

## Special Issue on **Fatigue Damage in Advanced Engineering Metals**

# CALL FOR PAPERS

Fatigue of materials, especially the formation of fatigue cracks, and their growth belong to the most important problems of solid mechanics, despite the creation of a lot more durable materials. Designers and operators of industrial devices that play an important role in maintaining general safety are focusing their attention on problems concerning durability and reliability of these devices. Currently, the most important attributes, which are considered when performing production activities, are safety and economy. Therefore, the new engineering materials should have the best properties, which will enable application in various industries. Choosing the right material affects, to a large extent, the durability of the construction and its cost.

This special issue aim is an analysis of initiation and fatigue crack growth in structural elements made from advanced engineering metals. The submitted works will show how the microstructure, heat treatment, and other factors affect the initiation and development of fatigue cracks. It would be good to investigate the effect of a load, frequency, and initiators of fatigue cracks.

Potential topics include but are not limited to the following:

- ▶ Effect of material structure on fatigue life and cracks initiation
- ▶ Influence of geometric and structural notches on initiation and fatigue crack growth
- ▶ How heat treatment and frequency affect the behaviour of advanced metals
- ▶ Influence of stress ratio and frequency on the behaviour of elements during fatigue crack initiation
- ▶ Effect of various components on the elongation of the period to crack initiation

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/amse/fdaem/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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### **Submission Deadline**

Friday, 29 December 2017

### **Publication Date**

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