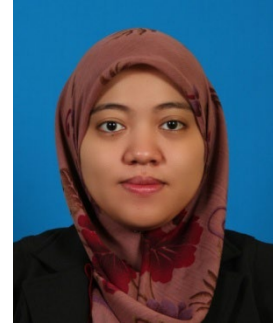


RESUME

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Group Leader
Hydraulics and Hydrology Research Group
Faculty of Civil Engineering, UTM

Research Fellow,
Centre for Environmental Sustainability and Water Security (IPASA), UTM

PERSONAL PARTICULARS

Nationality : Malaysian
Member : 1) Board of Engineers Malaysia, BEM (P125193)
2) Institute of Engineers Malaysia, IEM (49278)
3) Malaysian Society for Engineering and Technology, mSET (00566)
4) Asian Network on Climate Science and Technology (ANCST)
5) Japan Society of Civil Engineering (AM-10-00189)
6) MyKyoto (Kyoto University Alumni Malaysia)
7) Member of NADIM Malaysia, Vice President

Research Links:
https://www.researchgate.net/profile/Nor_Eliza_Alias
<https://utmscholar.utm.my/Scholar/ScholarInfoDetails/k3Qp>
<https://www.scopus.com/authid/detail.uri?authorId=55583417300>

Education Links:
YOUTUBE Playlist: NOR ELIZA BINTI ALIAS FKA
<https://youtube.com/playlist?list=PLWzSN4FN0W7t9s0b5KR8E5NI9KUrbgLMh>

HIGHER EDUCATIONAL BACKGROUND

Level : PhD (Engineering) – Civil and Earth Resources Engineering
PhD parallel program : GCOE-ARS: Sustainability/Survivability Science for a Resilient Society
Adaptable to Extreme Weather Conditions, Kyoto University, Japan
Year : 1 Oct 2011 – 24 Sept 2014
University : Kyoto University - Disaster Prevention Research Institute (DPRI)
Research title : Improving Extreme Rainfall Estimates Considering Regional Frequency Analysis
Research area : Extreme rainfall, climate change impact, hydrology

Level : Master of Engineering (Civil – Coastal and Maritime)
Year : Dec 2007 – Jan 2011
University : Universiti Teknologi Malaysia, Skudai, Johor, Malaysia
Research title : An Experimental Study of Tsunami Run-up on a Vegetated Coastal Slope
Mode : Master by Research
Research area : Physical experiment, tsunami, mangroves

Level : Bachelor's Degree in Civil Engineering
Year : July 2002 – August 2007
University : University Teknologi Malaysia, Skudai, Johor, Malaysia
Final Year Project : Hydraulic Properties using Wellguard System (River and coastal bank protection)
Award : Deans List Award

EXPERIENCE

1. WORKING

Current:

Senior Lecturer (24 September 2014 – current),

Administrative Positions:

Leader Hydraulics and Hydrology Research Group (HHRG), UTM

Program Coordinator: Master of Engineering (Hydraulics and Hydrology), UTM

Leader Ecohydrology Research Group (August 2019 - May 2022)

Tutor (Dec 2007-Sept 2014)

Industrial Attachment:

Jurutera Perunding Putra (Jun 2022-May2023)

2. TEACHING

- 1) Master of Engineering: Urban Stormwater Management (3 credit)
- 2) Master of Engineering: Statistical Hydrology (3 credit)
- 3) Master in Disaster Management: Flood Forecasting and Hazard Mapping (3 credit)
- 4) Bachelor of Engineering: Hydrology and Water Resources (3 credit)
- 5) Bachelor of Engineering: Fluid Mechanic (3 credit)
- 6) Bachelor of Engineering: Laboratory Hydraulics and Hydrology (2 credit)

