

21st European Conference on Fracture

ECF 21

Catania, Italy
June 20-24, 2016

Symposium on Local Approaches to Cleavage and Ductile Fracture

The 21st European Conference on Fracture (ECF21) is soliciting papers for publication and presentation in the technical sessions of the ***Symposium on Local Approaches to Cleavage and Ductile Fracture***. The fracture behavior of structural components subjected to various loading and environmental conditions is central to assess structural integrity. The increasing demand for ensuring acceptable levels of structural safety has spurred a flurry of predictive methodologies aimed at quantifying the impact of defects in load-bearing materials such as, for example, cracks in critical structural components of nuclear pressure vessels. Such methodologies play a key role in repair decisions and life-extension programs for in-service structures including nuclear and offshore structures. This symposium will focus on general topics associated with local approaches to describe the fracture behavior of structural and advanced materials with emphasis on the development and application of assessment procedures for structural integrity. Papers covering the following topics (but not limited to) are welcome:

- New Concepts in Local Approach Modeling
- Development and Application of Local Approaches to Brittle Fracture
- Development and Application of Local Approaches to Ductile Fracture
- Development and Application of Local Approaches to Weldments and Heterogeneous Materials
- Physical models for brittle and ductile fracture
- Probabilistic and Reliability Approaches Applied to Assessment Methods
- Transferability of Fracture Toughness Data
- Multiscale Modeling of Fracture
- Integrity Assessment Methods Under Static and Dynamic Loading
- Computational Modeling of Fracture

Symposium Organizer:

Prof. **Claudio Ruggieri**, University of São Paulo, Brazil