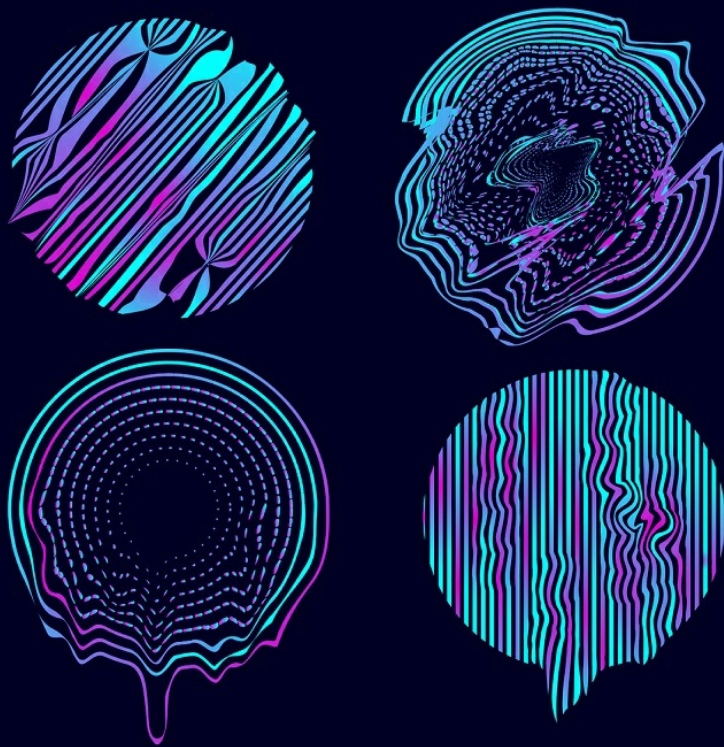


Applied Mathematics

Interdisciplinary Applications of Mathematics

Mathematical Models in Engineering



Editor in Chief

Minvydas Ragulskis	Kaunas University of Technology, (Lithuania)	minvydas.ragulskis@ktu.lt
Editorial Board		
Hojjat Adeli	The Ohio State University, (United States)	adeli.1@osu.edu
Tahir Cetin Akinci	Istanbul Technical University, (Turkey)	cetinakinci@hotmail.com
Mahmoud Bayat	The University of Texas at Arlington, (United States)	ranjan@rowan.edu
Jinde Cao	Southeast University, (China)	jdcao@seu.edu.cn
Maosen Cao	Hohai University, (China)	cmszhy@hhu.edu.cn
Sezgin Ersoy	Marmara University, (Turkey)	ersoy@marmara.edu.tr
Hee-Chang Eun	Kangwon National University, (South Korea)	heechang@kangwon.ac.kr
Wen-Hsiang Hsieh	National Formosa University, (Taiwan)	allen@nfu.edu.tw
Audrius Kabasinskas	Kaunas University of Technology, (Lithuania)	audrius.kabasinskas@ktu.lt
Vassilios Kappatos	Center for Research and Technology Hellas, (Greece)	vkappatos@certh.gr
Sunil Kumar	National Institute of Technology, (India)	skumar.math@nitjsr.ac.in
Petr Lepšík	Technical University of Liberec, (Czechia)	petr.lepsik@tul.cz
Chen Lu	Beihang University, (China)	luchen@buaa.edu.cn
Doina Pisia	Technical University of Cluj-Napoca, (Romania)	doina.pisia@mep.utcluj.ro
Vinayak Ranjan	University of Pittsburgh at Bradford PA, (United States)	vinayak.ranjan@bennett.edu.in
Julia Irene Real	Politechnical University of Valencia, (Spain)	jureaher@tra.upv.es
Eligijus Sakalauskas	Kaunas University of Technology, (Lithuania)	eligijus.sakalauskas@ktu.lt
G. Eduardo Sandoval-Romero	The National Autonomous University of Mexico, (Mexico)	eduardo.sandoval@ccadet.unam.mx
Reza Serajian	University of California, (United States)	rsera004@ucr.edu
Tadas Telksnys	Kaunas University of Technology, (Lithuania)	tadas.telksnys@ktu.lt
Agnieszka Wylomanska	Wroclaw University of Technology, (Poland)	agnieszka.wylomanska@pwr.edu.pl
Xiao-Jun Yang	China University of Mining and Technology, (China)	xjyang@cumt.edu.cn

MME Mathematical Models in Engineering

Aims and Scope

MME publishes mathematical results which have relevance to engineering science and technology. Formal descriptions of mathematical models related to engineering problems, as well as results related to engineering applications are equally encouraged.

