

CURICULUM VITAE



A. **PERSONAL DETAILS**

1. Name : Ts. Dr. Nor Hazwani Binti Md. Zain
2. Date of Birth : 01-09-1983
3. Gender : Female
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https://scholar.google.com/citations?user=_0WcioYAAAAJ&hl=en



<http://prisma.uitm.edu.my/prisma/?doit=home>



B. **BRIEF PERSONAL HISTORY**

Nor Hazwani Md Zain obtained her Bachelor's degree in Civil Engineering from Universiti Malaya (UM), Malaysia in 2005. In 2007, she received a Master's degree in Civil Engineering (Geotechnique) from University of Teknologi MARA. After her Master's degree, she worked as a Geotechnical Engineer in a Consultant firm for about one year before joining UiTM in 2008. She has been serving Uitm since then before joining a professional

engineer attachment under the UiTM vice chancellor's special project in 2011 for a year. Soon after that, she pursued his PhD in Delft University of Technology, The Netherlands in the field of Geotechnical Engineering majoring in peat or highly organic soil behaviour and she is currently waiting for her PhD defence.

Her research interest is looking at the behaviour of peat and organic soil behaviour when exposed to climatic change which can lead to ground settlement, developing sustainable geotechnical methods in construction works, finite element modelling in geotechnical engineering and understanding the mechanics of saturated and unsaturated soil in soft soils and residual soils.

C. **ACADEMIC QUALIFICATION**

No.	Name of Institution	Degree/Qualification	Date awarded
1.	Delft University of Technology, The Netherlands	PhD in Geotechnical Engineering	July 2019
2.	Universiti Teknologi MARA, Malaysia	MSc in Civil Engineering (Geotechnique)	2007
3.	Universiti Malaya, Malaysia	Bachelor of Engineering (Civil)	2005

D. **WORKING EXPERIENCE**

1.	2007-2008	Geotechnical engineer in T&T Konsult Sdn. Bhd.
2.	2009-2010	Lecturer in University Teknologi MARA
3.	2011-2012	Geotechnical Engineer at T&T Konsult Sdn. Bhd (attachment for professional training under VC special project)
4.	2013-2017	PhD student at Delft University of Technology, the Netherlands
5.	2018-present	Senior Lecturer in University Teknologi MARA, Shah Alam, Selangor

E. **PROFESSIONAL QUALIFICATIONS**

1. Professional Technologist, Malaysia Board of Technologists (MBOT) - Since 2018.
2. Graduate Engineer, Board of Engineers Malaysia (BEM) - Since 2008.

3. Graduate Member, The Institution of Engineers Malaysia (IEM) - Since 2010

F. **AREA OF RESEARCH**

Behaviour of peat and organic soils, finite element modelling, green technology and sustainable constructions.

G. **PHD THESIS**

Effect of Oxidation on the Compression Behaviour of Organic Soils.

H. **RESEARCH GRANTS**

1. The Modelling of Lateral Movement of Soft Soil Using Finite Element Analysis and Laboratory Model.
Grant: UiTM Internal Fund
Role: Co-Investigator
Year: 2009-2010
2. Numerical Analysis of Soil Behaviour of Soil Behaviour Due to Embankment Construction Using Different Constitutive Models.
Grant: UiTM Internal Fund
Role: Principle Investigator
Year: 2009-2010
3. Verification of Small Scale Drinking Water Production Processes Using Two Stage GFF Fibre at Busan, Korea.
Grant: Korean Fund (Contract Research)
Role: Co-Investigator
Year: 2008-2010
4. Biocementation Calcite Precipitation Theory
Grant: FRGS
Role: Principle Investigator
Year: 2012-2015

I. **PUBLICATION**

1. **Md. Zain, N.H.**, Mahamood, A.R. and Mohamed Jais, I.B.(2009). *Soft Soil Behaviour Of Embankment Construction Using Different Constitutive Models*. Regional Conference on Environmental and Earth Resources.
2. **Md. Zain, N.H.**, Mahamood, A.R. and Mohamed Jais, I.B.(2009). *Slope Stability Analysis Of An Embankment Using Different Constitutive Models*. Regional Conference on Environmental and Earth Resources.

