015.nl/content/authors by November 26th 2014.



Delft and its University

From 1602, Delft was a flourishing city, a centre of painting, arts, crafts and science. However by the 19th century the Netherlands lagged behind neighboring countries in industrial development. The country required technically trained people and therefore the Royal Academy for Civil Engineers was founded in Delft in the building vacated by the artillery school. This Academy later became the Technical University of Delft, which is now the largest employer in the city, with some 15,000 students registered