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After holding the biennial European Conference of Fracture (ECF) for the first time in Italy back in 1990, twenty-six years later the 21<sup>st</sup> edition of this conference (ECF21 - [www.ecf21.eu](http://www.ecf21.eu)) came back to Italy being hosted by the sunny and welcoming Sicilian city of Catania.

The conference was organised by the Italian Group of Fracture (IGF, [www.gruppofrattura.it](http://www.gruppofrattura.it)) to have not only conventional sessions populated with oral and poster presentations, but also a large number themed mini-symposia that were led by invited chairpersons. This strategy resulted in a large number of talks being delivered by researchers, academics and industrialists coming from 47 different countries as well as in 471 technical articles that were all published, with the support of Elsevier, in Procedia Structural Engineering ([www.journals.elsevier.com/procedia-structural-integrity](http://www.journals.elsevier.com/procedia-structural-integrity)). In order to maximise the dissemination of the large body of research work that was presented in Catania, the IGF has also made available the majority of the presentations being given via the ESIS You Tube channel ([www.youtube.com/c/EuropeanStructuralIntegritySociety](http://www.youtube.com/c/EuropeanStructuralIntegritySociety)).

The present special issue collects the extended versions of 16 technical articles that were presented in Catania, with these articles being selected for their particular scientific achievements in the field of Engineering Failure Analysis.

The guest editors of this special issue of Engineering Failure Analysis would like to express their sincere gratitude to the authors for submitting their valuable contributions as well as to the referees for reviewing all the manuscripts very competently.

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