Total Credit teaching: +215 credits

3. SUPERVISION

AS MAIN-SUPERVISOR

PHD

- 1) Muhammad Wafiy Adli Bin Ramli *Development of Integrated Disaster Risk Index Model for Local Assessment In Malaysia (Graduated)*
- 2) Farizul Nizam Bin Abdullah *Identifying the Meteorological Homogenous Zones within ASEAN (Malaysia-Indonesia) and Its Application for Extreme Rainfall Analysis and Climate Change.*
- 3) Muhamad Haris Jumaat *Modelling the Combined Effect of Land-use Dynamic and Climate Change On Flood Risk In Sungai Selangor Basin*
- 4) Muhamad Anwar Bin Ramzan *Modelling Historical & Future Floods Affected by Climate Change & Land Use Using Shetran in Johor River Basin*
- 5) Yusrin Faiz Bin Abd Wahab *Rainfall-runoff relationship subjected to population and waste growth in an urban catchment.*
- 6) Ahmad Zuhdi Bin Ismail *Development of Flood Damage Risk for Semi Urban Area Tok Jiiring, Terengganu (Graduated)*

MASTER BY RESEARCH

- 7) Ummi Hani Binti Mahamad Anuar *Climate Change Impact to Flood Hazard at Langat River Basin (Graduated)*
- 8) Rasnavi A/P Paramasivam *Improving Probable Maximum Precipitation Estimates Using Homogeneous Region in Malaysia (Graduated)*
- 9) Fara Aiza Binti Md Sanin *Hazard Mapping for Open-Fire Disaster of Johor State Using Geospatial Technology (Graduated)*
- 10) Mohamad Amirul Fitry Bin Mohd Bahar *Land Use Change Impact on Streamflow Properties in Selangor River Basin (Graduated)*

AS CO-SUPERVISOR

PHD

- 11) Rahmah Binti Mohd Lokoman *Time Varying Copula in Drought Analysis (Graduated)*
- 12) Nur Fatiha Binti Wahi Akbar *Modelling the Effect of Low Flow in Predicting Future Hydrological Drought In Selangor River Basin*
- 13) Hamizah Amalina Binti Amlan *Vulnerability Assessment of Road Networks in Cases of Flood*
- 14) Naqibah Binti Aminuddin Jafry *Flood Frequency Analysis in Johor River Basin using Vine Copula*
- 15) Muhammad Wafiy Adli Ramli, *Improving the Evacuation Preparedness Planning for Disaster Relief in Kelantan by Using Geographical Information System. (Graduated)*
- 16) Sharainie Binti Sahrin, *Regional Frequency Analysis on Peninsular Malaysia using L-moments. (Graduated)*
- 17) Muhammad Saiful Adham Bin Shukor, *Detecting Trends and Developing Intensity Duration Frequency (IDF) Curve using Future Rainfall Data at Kelantan State (Graduated)*
- 18) Suhaila Binti Sahat, *Effect of Water Abstraction and Climate Change on The Flow Regime of Sungai Johor and Sungai Muar (Graduated)*

- 19) Mohamad Amirul Fitry Mohd Bahar, *Land Use Change Impact on Stream Flow Properties In Selangor River (Graduated)*

