Journal of Vibration Testing and System Dynamics

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Journal of Vibration Testing and System Dynamics is an interdisciplinary journal as a platform for facilitating the synergy of *dynamics, experimentation, design,* and *education*. The journal publishes high-quality, original articles that explore the theory, modelling, and application of dynamical systems and data-driven dynamics for high-impact engineering solutions. Manuscripts exploring data science, machine learning, and artificial intelligence to the design and control of complex dynamical systems including cell and neuro networks are solicited. Articles on data mining, deep learning and big data applicable to physical sciences and large-scale dynamic systems are equally encouraged. Progress made in the following topics, but not limited to, are of interest to the journal:

Data-Driven Dynamics and Control

- Artificial intelligence and machine learning
- Data and signal processing
- System identification
- Dynamical sensing and measurement
- Discrete dynamical systems

Dynamics of Continuum

- Flow induced vibrations
- Combustion dynamics
- Sensing, measurement and devices
- Thermoacoustic vibrations

Complex Networks and Systems

- Network dynamics and control
- Synchronization and collective behavior
- Networks of networks
- Consensus tracking

Design for Dynamics

- Dynamical failures and fatigues
- Structural dynamics and reliability
- Vibration testing and validation
- Multi-body dynamics
- Wave propagation and acoustics

Biological and Biomedical Physics

- Biological dynamics and biophysics
- Dynamics of bio-systems
- Neuro and brain dynamics
- Biomechanical systems and devices

Chemical Dynamics

- Dynamic chemical networks
- Mechanism of chemical reaction
- Molecular dynamics
- Process modelling and design

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