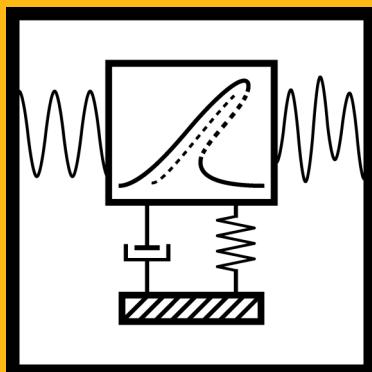


September 2017, Volume 5, Issue 3
Pages (115-221), NoP (125-134)
ISSN Print 2335-2124
ISSN Online 2424-4635

JME

Journal of Measurements in Engineering



Editor in Chief

M. Ragulskis Kaunas University of Technology,
 JVE International, (Lithuania) minvydas.ragulskis@ktu.lt
 m.ragulskis@jvejournals.com

Editorial Board

H. Adeli	The Ohio State University, (USA)	adeli.1@osu.edu
T. C. Akinci	Kirklareli University, (Turkey)	cetinakinci@hotmail.com
S. V. Augustis	Kaunas University of Technology, (Lithuania)	vygantas.augutis@ktu.lt
R. Bansevičius	Kaunas University of Technology, (Lithuania)	ramutis.bansevicius@ktu.lt
M. Bayat	Roudhen Branch, Islamic Azad University, (Iran)	mbayat14@yahoo.com
R. Burdzik	Silesian University of Technology, (Poland)	rafal.burdzik@polsl.pl
M. S. Cao	Hohai University, (China)	cmszhy@hhu.edu.cn
Lu Chen	Beihang University, (China)	luchen@buaa.edu.cn
S. Ersoy	Marmara University, (Turkey)	sersoy@marmara.edu.tr
H. C. Eun	Kangwon National University, (Korea)	heechang@kangwon.ac.kr
W. H. Hsieh	National Formosa University, (Taiwan)	allen@nfu.edu.tw
Li Jun	Adv. Inst. of Science and Engg. Information, (China)	lijun@aiseiac.org
V. Kaminskas	Vytautas Magnus University, (Lithuania)	v.kaminskas@if.vdu.lt
S. Kaušinis	Kaunas University of Technology, (Lithuania)	saulius.kausinis@ktu.lt
R. Kažys	Kaunas University of Technology, (Lithuania)	rymantas.kazys@ktu.lt
V. Klyuev	Association Spektr – Group, (Russia)	v.klyuev@spektr.ru
G. Laukaitis	Kaunas University of Technology, (Lithuania)	giedrius.laukaitis@ktu.lt
V. Lyalin	Izhevsk State Technical University, (Russia)	velyalin@mail.ru
Guang-qing Lu	Jinan University, Zhuhai Campus, Guangdong, (China)	tgqluyup@jnu.edu.cn
R. Martonka	Technical University of Liberec, (Czech Republic)	rudolf.martonka@tul.cz
R. Maskeliūnas	Vilnius Gediminas Technical University, (Lithuania)	rimas.maskeliunas@vgtu.lt
V. Ostaševičius	Kaunas University of Technology, (Lithuania)	vytautas.ostasevicius@ktu.lt
D. Pisla	Technical University of Cluj-Napoca, (Romania)	doina.pisla@mep.utcluj.ro
L. Qiu	Nanjing University of Aeronautics and Astronautics, (China)	lei.qiu@nuaa.edu.cn
K. Ragulskis	Lithuanian Academy of Sciences, (Lithuania)	ragulskis.jve@gmail.com
S. Rakheja	Concordia University, (Canada)	subhash.rakheja@concordia.ca
J. I. Real	Technical University of Valencia, (Spain)	jureaher@tra.upv.es
G. E. Sandoval-Romero	The National Autonomous University of Mexico, (Mexico)	aduardo.sandoval@ccadet.unam.mx
S. Seker	Istanbul Technical University, (Turkey)	sekers@itu.edu.tr
A. El Sinawi	The Petroleum University, (United Arab Emirates)	aelsinawi@pi.ac.ae
P. Singru	BITS Pilani, (India)	pmsingru@goa.bits-pilani.ac.in
G. Song	University of Houston, (USA)	gsong@uh.edu
S. Toyama	Tokyo A&T University, (Japan)	toyama@cc.tuat.ac.jp
D. Wang	City University of Hong Kong, (China)	dongwang4-c@my.cityu.edu.hk
S. Wierzbicki	University of Warmia and Mazury in Olsztyn, (Poland)	slawekw@uwm.edu.pl
Mao Yuxin	Zhejiang Gongshang University, (China)	maoyuxin@zjgsu.edu.cn

JME Journal of Measurements in Engineering

Aims and Scope

JME publishes articles describing contributions in the general field of measurements in/and engineering applications.

