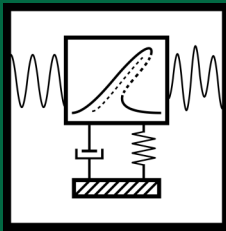


The 26th International Conference on VIBROENGINEERING

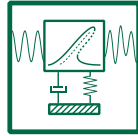
St. Petersburg, Russia
June 29-30th, 2017



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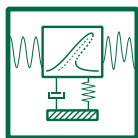


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The 26th International Conference on VIBROENGINEERING

June 29-30, 2017, St. Petersburg, Russia



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International Conference on VIBROENGINEERING

June 29-30, 2017, St. Petersburg, Russia.

The main theme of the Conference: **“Nonlinear Dynamics and Chaos in Engineering Applications”**

Topics of the Conference:

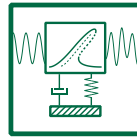
- Acoustics, Noise Control and Engineering Applications
- Chaos, Nonlinear Dynamics and Applications
- Fault Diagnosis Based on Vibration Signal Analysis
- Flow Induced Structural Vibrations
- Fractional Dynamics and Applications
- Mechanical Vibrations and Applications
- Modal Analysis and Applications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

International Conference on VIBROENGINEERING will be held in St. Petersburg, Russia. 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, Izhevsk Kalshnikov State Technical University and V.I. Uljanov (Lenin) Saint-Petersburg Electrotechnical University "LETI".

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.

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

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) and other esteemed International Journals.



Chairs of the Conference:

Prof. Lyalin Vadim Evgenjevich, (Izhevsk Kalshnikov State Technical University, Russia)

Prof. Kupriyanov Mikhail Stepanovich, (V.I. Uljanov (Lenin) Saint-Petersburg Electrotechnical University "LETI", Russia)

Prof. Minvydas Ragulskis (Kaunas University of Technology, Kaunas, Lithuania)

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Klionskij Dmitrij Michailovich, candidate of technical sciences, docent, (V.I. Uljanov (Lenin) Saint-Petersburg Electrotechnical University "LETI", Russia)

Cholod Ivan Ivanovich, candidate of technical sciences, docent, (V.I. Uljanov (Lenin) Saint-Petersburg Electrotechnical University "LETI", Russia)



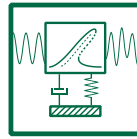
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M. Zakrzhevsky (Riga Technical University, Latvia)
Algazy Zhauyt (Kazakh National Research Technical University, Kazakhstan)



Conference Program

Day 0: June 28

Location: LETI University

18:00-20:00	Registration
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Day 1: June 29

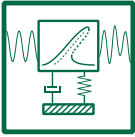
Location: LETI University

08:00-09:00	Registration
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Day 1: June 29

Location: LETI University

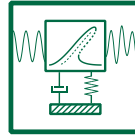
	PLENARY SESSION Session Chairs: Mikhail Kupriyanov, Minvydas Ragulskis
09:00-09:05	Conference Opening Ceremony Rector Vladimir Kutuzov , Saint-Petersburg Electrotechnical University "LETI", Russia
09:05-09:20	Opening Speech: «Vibroengineering – past, present and the future» Minvydas Ragulskis , JVE International Ltd. and Kaunas University of Technology
09:20-09:40	Plenary Speech: «On the inversion of describing functions in nonlinear system analysis» Kjell Ahlin , Xielalin Consulting
09:40-10:00	Plenary Speech: «Fiber optic mechanical vibration sensor» G. Eduardo Sandoval-Romero , Centro de Ciencias Aplicadas y Desarrollo Tecnológico/Universidad Nacional Autónoma de México
10:00-10:20	Plenary Speech: «Analysis on natural characteristics of four-stage main transmission system in three-engine helicopter» Yuan Chen , Nanjing University of Aeronautics and Astronautics

**Day 1: June 29****Location: LETI University**

10:20-10:45	Coffee Break
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Day 1: June 29**Location: LETI University**

