



## Fatigue Crack Propagation: Analysis of Safe Life Extension

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submissions:

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### Message from the Guest Editor

Dear Colleagues,

Most components age upon utilization; therefore, there is a need to understand more fully the physics of aging by testing representative components and modeling that behavior to be utilized in life extension analysis. The Special Issue will explore data generated on the components exposed to service conditions for one safe life or retired from service. The representative residual static and fatigue crack propagation behavior of high-performance materials used in aerospace, power, chemical plants, and other industries will be key in assessing life extension. Risk assessment tools will be investigated to extend these components through additional one-safe life as economic benefits would be more significant than replacing the components and/or plants. The papers presented in this Special Issue give an account of the state-of-the-art technology development. Your contribution to this issue will be highly valued and appreciated and will define the future methods to be developed and used globally on this research.

To find more information, please click this [link](#).





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## Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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