



Engineering Heritage Journal (GWK)

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

Fakhruddin Che Fauzi

Frequency:

Bi-annual (2 issue per year)

ISSN: 2521-0904 (Print)

ISSN: 2521-0440 (Online)

Price:

Single issue: 50 MYR

Price for abroad

Single issue: 25 USD

Web:

www.enggheritage.com

E-mail:

info@zibelinepub.com

Contents

VOLUME 4, ISSUE 2, 2020		
No	Editorial	Pages
1	SEISMIC ANALYSIS OF A SOIL SLOPE TO DEVELOP CORRELATIONS FOR FACTOR OF SAFETY CONSIDERING HORIZONTAL AND VERTICAL SEISMIC COEFFICIENTS	27-30
2	A STUDY OF PSEUDO SPECTRAL GALERKIN METHOD FOR SOLVING DIFFERENTIAL EQUATIONS	31-33
3	ANALYSIS OF EARTH FILL HYDRAULIC DAM WITH VARYING CREST LENGTH AND PERMEABILITY TO DEVELOP CORRELATIONS	34-38

Editorial

The prime objective of the Galeri Warisan Kejuruteraan (GWK) | Engineering Heritage Journal is to publish scientific and technical research contributions in the fields of civil and environmental engineering. GWK provide a medium by means of which fruits of these researches may be brought to the attention of world's civil communities. In particular regard to the latter, the environmental preservation of natural media (soils and rocks) and the mitigation of soil pollutions, natural and technological risks are now not only major societal challenges, but they are also the source of scientific and technical developments that could be extremely beneficial.

Scientific Board

Editorial Team

Editor in Chief

Dr. Nastaein Qamaruz Zaman
School Of Civil Engineering,
Universiti Sains Malaysia,
Engineering Campus, Nibong Tebal,
Pulau Pinang, Malaysia

Managing Editor

Assoc. Professor. Dr. Nurmin Bt Bolong
Faculty Of Engineering
University Malaysia Sabah
Kota Kinabalu, Sabah
Malaysia

Associate Editors

Dr. Fadzli Mohamed Nazri
School Of Civil Engineering, Universiti Sains
Malaysia, Engineering Campus, Nibong Tebal,
Pulau Pinang, Malaysia

Dr. Nur Sabahiah Abdul Sukor
School Of Civil Engineering, Universiti Sains
Malaysia, Engineering Campus, Nibong Tebal,
Pulau Pinang, Malaysia

Dr Lau Woe Jye
Advanced Membrane Technology Research Centre
(Amtec),
Faculty Of Petroleum And Renewable Energy
Engineering,
Universiti Teknologi Malaysia, 81310 Skudai,
Johor

Dr Hatijah Basri
Fakulti Sains, Teknologi Dan Pembangunan Insan
Universiti Tun Hussein Onn Malaysia
Batu Pahat Johor

Editorial Board

Assoc. Professor. Aeslina Abdul Kadir
Faculty Of Civil And Environmental Engineering,
Universiti Tun Hussein Onn (Uthm)

Dr. Noor Faizah Fitri Md. Yusof
School Of Civil Engineering, Universiti Sains
Malaysia

Assoc. Professor. Norhayati Abd. Hamid
Faculty Of Civil Engineering, Universiti Teknologi
Mara

Dr. Nor Hayati Abd Ghafar
Faculty Of Civil And Environmental Engineering,
Universiti Tun Hussein Onn (Uthm)

Assoc. Professor. Fatimah De'nan
School Of Civil Engineering, Universiti Sains
Malaysia

Dr. Mohd Ashraf Mohamad Ismail
School Of Civil Engineering, Universiti Sains
Malaysia

Dr. Farid Ezanee Mohammad Ghazali
School Of Civil Engineering, Universiti Sains
Malaysia

Assoc. Professor. Fadzil @ Padzil Hassan
Faculty Of Architecture Planning And Surveying,
Universiti Teknologi Mara

Dr. Mohd. Remy Rozainy Mohd Arif Zainol
School Of Civil Engineering, Universiti Sains
Malaysia

