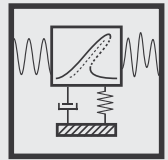


Mechanical Engineering

Multidisciplinary Engineering

Materials Science and Technology

Vibroengineering Procedia



VP Vibroengineering PROEDIA

Vibroengineering PROEDIA Volume 58 contains papers presented at the 72nd International Conference on Vibroengineering in Almaty, Kazakhstan, May 15-16, 2025. The main theme of the Conference is “ML and AI in Transport, Aerospace, and Mechanical Engineering”.

Aims and Scope

Journal publishes original papers presenting the state of the art in vibroengineering of dynamical systems.

The list of principal topics:

- Measurements in engineering
- Mathematical models in engineering
- Acoustics, noise control and engineering applications
- Mechanical vibrations and applications
- Fault diagnosis based on vibration signal analysis
- Vibration control, generation and harvesting
- Seismic engineering and applications
- Modal analysis and applications
- Vibration in transportation engineering
- Flow induced structural vibrations
- Oscillations in biomedical engineering
- Chaos, non-linear dynamics and applications
- Oscillations in electrical engineering
- Fractional dynamics and applications
- System dynamics in manufacturing system modeling
- Dynamics of smart and functionally graded materials

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May 15-16, 2025, in Almaty, Kazakhstan

The main theme of the conference: **ML and AI in Transport, Aerospace, and Mechanical Engineering**

General Topics of the Conference:

- ML and AI in vibration engineering
- Noise and vibration in transport, aerospace, and mechanical engineering
- Vibration control and fault diagnosis in transport, aerospace, and mechanical engineering
- Engineering problems in manned/unmanned aviation and aerial systems
- Engineering problems in airport operation and management
- AI integrated robotics and engineering applications
- Sustainable development and engineering applications
- Advanced approaches in telecommunications and signal processing
- Materials science and engineering: modern trends and current issues

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SHORT DESCRIPTION ABOUT THIS CATEGORY

Vibroengineering is an abbreviation of two words: vibration and engineering. Vibration phenomena play an important role in a wide range of mechanical, structural, electromechanical systems. Vibration engineering covers such topics as mechanical vibrations and applications, fault diagnosis based on vibration signal analysis, seismic engineering, acoustics and noise control, energy harvesting and vibration generation.

Every consecutive Volume of Vibroengineering Procedia is dedicated to a separate conference in the series of International Conferences on Vibroengineering.