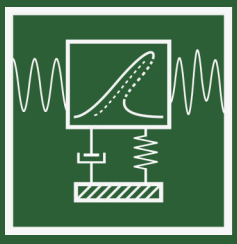
The 34th International Conference on VIBROENGINEERING

Shanghai, China
October 19-21st, 2018



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The 34th International Conference on VIBROENGINEERING

Vibration Engineering – Problems and Applications

19-21st October 2018, Shanghai, China

The 34th International Conference on **VIBROENGINEERING** will be held during 19-21st of October 2018 in Shanghai, China. Its purpose is to provide a platform for scientists, engineers and practitioners throughout the world to exchange ideas and present their latest research results in order to further promote the Vibroengineering and its applications to the aerospace, automobile, energy and other industries. The Conference is organized by **JVE International** in partnership with **Hohai University (Department of Engineering Mechanics)**, **China University of Mining and Technology** and **Beihang University (Institute of Reliability Engineering).**

The main theme of the conference focuses on (but not limited to):
Vibration Engineering – Problems and Applications.

General Topics of the Conference:

- Acoustics, Noise Control and Engineering Applications
- Chaos, Nonlinear Dynamics and Applications
- Fault Diagnosis Based on Vibration Signal Analysis
- Flow Induced Structural Vibrations
- Fractional Dynamics and Applications
- Mechanical Vibrations and Applications
- Modal Analysis and Applications
- Oscillations in Biomedical Engineering
- Oscillations in Electrical Engineering
- Seismic Engineering and Applications
- Vibration Generation and Control
- Vibration in Transportation Engineering

Internationally renowned invited speakers and contributing authors from all over the world will present the latest advances in the area of Vibroengineering. This conference will feature a broad range of high-level technical presentations including invited distinguished experts. The conference will provide an opportunity to communicate your recent research advances, exchange ideas in innovative engineering technologies, meet old friends and make new business partners in the area of Vibroengineering. With your participation, this Conference will prove to be an exciting scientific event, a fruitful opportunity to promote scientific research and technological development of Vibroengineering and its applications.

With your participation, this conference will prove to be a very exciting event, a fruitful opportunity, to promote scientific research and technological development of vibration engineering and its applications.

All papers presented at VIBROENGINEERING Conferences are published as short Conference papers in Vibroengineering PROCEDIA. Conference papers published in Vibroengineering PROCEDIA are indexed in EI Compendex, Scopus, Inspec, Gale Cengage, EBSCO, Google Scholar and CNKI Scholar.

The authors of best papers presented at the Conference will be invited to prepare the extended version of their papers (10-20 pages) which will be considered for publication in Journal of

VIBROENGINEERING (indexed in Web of Science, EI Compendex, EBSCO, Gale Cengage, Inspec and DOAJ), Journal of Measurements in Engineering (indexed in Web of Science, EI Compendex, EBSCO, Gale Cengage and Inspec) and Journal of Mathematical Models in Engineering (indexed in EBSCO, Gale Cengage).

The Conference Venue is at Pullman Shanghai Skyway.
15 Da Pu Road, Huang Pu District
Shanghai 200023, China

上海斯格威铂尔曼大酒店
中国上海市黄浦区打浦路 15 号
邮编 200023

On behalf of the Organizing Committee, we would like to welcome the delegates to the 34th International Conference on VIBROENGINEERING. We hope that you would enjoy the conference and find the program of the Conference exciting. We look forward to meeting you in October 2018 in Shanghai.

Chairs:

Prof. **Maosen Cao**	Department of Engineering Mechanics at Hohai University, People's Republic of China
Prof. **Minvydas Ragulskis**	JVE International, Lithuania

Organizing Committee:

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J. Wallaschek	Leibniz University Hannover, Germany
Mao Yuxin	Zhejiang Gongshang University, China

Conference Program

Day 1: October 19 **Location: In front of the Main meeting room VIP2**

19:00-21:00	**Registration**

Day 2: October 20 **Location: In front of Main room 47F VIP II**

08:00-12:00	**Registration**

Day 2: October 20 **Location: Main room 47F VIP II**

	PLENARY SESSION Session Chairs: **Prof. Minvydas Ragulskis** and **Prof. Maosen Cao**
10:00-10:15	**Conference Opening Ceremony**
10:15-10:30	Welcome Speech: **Prof. Minvydas Ragulskis.** Vibroengineering – past, present and the future
10:30-10:50	Invited Keynote Lecture: **Prof. Maosen Cao**, (Department of Engineering Mechanics at Hohai University, People's Republic of China) Chaos dynamics-based concepts and methods for health monitoring of plate-type structures
10:50-11:10	Invited Keynote Lecture: **Kjell Ahlin**, (Xielalin Consulting, Sweden) Nonlinear Mechanical System Simulation Based on Modal Coordinates and Modal Forces
11:10-11:30	Presentation by Vibration Research Inc.: **Kevin Li**, Using Kurtosion® and the Fatigue Damage Spectrum to Duplicate Field Vibrations

Day 2: October 20

11:30-11:45	**Coffee Break**

Day 2: October 20 **Location: Main room 47F VIP II**

	PARALLEL SESSION A1 Session Chairs: **Prof. Minvydas Ragulskis and Dr. Bang Chen**
11:45-12:00	**Wang Jingcheng.** Experimental study on the generated pyroshock level under different amount of explosive
12:00-12:15	**Bang Chen.** Synchronization behavior of a weakly damped far-resonance vibrating system
12:15-12:30	**Qi Liu.** Comparison study of fast independent component analysis and constrained independent component analysis
12:30-12:45	**Xuefeng Suo.** Research on the vibration damping performance of hydro-pneumatic suspension of mine dump truck
12:45-13:00	**Dongying Wang.** Research on measuring method of shot exit time for muzzle vibration analysis
13:00-13:15	**Kunpeng Xu.** Coupling dynamic stiffness identification of mechanical assembly with linear connection by the second indirect scheme of inverse substructuring analysis