UNDER-GRADUATE SUPERVISION – +21 Students since Sem1 2015/2016 until now

4. RESEARCH PROJECTS (Selected)

International

- 1) **Project Leader**, Improving Extreme Rainfall Estimates Using Transboundary Rainfall Data (South-East Asia) for Flood Risk Management, *JASTIP-NET 2019 Collaborative Research Fund. Dec 2019 – July 2020*.
- 2) **Project Leader**, Assessing the risk of extreme flood using trans-boundary extreme rainfall analysis, *JASTIP-NET 2018 Collaborative Research Fund. Sept 2018 – Sept 2019*.
- 3) **Project Leader**, Developing an Integrated Disaster Risk Index considering Climate Change - A pilot project for Malaysian River Basin, Developing an Integrated Disaster Risk Index considering Climate Change - A pilot project for Malaysian River Basin, *MJIIT Flagship Research Fund. –May 2017 - Oct 2019*
- 4) **Project Leader**, A Community-Based Study on the Effectiveness of Flood Emergency Warning System in Malaysia, *AUNSEED-SRJP 2016/2017. 6 March – 30 March 2017*.
- 5) **Project Leader**, Identifying the Meteorologically Homogeneous Zones within Asean (Malaysia-Indonesia) and Its Application for Extreme Rainfall Analysis and Climate Change, *JASTIP 2016 Collaborative Research Fund. Nov 2016 – March 2017*.
- 6) **Project Member as international collaborator**. “Global Climate Change and Local Anthropogenic Impact Assessment on Flood and Peat Fire (Haze) Risks in the Humid Tropical River Basins”, *JASTIP-NET 2021 Collaborative Research Fund. April 2021 to March 2022*– project leader Apip, Asia Pacific Centre for Ecohydrology (APCE), LIPI Indonesia (to be registered in RADIS)
- 7) **Project Member as international collaborator**. “Natural based solutions for sustainable development in ASEAN river basins”, *JASTIP-NET 2021 Collaborative Research Fund. April 2021 to March 2022*– project leader Pham Hong Nga, Thuyloi University, Vietnam (to be registered in RADIS)
- 8) **Project Member**. “Global Climate Change and Local Anthropogenic Impact Assessment on Flood and Peat Fire (Haze) Risks in the Humid Tropical River Basins”, *JASTIP-NET 2021 Collaborative Research Fund. April 2021 to March 2022*– project leader Apip, Asia Pacific Centre for Ecohydrology (APCE), LIPI Indonesia –(to be registered in RADIS)
- 9) **Project Member**. “IoT based Real-time monitoring for Flood Early Warning System”, *JASTIP-NET 2021 Collaborative Research Fund. April 2021 to March 2022*– project leader Ahmad ‘Athif Mohd Faudzi, Universiti Teknologi Malaysia (to be registered in RADIS)
- 10) **Project Member**. “GCRF Water Security and Sustainable Development Hub”, *GCRF British High Commision, February 2019 to February 2024*- project leader Prof Azmi Aris.

National

- 1) **Project Leader**, Hydrological and Water Quality GIS-Web based Platform for Real-time and Climate risk Monitoring of Tebrau River, *UTM COE Flagship*. June 2025-May2028 (1 PhD research student, 1 MSc research student)
- 2) **Project Leader**, Downstream water level prediction using Hydrological Routing Analysis and Machine Learning Application, *UTM PAS Grant*. Nov 2024-May2026 (1 Research Asistant)
- 3) **Project Leader**, Desiminasi sistem amaran awal banjir berkesan di Malaysia - Kajian kes Banjir November 2024 Pantai Timur, *UKM MONSUN 1.5*, May 2025 - Oct 2025.
- 4) **Project Leader**, Water Resource Mapping for Open-Fire Hazard Preparedness Of Johor State- Current and Future Climate Exposure, *UTMShine 2021*, 1 Oct 2021 – 30 Sept 2023.
- 5) **Project Leader**, Improving Statistical Probable Maximum Precipitation Using Homogeneous Regions, *UTM Fundamental Research (UTMFR) 2020*, Jan 2020 – Dec 2021.
- 6) **Project Leader**, Conceptualizing an Integrated Natural Disaster Risk Model to Climate Events and Community Resilience, Fundamental Research Grant (FRGS) 2019. Jan 2019-Dec 2021
- 7) **Project Leader**, Impact of Climate Change to Regional Extreme Rainfall Analysis Considering Homogeneous Regions, *GUP Tier 1, (Research University Grant)*.Feb 2018-Jan 2020
- 8) **Project leader**. A Community-Based Study on the Effectiveness of Flood Emergency Warning System in Malaysia – April 2015 to March 2016. *Fundamental Research Grant Scheme*.
- 9) **Project member**. HIR 10.1 : Temporal and spatial trends of rainfall intensity and regional Intensity Duration Frequency Curve (IDF) for Johor River Basin.- April 2018 to September 2021. *High Impact Research Grant* – Project Leader Prof Zulkifli Yusop
- 10) **Project member**. Land Use Change and Its Impact On Sungai Johor Morphology And River Basin Ecosystem Services – Jan 2020 to June 2023 – *UTM High Impact Research* – project leader Prof Kasturi Devi Kanniah
- 11) **Project member**. MRUN 1.1: Modelling and quantification of geo and hydrological hazards in Sungai Selangor River Basin – Jan 2019 to May 2023 – *Malaysia Research University Network (MRUN) Grant*- Project Leader Prof. Zulkifli Yusop
- 12) **Project member**. HIR 10.2 : Drought Analysis For Sustainable Water Supply In Johor – April 2018 to Sept 2021, *High Impact Research Grant (HIR)* - Project Leader Prof. Fadhilah Yusof
- 13) **Project member**. Flood modelling and environmental flow of Sungai Johor basin.- April 2015 to December 2015. *Fundamental Research Grant Scheme*.
- 14) **Project member**. Long Term Analysis of Tidal Range, High Tides and Selected Estuarine Water Level in East Coast of Malaysia– April 2015 to December 2015. *Fundamental Research Grant Scheme*.
- 15) **Project member**. Characterization of Malaysia's East-Coast Extreme Rainfall and Formulation of Rainfall Distribution Pattern– April 2015 to March 2016. *Transdisciplinary Research Grant Scheme*.

