## Extrica کے Journals Engineering

ISSN ONLINE ISSN PRINT 2424-4635 2335-2124

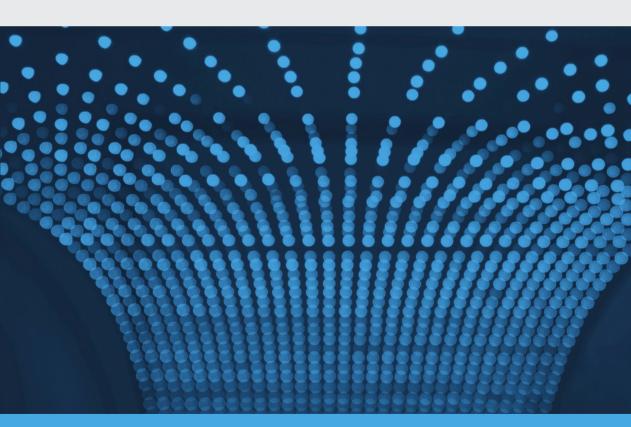
March 2023 VOLUME 11 ISSUE 1 PAGES 1-70

Mechanical Engineering

Instrumentation Technology

Materials Science and Technology

# Journal of Measurements in Engineering



**Editor in Chief** 

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

**Editorial Board** 

Wenyi Liu

Kouzou Abdellah Ziane Achour University of Dielfa, (Algeria) kouzouabdellah@ieee.org

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

Hemant Agrawal Central Mine Planning and Design Institute Limited,

(India)

Tahir Cetin Akinci Istanbul Technical University, (Turkey)

Mahmoud Bayat Roudehen Branch, Islamic Azad University, (Iran)

Rafał Burdzik Silesian University of Technology, (Poland)

Maosen Cao Hohai University, (China)

Sezgin Ersoy Marmara University, (Turkey)

W. H. Hsieh National Formosa University, (Taiwan)

Vassilis Kappatos Center for Research and Technology Hellas, (Greece)

Rymantas Kažys Kaunas University of Technology, (Lithuania)

Mohammad Nadeem Khan Majmaah University, (Saudi Arabia)

Giedrius Laukaitis Kaunas University of Technology, (Lithuania)

Guang-ging Lu School of Intelligent Systems Science and

Engineering, Jinan University, (China)

Jiangsu Normal University, (China)

Yuxin Mao Zhejiang Gongshang University, (China) Vytautas Ostaševičius Kaunas University of Technology, (Lithuania)

Doina Pisla Technical University of Cluj-Napoca, (Romania)

Kazimieras Ragulskis Lithuanian Academy of Sciences, (Lithuania)

Bennett University, (India) Vinavak Ranian

Julia Irene Real Politechnical University of Valencia, (Spain)

Alessandro Ruggiero University of Salerno, (Italy)

G. Eduardo Sandoval-Romero The National Autonomous University of Mexico,

(Mexico)

Serhat Seker Istanbul Technical University, (Turkey)

Junvou Shi Beihang University, (China) Shigeki Toyama Tokyo A&T University, (Japan)

Nicolò Vaiana University of Naples Federico II, (Italy)

Dong Wang Shanghai Jiao Tong University, (China)

Shoulin Yin Shenyang Normal University, (China)

hemant.ism@gmail.com

cetinakinci@hotmail.com mbayat14@yahoo.com

rafal.burdzik@polsl.pl

cmszhy@hhu.edu.cn

sersoy@marmara.edu.tr

allen@nfu.edu.tw

vkappatos@certh.gr

rymantas.kazys@ktu.lt

mn.khan@mu.edu.sa

giedrius.laukaitis@ktu.lt

liuwenyi@jsnu.edu.cn

tgqluyp@jnu.edu.cn

maoyuxin@zjgsu.edu.cn

vytautas.ostasevicius@ktu.lt

doina.pisla@mep.utcluj.ro

kazimieras3@hotmail.com

vinayak.ranjan@bennett.edu.in

jureaher@tra.upv.es

ruggiero@unisa.it

eduardo.sandoval@ccadet.unam.mx

sekers@itu.edu.tr

shijy@buaa.edu.cn

toyama@cc.tuat.ac.jp

nicolovaiana@outlook.it

dongwang4-c@my.cityu.edu.hk

yslin@hit.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 https://www.extrica.com/journal/jme

#### The journal material is referred:

#### Clarivate Analytics:

Emerging Sources Citation Index (ESCI)
Scopus: ELSEVIER Bibliographic Database
EI Compendex: ELSEVIER Bibliographic Database

El Compendex: ELSEVIER Dibliographic Databa

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 **Scilit:** https://www.scilit.net

Dimensions: https://www.dimensions.ai

Semantic Scholar: https://www.semanticscholar.org

Google Scholar: https://scholar.google.com

JGate: https://jgateplus.com CORE: https://core.ac.uk

BASE (Bielefeld Academic Search Engine): https://www.base-search.net Ulrich's Periodicals Directory: https://ulrichsweb.serialssolutions.com

CNKI Scholar: http://eng.scholar.cnki.net

**cnpLINKer** (**CNPIEC**): http://cnplinker.cnpeak.com **WanFang Data:** https://www.wanfangdata.com.cn

TDNet: https://www.tdnet.io

JournalTOCs: https://www.journaltocs.ac.uk

WorldCat Discovery Services: https://www.oclc.org/en/worldcat-discovery.html

MyScienceWork: https://www.mysciencework.com

**Crossref:** https://www.crossref.org **COPE:** https://publicationethics.org

#### Content is archived in Martynas Mazvydas National Library of Lithuania

Internet: https://www.extrica.com E-mail: publish@extrica.com

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

MARCH 2023. VOLUME 11, ISSUE 1, PAGES (1-70), ISSN PRINT 2335-2124, ISSN ONLINE 2424-4635

## Contents

1

AN EXPERIMENTAL MEASUREMENT AND NUMERICAL CALCULATION METHOD ON

FRICTION TEMPERATURE RISE OF SLIDING CONTACT PAIRS - TAKING RAIL/WHEEL CONTACT AS AN EXAMPLE YUNPENG WEI, YAPING WU, ZHIDONG CHEN	
AN ADAPTIVE INFRARED IMAGE DENOISING METHOD BASED ON TWO-DIMENSIONAL EMPIRICAL MODE DECOMPOSITION FOR DISTRIBUTION NETWORK INSPECTION UAV QIGANG ZHOU, LEI YANG, FENGQI LIU, SONGYU LI	12
INDIRECT MEASUREMENTS IN THE INTELLIGENT HEATING CONTROL SYSTEM FOR THE TURNOUT USING ADAPTIVE SYSTEMS  RUSLANS MUHITOVS, MAREKS MEZITIS, GUNTIS STRAUTMANIS,  VLADIMIRS IRISKOVS	23
In-situ experiment research on environmental vibration transmission characteristics of air-rail combined airport Zaixin Wu, Feng Dai, Jizhong Yang	35
MEASURING OF ROTATING SHAFTS ANGULAR DEFORMATION BY MEANS OF ULTRASONIC VIBRATION METER ARTEM ERMOLAEV, BORIS GORDEEV, SERGEI OKHULKOV, GRIGORY PANOVKO, ALEXANDER PLEKHOV	51
A REDUCED CHEMICAL KINETIC MECHANISM OF DIESEL FUEL FOR HCCI ENGINES CHUNHUI LIII, DELONG ZHANG	62

#### SHORT DESCRIPTION ABOUT THIS CATEGORY

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 and biomedical systems in nano, micro and macro scales.

