

# Journal of Vibration Testing and System Dynamics

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# Journal of Vibration Testing and System Dynamics

Volume 6, Issue 3, September 2022

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L&H Scientific Publishing, LLC, USA

## **Publication Information**

*Journal of Vibration Testing and System Dynamics* (ISSN 2475-4811 (print), eISSN 2475-482X (online)) is published quarterly (March, June, September, and December) by L & H Scientific Publishing, LLC, 25 Glen Ed Professional Park, Glen Carbon, IL62034, USA. Subscription prices are available upon request from the publisher or from this journal website. Subscriptions are accepted on a prepaid basis only and entered on a calendar year basis. Issues are sent by standard mail (Surface in North America, air delivery outside North America). Priority rates are available upon request. Claims for missing issues should be made within six months of the date of dispatch.

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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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*Continued from inside front cover*

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