5. CONSULTANCY PROJECTS

- 1) **Leader & trainer**, Perkhidmatan Latihan Kursus Sukarelawan Bencana 8-11 September 2024, National Disaster Management Association (NADIM Malaysia).
- 2) **Project Consultant**, Preparation for Johor's green development policy – Climate Change (Penyediaan Polisi Pembangunan Hijau Johor – Perubahan Iklim), 1 Mac 2024 – 28 February 2025, Permodalan Darul Takzim (PDT).

- 3) **Leader & Project Consultant**, Consultancy Service for Refinement of National Technical Guidelines for Sabo Structure Suitability Study in Malaysia, National Water Research Institute Malaysia (NAHRIM), (November 2023 – January 2024)
- 4) **Leader & Project Consultant**, Development of Construction Industry Standard (CIS) – Guideline for Flood Risk Assessment and Flood Vulnerability Index For Critical Infrastructure (CI) In Malaysia, A project for the Malaysian Construction Development Board, Construction Research Institute of Malaysia, CREAM (April 2023-November 2023)
- 5) **Leader & Project Consultant**, Revised and Update Climate Change Malaysia Adaptation Index, MAIN (NAHRIM), (October 2022 – October 2023)
- 6) **Leader & Project Consultant**, Sabo Dam Development Research Project in Gunung Jerai, Kedah, National Water Research Institute Malaysia (NAHRIM), (October 2021 – April 2022)
- 7) **Leader & Project Consultant**, Development of the Manual for Flood Risk Assessment and Flood Vulnerability Index for Critical Infrastructure, A project for the Malaysian Construction Development Board (Dec2020-March2021)
- 8) **Project Consultant**, MLIT Project for a Study on Project Implementation Preparation, Johor Bahru (Scope: Study on Possibility of Utilization of the River Management and Monitoring Tool (RMMT) to the River Disaster Prevention- Skudai River Basin), Malaysia, through Iskandar Regional Development Authority (IRDA) for Yachiyo Engineering and Japanese Ministry of Land, Infrastructure, Transport and Tourism (Dec 2022)
- 9) **Project Consultant**, Machap Dam Watershed Integrated Management Plan (ICMP), Kluang, Johor for Department of Irrigation and Drainage Malaysia (Aug 2022 – July 2023)
- 10) **Leader and Project Consultant**, Johor River Smart Disaster Risk Management Project funded by Smart-JAMP scheme under MLIT in Japan together with Iskandar Regional Development Authority (IRDA), (Feb 2022)
- 11) **Project Consultant**, Study of Tanjung Kupang Agricultural Drainage Master Plan, Johor, Department of Irrigation and Drainage Malaysia (October 2021 – March 2022)
- 12) **Project Consultant**, Detailed Design of Sungai Batu Pahat Flood Mitigation Plan, Johor (Sri Medan), Department of Irrigation and Drainage Malaysia (September 2021 – June 2023)
- 13) **Project Consultant**, Skudai River Total Maximum Daily Load (TMDL) Project for Badan Kawalselia Air Johor (BAKAJ). (Ogos 2020 – April 2021)
- 14) **Project Consultant**, Malaysia Adaptation Index (MAIN), for National Hydraulic Research Institute, NAHRIM and The Minister of Water, Land and Natural Resources (KATS) (July 2020 – March 2021)
- 15) **Project Consultant**, Preliminary Study and Possibilities for Technology and Design of Decentralized Water Treatment System and Other Related Works in the Federal Territory of Kuala Lumpur for National Hydraulic Research Institute (Disember 2019 – Disember 2020)
- 16) **Project Consultant**, Climate Change Adaptation Framework on Water Sectors for National Hydraulic Research Institute of Malaysia and Ministry of Environment and Water (KASA) (October 2019 – May 2020)
- 17) **Project Consultant**, Pelan Tindakan Pengurusan Air bagi PBT Pengerang (1January 2018 – 30 September 2018)
- 18) **Project Consultant**, Upgrading of the Johor Bahru City Centre District (CBD) Area Drainage System, IRDA (1 October 2017 – 15 May 2018)
- 19) **Project Consultant**, Iskandar Groundwater Study, IRDA (1 October 2017 – 31 December 2017)
- 20) **Project Consultant**, Integrated Lake Basin Management Plan: For Tasik Sembrong, Johore and Batang Ai, Sarawak, (16 May 2016 – 15 October 2016)

