

# EUROMAT 2021

EUROPEAN CONGRESS AND EXHIBITION  
ON ADVANCED MATERIALS AND PROCESSES

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## Area B: Structural Materials

### Symposium B6: Fatigue, Wear and Corrosion of Materials and Structures

<b>Title</b>		
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<b>Abstract</b>		
<p>Light-weight design, harsh operation conditions, extending safe service life, efficient and new manufacturing routes, and multiscale materials simulation concepts are challenging issues to be addressed in today's mechanical design and testing of materials. This is in particular the case, when interactions between fatigue, wear and environment, e.g.,</p> <ul style="list-style-type: none"><li>• fretting fatigue,</li><li>• corrosion fatigue,</li><li>• thermo-mechanical fatigue,</li><li>• stress-corrosion cracking,</li><li>• very high cycle fatigue, etc.</li></ul> <p>need to be taken into account. The symposium addresses these interactions as "missing links" in</p> <ul style="list-style-type: none"><li>• mechanical materials characterization,</li><li>• modeling, simulation and data handling approaches.</li></ul> <p>Of course, any other contributions dealing with one of the aspects, fatigue, wear and corrosion of any type of engineering materials (metallic alloys, composites, polymers etc.), are welcome.</p>		