Applications of mathematical models in financial engineering, mechanical and aerospace engineering, bioengineering, chemical engineering, computer engineering, electrical engineering, industrial engineering and manufacturing systems, nonlinear science and technology are especially encouraged.

Mathematical models of interest include, but are not limited to, ordinary and partial differential equations, nonlinear analysis, stochastic processes, calculus of variations, operations research.

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

More information is available online <https://www.extrica.com/journal/mme>

The journal material is referred:

Scopus: ELSEVIER Bibliographic Database

EBSCO: Discovery Services (Complementary Index)

Gale Cengage Learning:

Academic OneFile Custom Periodical

Computer Database

Science in Context

Scilit: <https://www.scilit.net>

Asian Science Citation Index (ASCI): <https://ascidatabase.com>

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: <https://cnki.net>

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

WanFang Data: <https://www.wanfangdata.com.cn>

TDNet: <https://www.tdnet.io>

MIAR, Universitat de Barcelona: <https://miar.ub.edu>

JournalTOCs: <https://www.journaltoCs.ac.uk>

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

Crossref: <https://search.crossref.org>

Content is archived in:

Martynas Mazvydas National Library of Lithuania: <https://www.lnb.lt>

Portico: <https://www.portico.org>

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

E-mail: publish@extrica.com

Publisher: Extrica

Contents

INTELLIGENT RISK-ORIENTED PREDICTIVE DIAGNOSTICS SYSTEM BASED ON VIBRATION SIGNAL ANALYSIS	220
MALIKA DOSHANOVA, MIRAZIZ TALIPOV, MADINA SHAAZIZOVA, NILUFAR MIRZAYEVA, SHIRIN KARAXANOVA, INDIRA KHODZAMURATOVA	
STUDYING THE IMPACT OF STRONG NEAR-FIELD AND FAR-FIELD EARTHQUAKES ON EARTHFILL RESERVOIR DAMS: AN INTEGRATED SATELLITE AND INSTRUMENTAL MONITORING APPROACH	235
DIYORBEB BEKMIRZAEV, SAYDULLO NABIYEV, SAID SHAUMAROV	
COMPUTATIONAL ANALYSIS OF TURBULENT FLOW AROUND A NACA0012 AIRFOIL AT LOW REYNOLDS NUMBERS USING A TWO-FLUID MODEL	269
ZOKHIDJON ABDULKHAEV, NILUFAR KURBONOVA, DILDORA KADIROVA, ZUXRIDIN UMIRZAKOV, PARVIZ KHUJAEV, AZIZA KURBANOVA	
AN EFFICIENT COMPUTER VISION FRAMEWORK FOR RSU-BASED ACCIDENT RECOGNITION AND V2X COMMUNICATION	291
DANISH ATHER, MIRAZIZ TALIPOV	
NUMERICAL INVESTIGATION OF FOAM BAFFLE DESIGNS FOR ENHANCED THERMAL-HYDRAULIC PERFORMANCE IN SHELL AND TUBE HEAT EXCHANGERS	313
RANA QASSIM FARAJ, ABBAS J. JUBEAR AL-JASSANI, HUSSEIN RAZZAQ AL-BUGHARBEE	
CFD-BASED THERMAL-HYDRAULIC ANALYSIS OF DOUBLE-PIPE HEAT EXCHANGERS EQUIPPED WITH STRUCTURED METAL-FOAM INSERTS	332
INAS FAIZ KADHIM, ABBAS J. JUBEAR AL-JASSANI, HUSSEIN RAZZAQ AL-BUGHARBEE	
RELIABILITY ANALYSIS OF AIRCRAFT LANDING GEAR RETRACTION AND EXTENSION MECHANISM BASED ON COUPLED DUAL-EXTREME VALUE RESPONSE SURFACE METHOD	356
YANHONG GONG, ANTON LOUISE DE OCAMPO	
ADAPTIVE HYBRID AI-BASED RETRIEVAL-AUGMENTED GENERATION FOR CONSTRUCTION AND SEISMIC REGULATORY QUESTION ANSWERING	371
D. A. BEKMIRZAEV, R. R. YULDOSHEV, E. A. KOSIMOV, A. M. ISMOILOV, S. S. SHAUMAROV	

SHORT DESCRIPTION ABOUT THIS CATEGORY

Mathematical modelling helps to create a mathematical representation of a real-world scenario to make a prediction or provide insight into the complex behavior of real-world systems. The journal publishes mathematical results which have relevance to engineering science and technology. Mathematical models of interest include, but are not limited to, ordinary and partial differential equations, nonlinear analysis, stochastic processes, calculus of variations, and operations research.

