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**TMS 2017**  
146<sup>th</sup> Annual Meeting & Exhibition



**February 26 – March 2, 2017**  
**San Diego, California, USA**

## **FRACTURE PROPERTIES AND RESIDUAL STRESSES IN SMALL DIMENSIONS**

Fracture properties have been a long-standing issue in materials science. Now, with the ongoing miniaturization trends and observation of size dependent brittle to ductile transitions, the determination of fracture properties and residual stress in ever-smaller dimensions is evolving as a highly active field within the small-scale testing community.

In this symposium, we want to highlight novel strategies for the experimental determination of fracture properties, as well as new concepts to evaluate small-scale experiments in the elastic and elasto-plastic domains. Contributions that address, for example, the fracture properties of confined volumes, interfaces, nanocrystalline materials, multilayered structures, or the influence of residual stresses, temperature, or environment on these fracture properties are welcome. Moreover, in-situ testing approaches as well as computational studies that unravel the underlying elemental fracture properties in small volumes are invited.

### **ORGANIZERS**

**Daniel Kiener**, University of Leoben, Austria

**Marco Sebastiani**, Roma TRE University, Italy

**Nagamani Jaya Balila**, Max Planck Institut fuer Eisenforschung GmbH, Germany

**William W. Gerberich**, University of Minnesota, USA

**Siddhartha (Sid) Pathak**, University of Nevada, Reno, USA

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