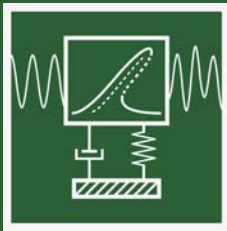


The 36th International Conference on VIBROENGINEERING

Dubai, United Arab Emirates
March 15-17th, 2019



JVE INTERNATIONAL

www.jvejournals.com

www.jveconferences.com



JVE INTERNATIONAL

www.jvejournals.com
www.jveconferences.com

The 36th International JVE Conference

Vibration and Acoustics in Civil Engineering and Fault Diagnostics

15-17th March 2019, Dubai, United Arab Emirates



The 36th International JVE Conference will be held during 15-17th of March 2019 in Dubai, United Arab Emirates. 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 **Heriot Watt University Dubai Campus**.

The main theme of the conference focuses on (but not limited to):

Vibration and Acoustics in Civil Engineering and Fault Diagnostics

General Topics of the Conference:

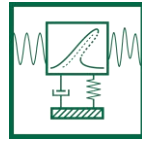
- Measurements in engineering
- Mathematical models in engineering
- Acoustics, noise control and engineering applications
- Mechanical vibrations and applications
- Fault diagnosis based on vibration signal analysis
- Vibration generation and control
- Seismic engineering and applications
- Modal analysis 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

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 JVE 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

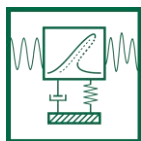


JVE INTERNATIONAL
www.jvejournals.com
www.jveconferences.com

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 and Inspec), 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 JA Ocean View Hotel, located in the area of Dubai Marina, United Arab Emirates – JBR (Jumeirah Beach Residence).

On behalf of the Organizing Committee, we would like to welcome the delegates to the 36th International JVE Conference. We hope that you would enjoy the conference and find the program of the Conference exciting. We look forward to meeting you in March 2019 in Dubai.



JVE INTERNATIONAL

www.jvejournals.com
www.jveconferences.com

Chairs:

Prof. **Fadi Ghaith** (Heriot Watt University, Dubai Campus, United Arab of Emirates)

Prof. **Minvydas Ragulskis** (JVE International, Lithuania)

Organizing Committee:

V. Babitsky (Loughborough University, UK)

M. Bayat (Roudehen Branch, Islamic Azad University, Iran)

I. Blekhman (Mekhanobr - Tekhnika Corporation, Russia)

K. Bousson (University of Beira Interior, Portugal)

M. Brennan (University of Southampton, UK)

Rafał Burdzik (Silesian University of Technology, Poland)

M. S. Cao (Hohai University, China)

Lu Chen (Beihang University, China)

F. Chernousko (Institute for Problems in Mechanics, Russia)

Z. Dabrowski (Warsaw University of Technology, Poland)

Y. Davydov (Institute of Machine Building Mechanics, Russia)

J. Duhovnik (University of Ljubljana, Slovenia)

A. El Sinawi (The Petroleum Institute, United Arab Emirates)

R. Ganiev (Blagonravov Mechanical Engineering Research Institute, Russia)

W. H. Hsieh (National Formosa University, Taiwan, R. O. C.)

V. Lyalin (Izhevsk State Technical University, Russia)

R. Maskeliūnas (Vilnius Gediminas Technical University, Lithuania)

L. E. Muñoz (Universidad de los Andes, Colombia)

G. Panovko (Blagonravov Mechanical Engineering Research Institute, Russia)

N. Perkins (University of Michigan, USA)

L. Qiu (Nanjing University of Aeronautics and Astronautics, China)

S. Rakheja (Concordia University, Canada)

M. A. F. Sanjuan (University Rey Juan Carlos, Spain)

G. Song (University of Houston, United States of America)

S. Toyama (Tokyo A&T University, Japan)

K. Uchino (The Pennsylvania State University, USA)

A. Vakhguelt (Nazarbayev University, Kazakhstan)

P. Vasiljev (Vilnius Pedagogical University, Lithuania)

V. Veikutis (Lithuanian University of Health Sciences, Lithuania)

J. Viba (Riga Technical University, Latvia)

V. Volkovas (Kaunas University of Technology, Lithuania)

J. Wallaschek (Leibniz University Hannover, Germany)

Mao Yuxin (Zhejiang Gongshang University, China)

M. Zakrzhevsky (Riga Technical University, Latvia)



Conference Program

Day 0: March 15

Location: JA Ocean View Hotel

16:00-18:00	Registration
-------------	---------------------

Day 1: March 16

Location: JA Ocean View Hotel, Pacific Conference Room

09:00-10:00	Registration
-------------	---------------------

Day 1: March 16

Location: JA Ocean View Hotel, Pacific Conference Room

	PLENARY SESSION
10:00-10:05	Conference Opening Ceremony
10:05-10:20	Welcome Speech: Prof. Minvydas Ragulskis. Vibroengineering – past, present and the future
10:20-10:40	Invited Keynote Lecture: Prof. Fadi Ghaith, (Heriot Watt University, United Arab of Emirates) Nonlinear Dynamic Modeling of Elastic Beam fixed on a moving cart and carrying lumped tip mass

