

## ECF23, European Conference on Fracture 2020

*June 27 – July 3, 2020. Funchal, Madeira, Portugal*

### TC18 Structural Integrity of Welded Joints

**Structural Integrity of Welded Joints** is a hot research topic still fundamental in many industrial strategic engineering applications. Recent advances in manufacturing processes have allowed to improve the fracture and fatigue strength of welded connections but still a lot can be done in this research field which has a high impact on large civil structures, mechanical components and a large variety products at different scale levels. The symposium will provide the recent advances in the field of welded joints structural integrity with particular reference to metallurgy, corrosion, fatigue and fracture resistance.

The main topics will cover:

- Fracture of Welded Joints
- Fatigue of Welded Joints
- Metallurgy of Welded Joints
- Corrosion of Welded Joints
- Design criteria of Welded Joints
- Modelling and simulation of Welded Joints
- Advanced joining techniques
- Welding process parameters optimization
- Post welding heat treatment
- Residual stress assessment

All contributions in the form of extended abstracts will be peer reviewed by the members of TC18 Scientific Committee. Full papers will be published in a special issue of the ESIS scientific journals (Elsevier) upon peer review and acceptance.

### Organizing Committee

Prof. Paolo Ferro, University of Padova

Prof. Filippo Berto, Norwegian University of Science and Technology

Prof. Aleksandar Sedmak, University of Belgrade

Prof. Øystein Grong, Norwegian University of Science and Technology

Prof. Jose' Antonio Correia, University of Porto