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Important Dates

Submission of Abstracts	15 December, 2011
Notification of Acceptance	15 February, 2012
Deadline for Early Registration	15 March, 2012
Submission of Full Papers	15 April, 2012
Conference	26-31 August, 2012

Further Information

Full information about the conference can be found in
the ECF19 web site, at the following address:

<http://www.ecf19.ru>

Scientific Topics

ECF19 will be the nineteenth in a series of biennial international conferences held by the European Structural Integrity Society (ESIS). The objective of the conference is to promote research and scientific communication on durability, reliability and safety of engineering materials, components and structures. The conference topics will focus on all important aspects of fracture and fatigue:

- ◆ Fracture mechanics current state (models, criteria, testing, engineering methods); especially – multiaxial/mixed mode fracture, dynamic fracture, multicyclic loading, multi-scale material structures, nano-structured materials, fracture mechanics of biomaterials, fatigue and fracture under variable amplitude loading, damage based fracture models, in-plane and out-of-plane constraint effects, damage and fracture under dynamic loading
- ◆ Fracture processes under the action of physical fields and chemically active media
- ◆ Methods for residual lifetime evaluation and prediction, engineering risk assessment, risk analysis in safety problems, structural integrity assessment
- ◆ Fracture diagnostics and monitoring. New equipment and technologies for monitoring the technical state of potentially dangerous structures and diagnostics of structural materials ageing
- ◆ Fracture mechanics and metrology of strength and fracture resistance characteristics of structural materials accounting for their multiscale structure (from nano- to macroscale)
- ◆ Fracture mechanics application in different fields of industry (aircraft; shipbuilding; nuclear; gas and oil industry; energetics; micro- and nano-electronics; scale effects at fracture; durability, safety and reliability of complex technical systems; non-destructive testing and evaluation of structural components
- ◆ Case histories
- ◆ Fracture mechanics in design of fracture resistant materials and components, materials of high-strength and high-fracture resistance in modern structures
- ◆ Fracture mechanics in engineering codes; virtual fracture analysis and testing
- ◆ Fracture mechanics of geomaterials and natural objects

International Scientific Committee

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Technical Exhibition

The Organizing Committee invites companies and individuals to participate in a Technical Exhibition. ECF 19 will provide facilities for presenting equipment, software and services related to the main topics of fracture mechanics. Companies and individuals interested in presenting software, apparatus or any other kind of material at the Technical Exhibition should inform the Conference chair of their intention as soon as possible.