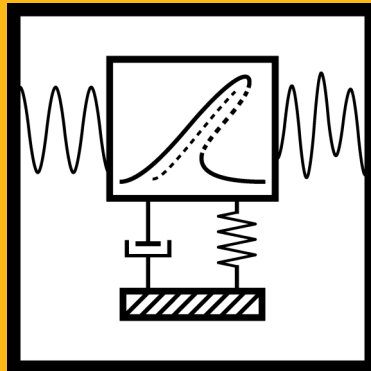


December 2020, Volume 8, Issue 4
Pages (142-196)
ISSN Print 2335-2124
ISSN Online 2424-4635

JME

Journal of
Measurements in
Engineering



Editor in Chief

M. Ragulskis Kaunas University of Technology, (Lithuania) minvydas.ragulskis@ktu.lt

Editorial Board

Hojjat Adeli The Ohio State University, (USA) adeli.1@osu.edu

Tahir Cetin Akinci Istanbul Technical University, (Turkey) cetinakinci@hotmail.com

Mahmoud Bayat Roudehen Branch, Islamic Azad University, (Iran) mbayat14@yahoo.com

Algimantas Bubulis Kaunas University of Technology, (Lithuania) algimantas.bubulis@ktu.lt

Rafał Burdzik Silesian University of Technology, (Poland) rafal.burdzik@polsl.pl

Maosen Cao Hohai University, (China) cmszhy@hhu.edu.cn

Sezgin Ersoy Marmara University, (Turkey) sersoy@marmara.edu.tr

W. H. Hsieh National Formosa University, (Taiwan) allen@nfu.edu.tw

Vassilis Kappatos Center for Research and Technology Hellas, (Greece) vkappatos@certh.gr

Rymantas Kazys Kaunas University of Technology, (Lithuania) rymantas.kazys@ktu.lt

Mohammad Nadeem Khan Majmaah University, (Saudi Arabia) mn.khan@mu.edu.sa

Giedrius Laukaitis Kaunas University of Technology, (Lithuania) giedrius.laukaitis@ktu.lt

Guang-qing Lu School of Intelligent Systems Science and Engineering, Jinan University, (China) tgqluy@jnu.edu.cn

Yuxin Mao Zhejiang Gongshang University, (China) maoyuxin@zjgsu.edu.cn

Vytautas Ostaševičius Kaunas University of Technology, (Lithuania) vytautas.ostasevicius@ktu.lt

Doina Pisla Technical University of Cluj-Napoca, (Romania) doina.pisla@mep.utcluj.ro

Kazimieras Ragulskis Lithuanian Academy of Sciences, (Lithuania) k.ragulskis@jve.lt

Vinayak Ranjan Bennett University, (India) vinayak.ranjan@bennett.edu.in

Julia Irene Real Politechnical University of Valencia, (Spain) jureaher@tra.upv.es

G. Eduardo Sandoval-Romero The National Autonomous University of Mexico, (Mexico) eduardo.sandoval@ccadet.unam.mx

S. Seker Istanbul Technical University, (Turkey) sekers@itu.edu.tr

Junyou Shi Beihang University, (China) shijy@buaa.edu.cn

Shigeki Toyama Tokyo A&T University, (Japan) toyama@cc.tuat.ac.jp

Dong Wang Shanghai Jiao Tong University, (China) dongwang4-c@my.cityu.edu.hk

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 <https://www.jvejournals.com>

The journal material is referred:

CLARIVATE ANALYTICS (former THOMSON REUTERS):

Emerging Sources Citation Index.

SCOPUS: ELSEVIER Bibliographic Database.

EBSCO: Academic Search Complete;

Computers & Applied Sciences Complete;

Central & Eastern European Academic Source;

Current Abstracts;

TOC Premier.

GALE Cengage Learning:

Academic OneFile Custom Periodical;

Science in Context.

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

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

COPE: <https://publicationethics.org>

DIRECTORY OF OPEN ACCESS JOURNALS (DOAJ): <https://doaj.org>

SEMANTIC SCHOLAR: <https://www.semanticscholar.org>

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

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

JGate: <https://jgateplus.com>

ULRICH'S PERIODICALS DIRECTORY: <https://ulrichsweb.serialssolutions.com>

BASE (Bielefeld Academic Search Engine): <https://www.base-search.net>

CORE: <https://core.ac.uk>

cnPLINKer (CNPIEC): <http://cnplinker.cnpeak.com>

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

Internet: <https://www.jvejournals.com>

E-mail: publish@jvejournals.com

Publisher: JVE International Ltd., Geliu ratas 15A, LT-50282, Kaunas, Lithuania

Contents

VIBRATION ANALYSIS OF MOTORCYCLE HANDLEBAR FOR RIDING COMFORT USING TUNED MASS DAMPER	142
SUMIT KHUNE, AMIT BHENDE	
A CONVERSION GUIDE: SOLAR IRRADIANCE AND LUX ILLUMINANCE	153
PETER R. MICHAEL, DANVERS E. JOHNSTON, WILFRIDO MORENO	
DETERMINATION OF STATIC TRANSMISSION ERROR OF HELICAL GEARS USING FINITE ELEMENT ANALYSIS	167
ALEXANDER CZAKÓ, KAMIL ŘEHÁK, ALEŠ PROKOP, VINAYAK RANJAN	
MEASUREMENT OF FUEL CONSUMPTION AND HARMFUL EMISSIONS OF CARS WHEN USING DIFFERENT TYPES OF FUEL	182
I. MANKO, Y. SHUBA, A. KORPACH, S. GUTAREVYC, J. RAGULSKIENE, A. PAULIUKAS	

