# The 30th International Conference on VIBROENGINEERING

Phuket, Thailand December 16-17th, 2017



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# The 30th International Conference on VIBROENGINEERING

#### Acoustics, Waves and Vibrations – Ocean Engineering, Green Technologies and Environment Protection

# 16-17th December 2017, Phuket, Thailand



The 30th International Conference on VIBROENGINEERING will be held during 16-17th of December 2017 in Phuket, Thailand. 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 cooperation with Jinan University and Lithuanian Academy of Sciences.

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

Acoustics, Waves and Vibrations – Ocean Engineering, Green Technologies and Environment Protection.

#### **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, Google Scholar, CNKI Scholar and EBSCO.

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 SCI and other major databases), Journal of Measurements in Engineering (indexed in Web of Science, Inspec, EBSCO and Gale Cengage) and Journal of Mathematical Models in Engineering (indexed in Gale Cengage).

The Conference Venue is located at The Patong Merlin Hotel (addr: 44 Thaveewong Rd., Patong BeachPatong Beach, Phuket 83150 Thailand).

On behalf of the Organizing Committee, we would like to welcome the delegates to the 30th 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 December 2017 in Phuket.



Chairs: Prof. Minvydas Ragulskis, JVE International, Lithuania

#### **Organizing Committee:**

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# **Conference Program**

Day 0: Decem	er 16 Location: The Patong Merlin	1 Hotel
18:00-20:00	Registration	
Day 1: Decem	er 17 Location: The Patong Merlin	1 Hotel
10:00-10:40	Registration	

Day 1: December 17

Location: The Patong Merlin Hotel

	PLENARY SESSION Session Chairs: Prof. Minvydas Ragulskis and Dr. Kristina Poskuvienė
10:40-10:45	Conference Opening Ceremony
10:45-11:00	Welcome Speech: Minvydas Ragulskis. Vibroengineering – past, present and the future
11:00-11:20	Invited Keynote Lecture: <b>Kristina Poskuvienė</b> , (Kaunas University of Technology, Kaunas, Lithuania). The influence of the smoothing component on the quality of algebraic forecasts
11:20-11:40	<b>Olegs Jakovlevs</b> , (Baltic Scientific Instruments (BSI), Latvia). Modal analysis of HPGe detector assembly in gamma-ray spectrometers
11:40-12:00	Presentation by <b>Vibration Research Corporation</b> : <b>Ryan Becker</b> , Test my product using sine or random?

Day 1: December 17		Location: The Patong Merlin Hotel
12:00-13:00		Lunch



#### Day 1: December 17

#### Location: The Patong Merlin Hotel

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	ORAL SESSION 1 Session Chairs: Dr. Kristina Poskuviene and Dr. Xiaobin Zhan
13:00-13:15	Xiaobin Zhan. Application of low frequency vibration to degassing of highly viscous shear-thinning fluids
13:15-13:30	Feng Song. Axisymmetric scattering of a fluid spheroid illuminated by an acoustical Bessel beam
13:30-13:45	<b>Kittipong Boonlong.</b> Vibration-based damage detection in beams by genetic algorithm encoding locations and damage factors as decision variables
13:45-14:00	Feng Song. Study on acoustic target strength characteristics of underwater composite rudder
14:00-14:15	Gintarė Vaidelienė. On the use of signal smoothness estimates and signal similarity in bearing fault detection
14:15-14:30	MD Shahrukh Adnan Khan. Industrial level analysis of air quality and sound limits monitoring in Bangladesh using real time control system

#### Day 1: December 17

Day 1: Decemb	ber 17 Location: The Patong Merlin Hotel
14:30-14:45	Coffee Break

#### Day 1: December 17

Location: The Patong Merlin Hotel

	ORAL SESSION 2 Session Chairs: Prof. Minvydas Ragulskis and Dr. Puttha Jeenkour
14:45-15:00	Puttha Jeenkour. Numerical study on axial vibration of water-lubricated small thrust bearing considering grooved pad
15:00-15:15	Marc Thomas. Faulty bearing features by variational mode decomposition
15:15-15:30	Zhihong Zour. Analysis acoustic target strength of anechoic coatings in low frequency based on equivalent parameter inversion
15:30-15:45	Jing Tan. Test and analysis of three axis vibration of harmonic drives
15:45-16:00	Pedro Henrique Ramos Lima. Vibroacoustic characterization of lightweigth panels by using acoustic cavity with calibrated source



Day 1: Decem	ber 17 Location: The Patong Merlin Hotel
	CLOSING SESSION Session Chairs: Prof. Minvydas Ragulskis and Dr. Kristina Poskuvienė
16:00-16:15	Closing Ceremony

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