

Matrix Science Mathematic (MSMK)

HEAD OFFICE ADDRESS:

Zibeline International Publishing Sdn Bhd

C2-2-3, Block 2, CBD Perdana 3,
Persiaran Cyberpoint Timur,
Cyber 12, 63000 Cyberjaya,
Selangor.

Tel: +603-86879842

EDITORIAL STAFF:

Publishing Manager

Tasbia Ab Rajul

Publishing Co-Coordinator

Nurul Atikah Arsat

Publishing Editor

Farah Awanis Md Radzi

Publishing Editor

Nurul Afiqah Ab Manan

Technical Editor

Nuruljannah Kamarudin

Technical Editor

Fakhrudin Che Fauzi

Frequency:

Bi-annual (2 issue per year)

ISSN: 2521-0831 (Print)

ISSN: 2521-084X (Online)

Price:

Single issue: 50 MYR

Price for abroad

Single issue: 25 USD

Web:

www.matrixsmathematic.com

E-mail:

info@zibelinepub.com

Matrix Science Mathematic (MSMK)

Contents

VOLUME 4, ISSUE 1, 2020		
No	Editorial	Pages
1	ANALYTIC APPROXIMATE SOLUTION OF RABIES TRANSMISSION DYNAMICS USING HOMOTOPY PERTURBATION METHOD	1-5
2	ON NEW WAYS OF VARIOUS IDEALS IN TERNARY SEMIGROUPS	6-9
3	ANALYTICAL APPROXIMATION FOR THE NONLINEAR DYNAMICS OF ERK ACTIVATION IN THE PRESENCE OF COMPETITIVE INHIBITOR	10-13
4	COMPUTATION OF THE POWER OF BASE OF TWO DIGITS NUMBER USING KIFILIDEEN (MATRIX, COMBINATION AND DISTRIBUTIVE (MCD)) APPROACH	14-19
5	CUBIC B-SPLINE SOLUTION FOR A SECOND-ORDER SINGULAR LINEAR PARTIAL DIFFERENTIAL EQUATIONS	20-26

Matrix Science Mathematic (MSMK)

Editorial

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. The full account of the research must be provided so that the results can be reproduced. Electronic files or software which provide the full details of the calculations, proofs and experimental procedures can be deposited as supplementary material (if unable to be published in a normal way).

Scientific Board

Editorial Team

Editor in Chief

Assoc. Professor. Dr Norma Binti Alias
Center for Sustainable Nanomaterials,
Ibnu Sina Institute for Scientific and Industrial
Research,
Universiti Teknologi Malaysia
Skudai, Johor , Malaysia

Managing Editor

Dr Hidayat Ullah Khan
Department of Mathematics,
University of Malakand, Chakdara,
District Dir (L),
Khyber Pakhtunkhwa, Pakistan

Associate Editors

Professor. Dr. Tahir Ahmad
Ibnu Sina Institute For Scientific And Industrial
Research,
Universiti Teknologi Malaysia
Skudai, Johor , Malaysia

Professor. Dr. Norsarahaida Saidina Amin
Department Of Mathematical Sciences, Faculty Of
Science
Universiti Teknologi Malaysia
Skudai, Johor , Malaysia

Assoc. Professor. Dr. Rohani Ahmad Tarmizi
Institute Of Mathematical Research
Faculty Of Educational Studies
Universiti Putra Malaysia
Serdang, Malaysia

Assoc. Professor. Dr Ali Hassan Mohamed Murid
(Utm)
Utm Centre For Industrial And Applied
Mathematics (Utm-Ciam)
Department Of Mathematical Sciences, Faculty Of
Science
Universiti Teknologi Malaysia
Skudai, Johor , Malaysia

Ssoc. Professor. Dr. Hjh. Munira Ismail
Department Of Mathematical Sciences, Faculty Of
Science
Universiti Teknologi Malaysia
Skudai, Johor , Malaysia

Mr. Amir Khan
Department of Mathematics and Statistics
University of Swat
Swat, Pakistan

Editorial Board

Professor. Dr. Mohd. Salmi Md Noorani
School Of Mathematical Sciences
Faculty Of Science And Technology
Universiti Kebangsaan Malaysia
Bangi, Malaysia

Professor. Dr. Mohd Othman
Department Of Communication Technology And
Networking
Faculty Of Computer Science And Information
Technology
Universiti Putra Malaysia
Serdang, Malaysia

Professor. Ahmad Izani Md. Ismail
School Of Mathematical Sciences
Universiti Sains Malaysia
Penang, Malaysia

Professor. Dr. Norhashidah Ali
School Of Mathematical Sciences
Universiti Sains Malaysia
Penang, Malaysia

Assoc. Professor. Dr. Mohammad Khatim Hasan
School Of Mathematical Sciences
Faculty Of Science And Technology
Universiti Kebangsaan Malaysia
Bangi, Malaysia

Matrix Science Mathematic (MSMK)

Assoc.Professor. Dr. Jumat Sulaiman
Faculty Of Science And Natural Resources
University Malaysia Sabah
Kota Kinabalu, Sabah, Malaysia

Assoc.Professor. Dr. Jane Labadin
Faculty Of Computer Science And Information
Technology
University Malaysia Sarawak
Kuching, Sarawak, Malaysia

Assoc.Professor. Dr. Md Shohel Sayeed
Faculty Of Information Science And Technology
Multimedia University
Bukit Beruang, Melaka, Malaysia

Dr. Norhaida Mohd Suaib
Faculty Of Computing,
Universiti Teknologi Malaysia,
Skudai, Johor, Malaysia