JME welcomes theoretical papers aimed at winning further understanding of fundamentals of measurements and associated technologies, including, but not restricted to, general principles of measurement and instrumentation, sensors and systems modelling, data acquisition, processing and evaluation.

JME covers practical aspects and applications with contributions on measurement technology and engineering applications, including, but not restricted to, non-destructive measurement of vibrations, thermal, acoustic, optical and laser based measurement of engineering systems in nano, micro and macro scales.

All published papers are peer reviewed and crosschecked by plagiarism detection tools.

More information is available online <http://www.jvejournals.com>

The journal material is referred:

CLARIVATE ANALYTICS (former THOMSON REUTERS):

Emerging Sources Citation Index.

EBSCO: Academic Search Complete;

Computers & Applied Sciences Complete;
Central & Eastern European Academic Source;
Current Abstracts;
TOC Premier.

GALE Cengage Learning: Academic OneFile Custom Periodical.

INSPEC: OCLC. The Database for Physics, Electronics and Computing.

VINITI: All-Russian Institute of Scientific and Technical Information.

GOOGLE SCHOLAR: <http://scholar.google.com>

CNKI SCHOLAR: <http://eng.scholar.cnki.net>

CROSSREF: <http://www.crossref.org>

Internet: <http://www.jvejournals.com>; <http://www.jve.lt>

E-mail: m.ragulskis@jvejournals.com; ragulskis.jve@gmail.com

Address: Geliu ratas 15A, LT-50282, Kaunas, Lithuania

Publisher: JVE International Ltd.

JME

Journal of Measurements in Engineering

SEPTEMBER 2017. VOLUME 5, ISSUE 3, PAGES (115-221), NUMBERS OF PUBLICATIONS FROM 125 TO 134.
ISSN PRINT 2335-2124, ISSN ONLINE 2424-4635

Contents

125. NUMERICAL ANALYSIS IN VISCOSITY-TEMPERATURE CHARACTERISTICS OF SOLID-LIQUID TWO-PHASE ABRASIVE FLOW POLISHING	115
JUNYE LI, JINGLEI HU, NINGNING SU, WEIHONG ZHAO, XINMING ZHANG	
126. THE EXPERIMENTAL DETERMINATION OF THE STRESS CALCULATION AND RELATIVE STRAINS IN THE SPAN ELEMENTS OF RAILWAY BRIDGES UNDER THE INFLUENCE OF THE ROLLING EQUIPMENT	125
JANAT MUSAYEV, ALGAZY ZHAYUT, TOTY BUZAUOVA, GULNAR MAMATOVA, ZHAKHAR YESSENKLUOVA, GULNUR ABDUGALIYEVA	
127. PRECISION PREDICTION MODEL IN FDM BY THE COMBINATION OF GENETIC ALGORITHM AND BP NEURAL NETWORK ALGORITHM	134
HUA DONG YANG, SEN ZHANG	
128. SIMULATION TECHNIQUE OF CONSTANT CONTACT SIDE BEARINGS OF FREIGHT CAR BOGIES	142
ERZHAN ADILKHANOV, SHOLPAN SEKEROVA, JANAT MUSAYEV, ALGAZY ZHAYUT, SALTANAT YUSSUPOVA, ASSYLKHAN ALIMBETOV	
129. SIMULATION ANALYSIS OF LOW STRAIN DYNAMIC TESTING OF PILE WITH INHOMOGENEOUS ELASTIC MODULUS	152
JUNCAI XU, ZHENZHONG SHEN, QINGWEN REN	
130. A 2D-3D NON-CONTACT ANTHROPOMETRIC METHOD FOR DAILY DRESSING STATE-TAKES YOUNG ASIAN WOMEN AS EXAMPLE	161
KE KE SUN, YI JUI CHIU, YI CHENG CHEN, YU XIU WANG	
131. NUMERICAL ANALYSIS AND EXPERIMENTAL STUDY ON MICRO-HOLES IN SOLID-LIQUID TWO-PHASE ABRASIVE FLOW MACHINING	176
JUNYE LI, ZENGWEI ZHOU, XINMING ZHANG, WEIHONG ZHAO	
132. THE RESEARCHING OF THE DYNAMIC PROPERTIES OF LONG-WHEELBASE PLATFORMS FOR THE TRANSPORTATION OF LARGE-CAPACITY CONTAINERS	182
NURLAN IGEMBAYEV, JANAT MUSAYEV, ALGAZY ZHAYUT, GANI BALBAYEV, ALMA AUEZOVA, GULBARSHYN SMAIROVA	
133. EFFECT OF UNDERBODY STRUCTURE ON AERODYNAMIC DRAG AND OPTIMIZATION	194
ZHIQUN YUAN, YIPING WANG	
134. NUMERICAL SIMULATION FOR OPTIMIZING THE NOZZLE OF MOIST-MIX SHOTCRETE BASED ON ORTHOGONAL TEST	205
LIANJUN CHEN, PENGCHENG LI, GUOMING LIU, FEI WANG	