Day 1: March 16

Location: JA Ocean View Hotel, Pacific Conference Room

10:40-11:00	Coffee Break
-------------	---------------------

Day 1: March 16

Location: JA Ocean View Hotel, Pacific Conference Room

	ORAL SESSION 1 Session Chairs: Prof. Minvydas Ragulskis and Dr. Victor A. Kovtunenکو
11:00-11:15	Markus Riepold. Open-loop linearization for piezoelectric actuator with inverse hysteresis model
11:15-11:30	Ayodele Faiyetole. Predicting the aircraft take-off noise level



11:30-11:45	Hamdy Youssef. Adomian's decomposition method to modeling power functionally graded thermoelastic materials in heat transfer and thermal stress analysis
11:45-11:00	Naveen Mani. Modelling on vibration of skew plate with thickness and temperature variation
12:00-12:15	Neeraj Lather. Natural vibration of skew plate on different set of boundary conditions with temperature gradient
12:15-12:30	Hamdy Youssef. Three-dimensional biological tissue under high-order effect of two-temperature thermal lagging to thermal responses due to a laser irradiation
12:30-12:45	Kaiqian Xiao. Rockfall monitoring based on multichannel synthetic aperture radar

Day 1: March 16

Location: JA Ocean View Hotel, Pacific Conference Room

12:45-14:00	Lunch
-------------	--------------

Day 1: March 16

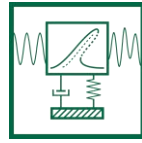
Location: JA Ocean View Hotel, Pacific Conference Room

	ORAL SESSION 2 Session Chairs: Prof. Fadi Ghaith and Prof. Hamdy Youssef
14:00-14:15	Lianfu Wang. A homogeneous high precision direct integration based on Chebyshev interpolation
14:15-14:30	Vijay Kumar. Vibration of rectangle plate with variable density and Poisson's ratio
14:30-14:45	Victor A. Kovtunenکو. Mathematical model of crack diagnosis: inverse acoustic scattering problem and its high-precision numerical solution
14:45-15:00	Karunesh K Gupta. Bearing fault analysis using kurtosis and wavelet based multi-scale PCA
15:00-15:15	Guanting Liang. Fissure prediction based on wavelet transform and complex signal analysis technology
15:15-15:30	Mohamed Rikaz. Review on vibration quality improvement of a passenger seat
15:30-15:45	Sangram Patil. Remaining useful life (RUL) prediction of bearing by using regression model and principal component analysis (PCA) technique

Day 1: March 16

Location: JA Ocean View Hotel, Pacific Conference Room

	CLOSING SESSION Session Chair: Prof. Minvydas Ragulskis
15:45-16:00	Closing Ceremony



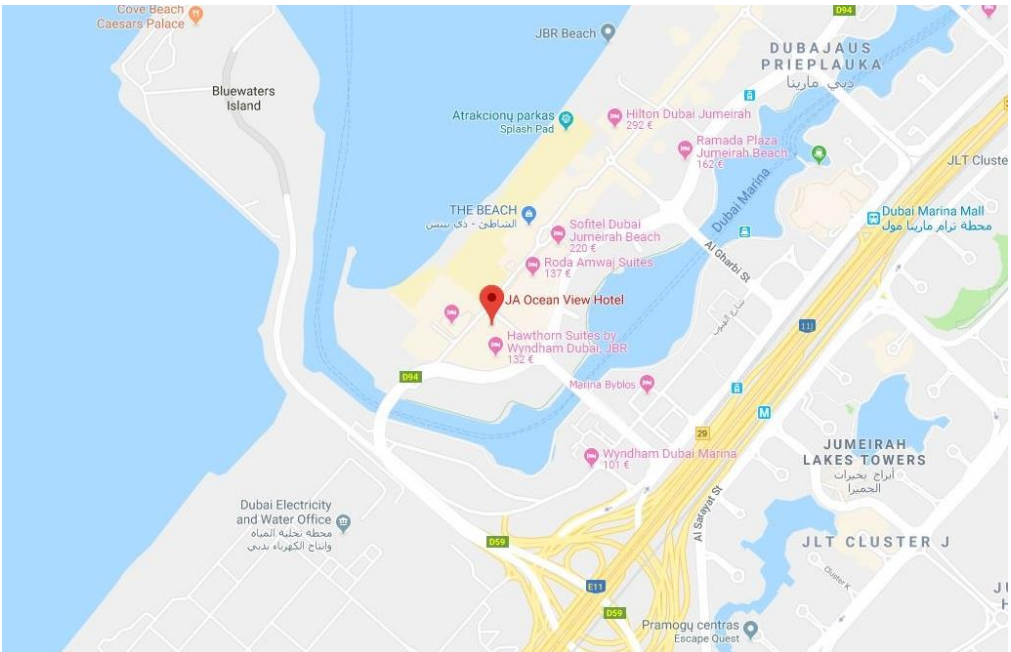
Day 2: March 17

Location: Pier 7 Valet Parking, Dubai Marina

11:00-13:00

**Boat Tour with breakfast (additional fee)
Dubai Marina, Ain Wheel, JBR and Atlantis the Palm**

Conference Location



JA Ocean View Hotel, Pacific Conference Room,
P.O. Box 26500 Jumeirah Beach Residence,
Dubai, UAE