	SESSION 1 Session Chairs: Kjell Ahlin and Minvydas Ragulskis
10:45-11:00	«Hydroelastic oscillation of a plate resting on Pasternak foundation» Dmitry V. Kondratov , Russian Presidential Academy of National Economy and Public Administration
11:00-11:15	«Compressor fault diagnosis based on SVM and GA» Milad Golmoradi , Kermanshah branch, Islamic Azad University
11:15-11:30	«Behavioral models of nonlinear filters based on discrete time cellular neural networks» Elena Solovyeva , Saint Petersburg Electrotechnical University "LETI"
11:30-11:45	«Methods for improving the performance data processing on an example of the task of constructing routes in DTN networks» Yulia Shichkina , Saint Petersburg Electrotechnical University "LETI"
11:45-12:00	«Mathematical modeling of three-layer beam hydroelastic oscillations» Victor Popov , Yuri Gagarin State Technical University of Saratov
12:00-12:15	«Development of protection mechanisms against DRDoS-attacks and combined DRDoS-attacks» Yana Bekeneva , Saint Petersburg Electrotechnical University "LETI"
12:15-12:30	«Discriminant analysis model of oil formation based on forecast probabilities of pressure changes» Mikhail Sharonov , Kalashnikov Izhevsk State Technical University
12:30-12:45	«Smart collection of measurement from moving objects» Ivan Kholod , Saint Petersburg Electrotechnical University "LETI"



Day 1: June 29

Location: LETI University

12:45-13:15	Coffee Break
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Day 1: June 29

Location: LETI University

	SESSION 2 Session Chairs: Guntis Strautmanis and Mikhail Kupriyanov
13:15-13:30	«Simulation of a drive with a long mechanical link» Leonid Kondratenko , State Science Center RF of TsNIITMash, Moscow
13:30-13:45	«Fault diagnosis of compressor based on decision tree and fuzzy inference system» Milad Golmoradi , Kermanshah branch, Islamic Azad University
13:45-14:00	«Automation of obtaining initial estimates of reservoir parameters when processing the pressure change curve» Mikhail Sharonov , Kalashnikov Izhevsk State Technical University
14:00-14:15	«Entropies in investigation of dynamical systems» Natalia Ampilova , Saint Petersburg State University

Day 1: June 29

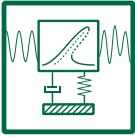
Location: LETI University

14:15-15:45	LUNCH
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Day 1: June 29

Location: LETI University

	CONTINUATION OF SESSION 2 Session Chairs: Guntis Strautmanis and Mikhail Kupriyanov
15:45-16:00	«New approaches to pattern discovery in signals via empirical mode decomposition» Dmitry Klionskiy , Saint Petersburg Electrotechnical University "LETI"



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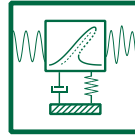
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16:00-16:15	«Optimization of thread affinity and memory affinity for remote core locking synchronization in multithreaded programs for multicore computer systems» Alexey Paznikov , Saint Petersburg Electrotechnical University "LETI"
16:15-16:30	«Impact of dimensions of the compensating mass of the automatic balancer on its acceleration» Guntis Strautmanis , Riga Technical University
16:30-16:45	«Simulation of tombolo evolution by using CST3D-WA» Seungho Lee , Kookmin University
16:45-17:00	«On the question of the relationship between longitudinal and torsional vibrations in the manufacture of holes in the details» Lubov Mironova , Moscow State University of Railway Engineering
17:00-17:15	«Processing curves pressure changes on the results of well test based on fuzzy regression trees» Mikhail Sharonov , Kalashnikov Izhevsk State Technical University
17:15-17:30	«Analytical formulation of an oscillatory system with hereditary-type dry friction and oscillation constraints» Vladimir S. Metrikin , Research Institute for Mechanics of the National Research Lobachevsky State University of Nizhni Novgorod

Day 1: June 29

Location: LETI University

	Closing Session
17:30-17:45	Chairs Mikhail Kupriyanov, Minvydas Ragulskis Ideas, Cooperation and Projects Meeting All Conference participants are welcome to attend
17:45-18:00	Best Papers Awards, Closing Ceremony



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Day 1: June 29

Location: Restaurant near LETI University

18:30-20:30

Gala Dinner

Day 1 – Day 2: June 29 – June 30

20:30 -

White Nights Tour

Conference Partners:



Saint Petersburg Electrotechnical University "LETI"
the oldest Electrotechnical University in Europe



**Kalashnikov Izhevsk State
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