Dr. Mohd Murtadha Mohamad
Faculty Of Computing,
Universiti Teknologi Malaysia,
Skudai, Johor, Malaysia

Dr. Bukhari Bin Manshoor
Department Of Energy Engineering And
Thermofluids (Jkt)
Faculty Of Mechanical And Manufacturing
Engineering
University Tun Hussein Onn, Malaysia

Dr. Shazirawati Mohd Puzi
Department Of Mathematical Sciences, Faculty Of
Science
Universiti Teknologi Malaysia
Skudai, Johor , Malaysia

Dr. Faridah Mustaffa
Department Of Mathematical Sciences, Faculty Of
Science
Universiti Teknologi Malaysia
Skudai, Johor , Malaysia

Dr. Fuaada Mohd Siam
Department Of Mathematical Sciences, Faculty Of
Science
Universiti Teknologi Malaysia
Skudai, Johor , Malaysia

Prof. Dr. Hamido Fujita
Director Of Intelligent Software Laboratory
Iwate Prefectural University (Ipu)
Iwate, Japan

Prof. Dr. Victor Malyshkin
Head, Supercomputer Software Department (Ssd),
Institute Of Computational Mathematics And
Mathematical Geophysics,
Russian Academy Of Sciences, Russia

Prof. Dr. Farooq Ahmad
Department Of Computational Sciences
National University Of Sciences And Technology
(Nust)
Islamabad, Pakistan

Prof. Dr. Ahmed Zaki Bin Abu Bakar
Faculty Of Computing,
Universiti Teknologi Malaysia,
Skudai, Johor, Malaysia

Prof. Dr. Hend S. Al-Khalifa
Information Technology Department
College Of Computer And Information Sciences
Ccis
King Saud University
Riyadh, Saudi Arabia

Assoc. Prof. Dr. Iftikhar Ahmad
College Of Computer And Information Sciences
Ccis
King Saud University
Riyadh, Saudi Arabia

Dr. Melvi Ulvan
Department Of Electrical Engineering,
Lampung University,
Bandar Lampung, Indonesia

Dr. Ardian Ulvan
Department Of Electrical Engineering,
Lampung University,
Bandar Lampung, Indonesia

Dr. Abir Alharbi
Department Of Mathematics
College Of Science
King Saud University
Riyadh, Saudi Arabia

Dr. Irza Sukmana
Faculty Of Healthscience And Biomedical
Engineering
Universiti Teknologi Malaysia
Skudai, Johor , Malaysia

Dr. Mashuri, S.Si., M.Si.
Program Mathematics
Universitas Jenderal Soedirman (Unsoed),
Indonesia

Matrix Science Mathematic (MSMK)

Dr . Fairouz Tchier
Department Of Mathematics
College Of Science
King Saud University
Riyadh, Saudi Arabia

Dr. Hala Mokhtar
Department Of Information Technology
College Of Computer And Information Sciences
King Saud University
Riyadh, Saudi Arabia Professor Dr. Tran Van Tri
Geological Survey Of Vietnam, Hanoi, Viet Nam

Advisory Committee

Hao Wang
Department Of Energy And Resources
Engineering, College Of Engineering Peking
University, Beijing, China

Barry C. Arnold
Department Of Statistics, University Of California,
Riverside Ca 92521, Usa

Pranab Kumar Sen
University Of North Carolina U.S.A

H.M. Srivastava
Professor Emeritus, University Of Victoria Canada

Ahmed Z. Afify
Department Of Statistics, Mathematics &
Insurance, Faculty Of Commerce Benha University,
Egypt

S. Ejaz Ahmed
Dean Faculty Of Mathematics & Science Brock
University, Ontario, Canada

M. Ahsanullah
Department Of Management Sciences, College Of
Business Administration, Rider University, Usa.

Ateq Ahmed Al-Ghamedi
Department Of Statistics, King Abdulaziz
University, Po Box 80203, Jeddah 21589, Saudi
Arabia

Abdullah H. Al-Harbey
King Abdul Aziz University, Jeddah Saudi Arabia

Alya O. Al-Mutairi
Department Of Mathematics, Faculty Of Science
Taibah University, Saudi Arabia

Amer Ibrahim Al-Omari
Department Of Mathematics, Faculty Of Science Al
Al-Bayt University, Jordan

Mir Masoom Ali
George And Frances Ball Distinguished Professor
Of Statistics Emeritus Department Of
Mathematical Sciences, Ball State University,
Muncie, Usa

Morad Alizadeh
Department Of Statistics, Ferdowsi University Of
Mashhad Iran

Raymond J. Carroll
Texas A&M University College Station, Usa

Kevin J. Chen
Hong Kong University Of Science And Technology
Hong Kong

Gauss M. Cordeiro
Departamento De Estatistica, Universidade Federal
De Pernambuco Recife, Pe, Brazil

Hani Doss
Department Of Statistics, University Of Florida
Gainesville, Usa

R.C. Gupta
Department Of Mathematics And Statistics,
University Of Maine, Maine Usa

Shahjahan Khan
Faculty Of Health, Engineering And Sciences
University Of Southern Queensland, Australia

Gane Samb Lo
University Of Gaston Berger Saint-Louis, Senegal

Amin D. Malayeri, Dba
R&D Manager, Cambridge International
Academics Uk

Rahul Mukerjee
Department Of Operations Management Indian
Institute Of Management, Calcutta, India

Liang Peng
Georgia State University Atlanta, Us

Serge B. Provost
Department Of Statistics & Actuarial Sciences, The
University Of Western Ontario, Canada