3. Hong-Hooi Liew , **Nor Hazwani Md. Zain**, Chang-Han Yun and Suhaimi Abdul-Talib (2009). *Evaluation Of A Two-Stage Fiber Filtration System For Drinking Water Production*. Regional Conference on Environmental and Earth Resources, Pahang.
4. **Nor Hazwani Md. Zain**, Bahardin Baharom, Ismacahyadi Bagus Mohamed Jais (2010). *The Compaction Of Laterite Using Gyrotory Compactor*. 8th International Conference on Geotechnical and Transportation Engineering.
5. Intan Shafika Saiful Bahri, **Nor Hazwani Binti Md. Zain**, Rozaini Ram (2010). *Swelling Potential Of Clay Mineral Contents Of Soft Clay*. 8th International Conference on Geotechnical and Transportation Engineering.
6. Norbaya Sidek, **Nor Hazwani Md. Zain**, Norazlan Khalid, Aidillah Mohd. (2010). *Effect Of Particle Composition On The Shear Strength Characteristics Of Residual Soil At Constant Dry Density*. 8th International Conference on Geotechnical and Transportation Engineering.
7. **Nor Hazwani Md. Zain**, Juhaizad Ahmad, Yasmin Ashaari (2010). *Modelling of Lateral Movement in Soft Soil Using Hardening Soil Model*. Uk Sim 13th International Conference on Modelling and Simulation. Cambridge University, Uk.
8. Norbaya Sidek, Suhaimi Abdul Talib, **Nor Hazwani Md. Zain**, Nik Roslan Nik Abdul Rashid, Ilyani Akmar Abu Bakar (2015). An Investigation on the Effect of Calcite Bacteria Seeding on Shear Strength of Peat Soil via an Unconfined Compression Test .*Applied Mechanics and Materials*, Vol. 773, 1513-1517.
9. **NHM Zain**, LA van Paassen, C. Jommi, TJ Heimovaara (2015). The effect of decomposition on compression behaviour of organic sediments from Wormer Jisperveld, The Netherlands. Biogeocivil Summit, Delft, The Netherlands. Pg 21.
10. S Chin a Moei, LA van Paassen, **NHM Zain**, C Chassagne, C. Jommi (2017). The Effect of Organic Matter on Shrinkage and Water Retention Behaviour of Organic Dredged Sediments. Responsible Management of Peatlands.
11. **NHM Zain**, M Mustapha, ASA Rahman (2018). Settlement Behaviour of Peat Reinforced with Recycled Waste Tyre Granules. International Conference on Built Environment and Engineering.
12. ASA Rahman, J Ahmad, N Sidek, **NHM Zain**, MIF Rosli (2018). Shear Strength Behaviour of Residual Soil mix mixed with usable cooking oil for unsoaked and soaked. *Advances in Geoscience*, 2(1).

13. **NHM Zain**, MI Zulastry (2019). Compressive Strength of Peat Soil Treated with Waste Tyre Granules. Lecture Notes in Civil Engineering (Springer) (under review)

J. **BOOK**

Zain, NHM, Jommi, C, van Paassen, L.A. (2019) Effect of Oxidation on the Compression Behaviour of Organic Soils. Delft University of Technology, The Netherlands. ISBN: 978-94-028-1596-2

K. **CONSULTANCY EXPERIENCE**

Client: T&T Konsult Sdn Bhd

Project: East Coast Economic Region Project Development (ECER)
Jalan Persekutuan 8 dan 9 Central Spine Road Pakej 4 ; Kg Relong to Raub, Pahang –PACKAGE D

Workscope: Carry out slope stability analysis, Prepare ground treatment schedule

Project: Proposed Construction of Hydrocarbon Storage and Distribution Facility at Tanjung Bin, Johor, Malaysia

Workscope: Pile design, Prepare Geotechnical Interpretative Report

Project: Proposed Setia City Mall, Setia Alam

Workscope: Supervision of Bored pile and Driven pile installation

Project: Proposed Alor Pongsu Interchange At Km 181 North South Expressway

Workscope: Settlement and slope stability analysis

Project: Proposed National Institute of Health for Ministry of Health, Malaysia at Setia Alam, Selangor Darul Ehsan

Workscope: Settlement Analysis and assists in preparing Tender Evaluation report.

Project Mass Rapid Transit Lembah Kelang Jajaran Sungai Buloh – Kajang Section E6

Workscope: Site Supervision and Pile Design

Project: Cadangan Merekabentuk Dan Menyelia Projek Persimpangan Bertingkat Seri Kembangan (Jalan Putra Permai) Sebagai Akses ke Lebuhraya Kuala Lumpur- Putrajaya (Lebuhraya Mex) – FASA 1

Prepare Bill of quantities for Site investigation works

Workscope: Prepare bill of Quantities for site investigation works

Project: Proposed Design, Construction & Completion Of Condominium At Bukit Rahman Putra, District Of Shah Alam, Selangor Darul Ehsan For Messr Sabna Development Sdn. Bhd

Workscope: Pile testing

Project: East Coast Economic Region Project Development (ECER)
Jalan Persekutuan 8 dan 9 Central Spine Road Pakej 4 ; Kg Relong, Raub,
Pahang – PACKAGE A
Workscope: Slope Stability Analysis

Project title: Upgrading of natural materials and methods for sustainable
lift up of low lying polder areas
Year: 2013-2016
Partners: Delft University Technology, Wageningen University, Deltares,
witteveenbos, tauw, arcadis
Site location: Wormer Jisperveld, The Netherlands
Workscope: Site visit and sample collection, engineering testing:
Oedometer testing, Physical and chemical properties test for organic soils,
Bioreactor test.

Project title: Stabilization of peat silica based solidification
Partners: Delft University of Technology and Deltares
Year: 2013
Site Location: Netherlands
Workscope: Sample testing to determine the liquid limit of soil at different
stabilising composition.

Project: Pipe Jacking Project Underneath LRT Lines to Upgrade the Drainage
System at LRT SG Besi Station, Kuala Lumpur
Year: 2018
Workscope: Simulation of settlement of non-treated and treated soil as a
result of installation of concrete pipe

L. **AWARD**

Doctoral Education Programme Certificate (TU Delft Graduate School)
Year: 2016

UiTM Excellent Service Award (Faculty of Civil Engineering)
Year: 2018

Best paper and best presenter in the International Conference on Built
Environment and Engineering.
Role: Main author
Year: 2018

Best presenter in the International Conference International Conference on
Architecture and Civil Engineering
Year: 2019
Role: Main author

M. **INTEREST**

Compression Behaviour of Oxidised Organic Soils and Peat
Geotechnics of Organic Soils and Peat
Sustainable Geotechnical Engineering
Finite element modelling