Special Issue

Vibration Analysis for Structural Health Monitoring

Message from the Guest Editor

In recent years, condition monitoring (CM), fault diagnosis, and the prognosis of structures and machines have become topics of increasing concern. Early fault detection can help to avoid risks of damage and thus save expensive emergency repair costs. Vibration is considered the most commonly measured parameter in the CM of structures, and it is extensively used in various industrial applications However, interpretation of results from vibration analysis requires investigation from various aspects, and therefore, research in this area faces multiple challenges. Many novel and interesting CM methods have been developed in recent years; however, the challenge will always remain of producing a CM system capable of detecting and identifying the presence of a fault at ever earlier stages of its development. The need to maximise equipment and lifetime reliability requires the integration of reliability condition monitoring (CM) and maintenance precision practices.

Guest Editor

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Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.
Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.
There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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