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Creep Behaviour and Life Assessment of Structural Materials

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Message from the Guest Editors

Several processes require the increase of operating temperature to ensure higher efficiency. Elevated temperatures can speed up the processes of creep strain accumulation and activate mechanisms of damage that can cause early failure of the material. Other no less important applications are governed by stress relaxation. which is closely related to the viscous flow of the material. One of the critical issues in the creep design is the life assessment of structural materials linked to the capability to predict the creep behaviour in operation. A further limitation is the limited availability of long-term experimental data so that creep theories are often validated on short-term tests. In this context, further studies on new more performing materials as well as on advanced creep modelling can help to preserve an adequate level of structural integrity. The topic and its potential applications, although of extreme relevance, cover little space in the scientific literature. It is our pleasure to invite you to submit a manuscript for this Special Issue entitled "Creep Behaviour and Life Assessment of Structural Materials."













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Message from the Editor-in-Chief

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