# THE 23-ST INTERNATIONAL VIBROENGINEERING CONFERENCE
## 7th October 2016, Istanbul, Turkey
## PROGRAM

The 23-st International VIBROENGINEERING Conference will be held on 7th October, 2016 in Istanbul, Turkey. Authors from different Countries will present their latest research efforts during the Conference. 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 the areas of Modeling, Identification and Fault Detection in Oil and Gas Equipment and Infrastructures, in order to further promote the Vibroengineering and its applications. The Conference is organized by JVE International in partnership with Marmara University, Istanbul. Opening ceramony will be held at Dr. İbrahim Üzümcü Congre Saloon located at:

Dr. İbrahim Üzümcü Konferans Salonu
Marmara Üniversitesi Göztepe Kampüsü (Eğitim Mh. Fahrettin Kerim Gökay Cd. Göztepe)
34722 İstanbul, Türkiye

Directions: https://www.google.com.tr/maps/dir/"/ibrahim+%C3%BCz%C3%BCmc%C3%BC +konferans+salonu/@40.9849682,29.0522934,15.75z/data=!4m8!4m7!1m0!1m5!1m1! 1s0x14cac789345e7633:0xc9baa31feb346b34!2m2!1d29.0516069!2d40.986796

The main theme of the conference will be – but not limited to - Modeling, Identification and Fault Detection in Oil and Gas Equipment and Infrastructures.

Conference Topics: Modelling & Simulation in Vibroengineering, Measurement & Signal Processing, Vibration Coupling & Interaction, Modal Analysis & Identification, Nonlinear Vibration & Dynamics, Noise & Uncertainty & Control, Diagnostics, Monitoring & Assessment, Biomedical Vibration Engineering.

Internationally renowned invited speakers and contributing authors from all over the world will present the latest advances in the thriving area of Vibroengineering. This conference will feature a broad range of high-level technical papers from all over the world. Invited distinguished experts will present brilliant presentations for our technical sessions and discussions with a focus on the

conference theme. The conference will provide you with an opportunity to communicate with other scientists and engineers about recent research advances, and exchange ideas in innovative science and technologies, meet old friends and make new business partners in the areas of civil infrastructure, typically bridge engineering, hydraulic engineering, offshore engineering, and transportation structures.

All accepted short papers (4-6 pages length Proceedings format) intend to address the hottest issues in Vibroengineering of dynamical systems and will be published in VIBROENGONEERING PROCEDIA.

On behalf of the Organizing Committee, we would like to welcome the delegates to International Conference VIBROENGINEERING 2016.

# Conference Program

| October 7 | Location: Dr. İbrahim Üzümcü Konferans Salonu |
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| 12:00-12:05 | **Opening Ceremony**<br>Welcome Message from the Local Host Dr. Sezgin Ersoy |
| 12:05-12:15 | **Opening Speech** Prof. **Minvydas Ragulskis**<br>"VIBROENGINEERING – Past, Present and the Future" |

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| | **Oral Session** |
| | Session Chairs Dr. **Sezgin Ersoy** and Prof. **Minvydas Ragulskis** |
| 12:15-12:30 | **Ersin Toptas, Sezgin Ersoy**.<br>Comparison of the vibration properties of materials AA2124/SiC/25p and Alüminyum 6061-T6 |
| 12:30-12:45 | **A. El Hafidi, B. Martin, S. Ersoy**.<br>Identification of viscoelastic material properties based on Big Bang-Big Crunch optimization method |
| 12:45-13:00 | **Bendjaballah Driss, Bouchoucha Ali**.<br>Finite element simulation of the airbag deployment in frontal impacts |
| 13:00-13:15 | **Umud Esat Ozturk, Rıfat Yanarocak**.<br>An application of early fault detection for the crankshaft and piston of an internal combustion engine |
| 13:15-13:30 | **Mohammed Boufenar, Saïd Rechak, Noureddine Zerhouni.**<br>Bayesian approach with prior law enforcing sparsity for vibration components denoising and its application in roller bearings diagnosis |
| 13:30-13:45 | **Adel Zemirline, Mohammed Ouali, Ali Mahieddine, Abdelah Abdelah El-hadj.**<br>Study of a piezoelectric bimorph plate with two forms of electrodes |
| 13:45-14:00 | **Hulun Guo, Shuqian Cao, Yushu Chen.**<br>Vibration suppression of rotating nonlinear beam by nonlinear energy sink |

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| 14:00-14:15 | **Coffee Break** |

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| 14:15-14:30 | **Hamid Reza Ashrafi, Amir Mohammad Amiri, Soroush Dadgar, Peyman Beiranvand.** Studying the effects of earthquakes near and far fault region on seismic behavior of dual frame equipped with viscous damper |
| 14:30-14:45 | **Yahya Bozkurt, Sezgin Ersoy.** Determining the vibration behavior of metal matrix composite used in aerospace industry by FEM |
| 14:45-15:00 | **Khelf Mouloud, Boukebbab Salim.** The effect of vibration inside the Constantine's tramway on the comfort of passengers |
| 15:00-15:15 | **Ufuk Tosun, Reza Aghazadeh, Mehmet Bulent Ozer.** Experimental setup design for liquid sloshing |
| 15:15-15:30 | **Salim Boukebbab, Hassina Gheribi, Jean Marc Linares.** A procedure for total knee alignment prosthesis using the ICP algorithm in the aim to implant it in the biomechanical engineering |
| 15:30-15:45 | **Xianglin Tian, Jingjun Lou, Yangyang Zhang, Duo Qu.** The NAH based on complex cepstrum method in a closed space |
| 15:45-16:00 | **George Georgoulas, Vassilios Kappatos, George Nikolakopoulos.** Acoustic emission localization on ship hull structures using a deep learning approach |
| 16:00-16:15 | **Kopesbayeva Aksholpan, Abdreshova Samal, Mussina Aigerim, Balbayev Gani,** Kozhamberdiev Kuatbek. Investigation of the quality of arrayed data transmission through wireless networks |
| 16:15-16:30 | **V. E. Lyalin, R. A. Galiahmetov, N. F. Revenko, E. B. Homenko.** Simulation of optimal control of industrial corporations that produce complex dynamic systems engineering |

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| 16:30-16:45 | **G. E. Kalinkina, N. G. Sokolova, D. M. Gadzhikurbanov, O. M. Perminova.**<br>The use of decision trees for applying the method of analogy with the cognitive design of complex dynamical systems |
| 16:45-17:00 | **V. P. Grahov, N. L. Taranuha, K. V. Pavlov, A. S. Shirobokov.**<br>Cognitive design of products for engineering and vibromechanics by criterion of minimization labor input of their manufacturing |
| 17:00-17:15 | **Isfendiyar Baksiyev.**<br>The reduced free vibration modes analyses of the large branched gearing mechanisms by using the dqds algorithm |

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| 18:00-23:00 | **GALA Dinner** |