The 35th International Workshop on VIBROENGINEERING

Mexico City, Mexico
November 13-15th, 2018
The 35th International Workshop on VIBROENGINEERING

Vibration, Waves and Acoustics-Engineering Problems and Applications

13-15th November 2018, Mexico City, Mexico
The 35th International Workshop on VIBROENGINEERING will be held during 13-15th of November 2018 in Mexico City, Mexico. 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 Workshop is organized by JVE International with the partnership of Universidad Nacional Autonoma de Mexico, Universidad Autónoma de Querétaro and International Federation for the Promotion of Mechanism and Machine Science (IFToMM).

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

**Vibration, Waves and Acoustics-Engineering Problems and Applications.**

**General Topics of the Workshop:**

- 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 workshop will feature a broad range of high-level technical presentations including invited distinguished experts. The workshop 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 workshop will prove to be an exciting scientific event, a fruitful opportunity to promote scientific research and technological development of Vibroengineering and its applications.

The Workshop Venue is at the main building of Research Institute in Applied Mathematics and Systems (IIMAS). The address is:

Escolar 3000, Ciudad Universitaria,
04510 Ciudad de México, CDMX, Mexico

On behalf of the Organizing Committee, we would like to welcome the delegates to the 35th International Workshop on VIBROENGINEERING. We look forward to meeting you in November 2018 in Mexico.
Chair:  
Dr. G. Eduardo Sandoval-Romero  Universidad Nacional Autonoma de Mexico, Mexico

Organizing Committee:  
V. Babitsky  Loughborough University, UK  
M. Bayat  Roudehen Branch, Islamic Azad University, Iran  
K. Bousson  University of Beira Interior, Portugal  
I. Blekhman  Mekhanobr - Tekhnika Corporation, Russia  
M. Brennan  University of Southampton, UK  
R. Burdzik  Silesian University of Technology, Poland  
M. S. Cao  Hohai University, China  
Lu Chen  Beihang University, China  
Z. Dabrowski  Warsaw University of Technology, Poland  
J. Duhoivnik  University of Ljubljan, Slovenia  
Y. Davydov  Institute of Machine Building Mechanics, Russia  
R. Ganiev  Blagonravov Mechanical Engineering Research Institute, Russia  
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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  
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S. Rakheja  Concordia University, Canada  
M. A. F. Sanjuan  University Rey Juan Carlos, Spain  
A. El Sinawi  The Petroleum Institute, United Arab Emirates  
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
## Workshop Program

### Day 1: November 13

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00-14:30</td>
<td>Greeting of workshop participants and University tour</td>
</tr>
</tbody>
</table>

### Day 2: November 14

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00-10:30</td>
<td>Registration</td>
</tr>
</tbody>
</table>

### Day 2: November 14

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30-10:45</td>
<td>Conference Opening Ceremony</td>
</tr>
<tr>
<td>10:45-11:00</td>
<td>Welcome Speech: Minvydas Ragulskis. Vibroengineering – past, present and the future</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>11:00-11:30</td>
<td>Coffee Break</td>
</tr>
</tbody>
</table>

### Day 2: November 14

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Chairs: Dr. G. Eduardo Sandoval-Romero and Prof. Juan Carlos Jauregui</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:30-11:45</td>
<td>Guntis Strautmanis. Model of a vertical rotor with an automatic balancer with two compensating masses</td>
<td></td>
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<tr>
<td>11:45-12:00</td>
<td>Indira Inzunza-Aragón. Structural capacity of a wind turbine tower considering fatigue damage over time</td>
<td></td>
</tr>
<tr>
<td>12:00-12:15</td>
<td>Marco A. Santos-Santiago. Wind-induced vibration control for buildings equipped with non-linear fluid viscous dampers</td>
<td></td>
</tr>
<tr>
<td>12:15-12:30</td>
<td>Abraham Perez-Alonzo. Experimental study of a fiber Bragg grating accelerometer for seismic measurement</td>
<td></td>
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<tr>
<td>12:30-12:45</td>
<td>Jovan E. Basaldúa Sánchez. Seismic propagation in soils with a fluid inclusion</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Speaker</td>
<td>Title</td>
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<tr>
<td>12:45-13:00</td>
<td>Miguel A. Casas-Ramos</td>
<td>Optical accelerometer for seismic measurement</td>
</tr>
<tr>
<td>13:00-13:15</td>
<td>Miguel X. Rodríguez-Paz</td>
<td>Beginning of cracking of masonry walls due to vibrating and noise effects of machines</td>
</tr>
<tr>
<td>13:15-13:30</td>
<td>Van Liem Nguyen</td>
<td>Study on the influence of bus suspension parameters on ride comfort</td>
</tr>
<tr>
<td>13:30-13:45</td>
<td>HaiTao Hua</td>
<td>Optimal design of carbon fiber collapsible hinge for space application</td>
</tr>
<tr>
<td>13:45-13:00</td>
<td>Le Van Quynh</td>
<td>Study on the influence of bus suspension parameters on ride comfort</td>
</tr>
<tr>
<td>14:00-14:15</td>
<td>Van Liem Nguyen</td>
<td>Enhancing the ride comfort of the off-road vibratory roller cab by adding damper hydraulic mount</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>Jun Ye Li</td>
<td>Deviation analysis of rotational inertia measurement based on torsion bar method</td>
</tr>
<tr>
<td>14:30-14:45</td>
<td>Chen Guangyuan</td>
<td>Development of an automatic pulling mechanism of probe plug in marine eXpendable BathyThermograph launching system</td>
</tr>
<tr>
<td>14:45-15:00</td>
<td>Yong Huang</td>
<td>Design of Traffic Coordination Control Structure Based on Multi-Agent</td>
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**Day 3: November 15**

**City Tour**

**Workshop Location**

Workshop will be held in the main building of Research Institute in Applied Mathematics and Systems (IIMAS). The address is:

Escolar 3000, Ciudad Universitaria,  
04510 Ciudad de México, CDMX, Mexico

**Workshop Partners:**