Day 2: October 20 **Location: 2nd room 47F VIP III**

	PARALLEL SESSION A2 Session Chairs: **Kjell Ahlin** and **Dr. Qingzhao Zhou**
11:45-12:00	**Xu Zhiyun.** The influence of large foundation arrangement on underwater radiated noise of underwater vehicle engine compartment
12:00-12:15	**Dan Bao.** Parameters identification of a cannon counter-recoil mechanism based on PSO and interval analysis theory
12:15-12:30	**Qiang Lei.** Simulation and experimental investigation of high-speed projectile impacting closed-cell aluminum foam
12:30-12:45	**Qingzhao Zhou.** Mean square responses of a viscoelastic Timoshenko cantilever beam with different damping mechanisms
12:45-13:00	**Guojie Li.** Analysis of friction force of magneto-rheological damper with a novel mathematical model
13:00-13:15	**Yang Zhao.** A single neuron PID control method based on Smith predictor for active balancing control of rotor with time-delay

Day 2: October 20 **Location: Pullman Shanghai Skyway**

13:15-14:15	**Lunch**

Day 2: October 20 **Location: Main room 47F VIP II**

	PARALLEL SESSION B1 Session Chairs: **Prof. Maosen Cao** and **Dr. Ming Yuan**
14:15-14:30	**Hao Wen.** Contact parameters identification of a cannon cradle and its bushing based on FDA and ELM
14:30-14:45	**Dongying Wang.** Study on experiment measurement method of braking force of muzzle brake for vibration analysis
14:45-15:00	**Ming Yuan.** Low frequency acoustic energy harvesting adopting slit Helmholtz resonator
15:00-15:15	**Jiayi Gu.** Modal test and finite element analysis of a turbine disk
15:15-15:30	**Kaihua Lu.** Research on vibration reduction of multiple parallel gear shafts with ISFD
15:30-15:45	**Wang Ruiping.** Adaptive vibration control for a cantilevered beam using actuating and sensing functions of a piezoelectric bimorph

Day 2: October 20 **Location: 2nd room 47F VIP III**

	PARALLEL SESSION B2 Session Chairs: **Prof. Minvydas Ragulskis** and **Dr. Xueyi Li**
14:15-14:30	**Jianhua Zhang.** Parametric study of unsteady-flow-induced volute casing vibro-acoustics in a centrifugal fan
14:30-14:45	**Hanping Qiu.** Health monitoring device design and application for large synchronously excited multi-shaker vibration test facility
14:45-15:00	**Xudong Kong.** Supply groove effects on characteristics of squeeze film damper
15:00-15:15	**Ze-dong Yang.** Parametric design and optimization of engine disc
15:15-15:30	**Xu Li.** Fatigue Life Prognostic for Medium-carbon Steel Based S-N Curve Computation and Deep Autoencoder
15:30-15:45	**Xueyi Li.** Gear pitting level diagnosis using vibration signals with an improved inception structure

Day 2: October 20

15:45-16:15	**Coffee Break**

Day 2: October 20 **Location: Main room 47F VIP II**

	PARALLEL SESSION C1 Session Chairs: **Kjell Ahlin** and **Dr. Fujiang Cui**
16:15-16:30	**Xi Kuang.** Multi-objective rotor dynamics optimization of the plain bearing-rotor system
16:30-16:45	**Dongying Wang.** Study on the measuring method of moving time in the bore of projectile for vibration analysis
16:45-17:00	**Xinming Li.** Acoustic test facility at Tianjin spacecraft AIT center of China
17:10-17:15	**Ze-gao Shi.** Optimization of critical speed of double spools with reverse rotation
17:15-17:30	**Fujiang Cui.** Galloping behavior analysis of transmission line with thin ice accretions

Day 2: October 20 **Location: 2nd room 47F VIP III**

	PARALLEL SESSION C2 Session Chairs: **Prof. Minvydas Ragulskis** and **Dr. Ruizhi Shi**
16:15-16:30	**Ruizhi Shi.** Stability analysis of differential scheme for dynamic equations of mooring cable system
16:30-16:45	**Junjie Zhang.** The optimization analysis on the vibration control of cylindrical shell with dynamic vibration absorber attached
16:45-17:00	**Xixi Yan.** Experimental study of guided waves propagation characteristics under the changing temperatures
17:10-17:15	**Hao Wang.** Calculation of static transmission errors associated with thermo-elastic coupling contacts of spur gears
17:15-17:30	**Fulin Wang.** Finite element analysis of spherical ultrasonic motor using wire stator with support structure on waveguide

Day 2: October 20 **Location: Main room 47F VIP II**

17:30-17:45	**CLOSING SESSION** Session Chairs: **Prof. Minvydas Ragulskis** and **Prof. Maosen Cao**

Day 2: October 20 **Location: Pullman Shanghai Skyway**

18:00	**Gala-Dinner**

Day 3: October 21

	At the registration table you can register for the tour to Suzhou on the 21st of October. Full day tour Private Car Service between Shanghai to Suzhou. Private guide service is inclusive. Lunch and entrance fees are at your own cost. Price 120 USD

Conference Location

Conference opening ceremony and conference sessions will be held in Pullman Shanghai Skyway.
15 Da Pu Road, Huang Pu District
Shanghai 200023, China

上海斯格威铂尔曼大酒店
中国上海市黄浦区打浦路 15 号
邮编 200023

34-th International Conference on VIBROENGINEERING is co-organized with Hohai University (Department of Engineering Mechanics)

Conference Sponsors and Partners:

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