

**EUROMAT 2019 / Area B: Structural Materials  
SYMPOSIUM: B7**

<b>Title:</b> Fatigue, Wear and Corrosion of Materials and Structures		
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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 corrosion, e.g.,</p> <ul style="list-style-type: none"><li>• fretting fatigue,</li><li>• corrosion fatigue,</li><li>• thermo-mechanical fatigue,</li><li>• tribocorrosion,</li><li>• stress-corrosion cracking, 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 and data handling approaches.</li></ul> <p>Of course, any other contributions dealing with one of the aspects, fatigue, wear and corrosion, are welcome.</p>		