Assoc. Professor. Mohd Sanusi S. Ahamad
School Of Civil Engineering, Universiti Sains
Malaysia

Engineering Heritage Journal (GWK)

Professor. Datin Dr. Maryati Mohamed
Universiti Tun Hussein Onn Malaysia

Professor Dr. Mohd. Razman Salim
Universiti Teknologi Malaysia

Associate Professor Dr. Wardah Tahir
Universiti Teknologi Mara

Professor Ir. Dr. Amir Hashim Mohd Kassim
Universiti Tun Hussein Onn Malaysia

Professor Ab Aziz Abdul Latiff
Universiti Tun Hussein Onn Malaysia

Associate Professor Dr. Tan Lai Wai
Universiti Tun Hussein Onn Malaysia

Fatehah Mohd Omar
Universiti Sains Malaysia

Assoc Prof. Dr Farah Talpur
National Centre Of Excellence In Analytical
Chemistry
University Of Sindh Jamshoro, Pakistan

Prof. Dr Kamaruzzaman Yunus
Kulliyah Of Science
International Islamic University
Malaysia

Prof. Dr Muhammad Aqeel Ashraf
School Of Environmental Studies
China University Of Geosciences, Wuhan, China

Assoc Prof. Dr Aamna Balouch
National Centre Of Excellence In Analytical
Chemistry
University Of Sindh Jamshoro, Pakistan

Prof. Dr Ahmed Jalal Khan Chowdhury
Kulliyah Of Science
International Islamic University
Malaysia

Dr Saima Nasreen
Department Of Environmental Sciences
Women University, Multan, Pakistan

Assoc. Prof. Dr Wenzhi Zeng
School Of Water Resources And Hydropower
Engineering,
Wuhan University
Wuhan, Pr. China

Dr Firuza Beghum Mustafa
Department Of Geography
University Of Malaya, Kuala Lumpur

Assoc Prof. Dr Majid Hosseini
Soil Conservation And Watershed Management
Research Institute (Scwmri)
Tehran-Iran

Dr. Khaled S. Balkhair
Department Of Hydrology And Water Resources
Management
King Abdulaziz University, Jeddah, Saudi Arabia

Dr Mohamadreza Gharibreza
Soil Conservation And Watershed Management
Research Institute (Scwmri)
Tehran-Iran

Associate Professor Dr. Shahreen Kasim
Head Of Centre,
Soft Computing And Data Mining (Smc)
Faculty Of Computer Science & Information
Technology
University Tun Hussein Onn Malaysia
Malaysia

Dr. Nguyen Viet Duc
Thuyloi University
175 Tay Son, Dong Da, Hanoi, Vietnam

Advisory Committee

Prof. Mark Milke
University Of Canterbury, New Zealand

Professor George Ofori
School Of Design And Environment, National
University Of Singapore

Dr. Pedro Luiz Borges Chaffe
Department Of Sanitary And Environmental
Engineering, Federal University Of Santa Catarina,
Brazil

Dr. Kriyo Sambhodo
Faculty Of Marine Technology, Institut Teknologi
Sepuluh Nopember Surabaya (Its), Indonesia

Assoc. Prof. Teng The Lim
Agriculture Systems Management, University Of
Missouri Columbia, Usa

Professor Dr. Ahmad Tarmizi Abdul Karim
Universiti Tun Hussein Onn Malaysia

Professor Yukihiro Shimatani
Kyushu University, Jepun

Professor Dr. Zulkifli Yusop
Universiti Teknologi Malaysia

Professor Dr. Nor Azazi Zakaria

Engineering Heritage Journal (GWK)

Malaysia

Universiti Sains Malaysia

Professor Sr. Ir. Dr. Hj Suhaimi AbdTalib
Universiti Teknologi Mara

Datuk Dr. Francis Wong Ching Weoh
Esi Consultant

Professor Ir. Dr. Junaidah Ariffin
Universiti Teknologi Mara

Dr. Mohd Pauze Mohamad Taha
Solid Waste And Public Cleansing Management
Corporation (Swcorp)