6.

PUBLICATION (INDEXED)**WOS**

- 1) Jafry, N., & Jamaludin, S., Yusof, F., Mohd Nor, S. R., **Alias, N. E.**, (2024). Enhancing flood risk assessment in the Johor River Basin through trivariate copula. *Journal of Water and Climate Change*. 15. 10.2166/wcc.2024.624.(Q2)
- 2) Sa'adi, Z. , **Alias, N.E.** , Yusop, Z., Hamed, M.M., Shukla, P., Houmsi, M.R., Mohamad, N.A., Shiru, M. S., Sa'adi, N., Muhammad, M.K.I., Iqbal, Z., Banday, U.J., (2024) Characterization of the future northeast monsoon rainfall based on the clustered climate zone under CMIP6 in Peninsular Malaysia, *Atmospheric Research*, 304, July 2024, 107407, <https://doi.org/10.1016/j.atmosres.2024.107407> (Q1)
- 3) Sa'adi, Z. , **Alias, N.E.** , Yusop, Z., Iqbal, Z., Houmsi, M.R., Houmsi, L.N., Adli Ramli, M.W., Muhammad, M.K.I. (2024) Application of relative importance metrics for CMIP6 models selection in projecting basin-scale rainfall over Johor River basin, Malaysia, *Science of The Total Environment*, 912, ISSN 0048-9697, <https://doi.org/10.1016/j.scitotenv.2023.169187>. (Q1)
- 4) Sa'adi, Z., Hamed, M. M., Muhammad, M. K. I., Chow, M. F., Mohamad, N. A., Basri, M. H. A., Ahmad, M. F., Sa'adi, N, **Alias, N. E.**, Yusop, Z, Houmsi, M. R. , Shukla, P., Aris, A. (2024) Employing gridded-based dataset for heatwave assessment and future projection in Peninsular Malaysia, *Theoretical and Applied Climatology*, Vol. 5, Issue 6, 5521-5278, June 2024, 10.1007/s00704-024-04946-2
- 5) Sa'adi, Z., Yusop, Z., **Alias, N.E.**, Chow, M.F., Muhammad, M.K.I., Ramli M.W.A., Iqbal Z., Shiru M.S., Rohmat F.I.W., Mohamad N.A., Ahmad, M. F. (2023) Evaluating Imputation Methods for rainfall data under high variability in Johor River Basin, Malaysia, *Applied Computing and Geosciences*, Vol 20, Dec 2023, 100145, 10.1016/j.acags.2023.100145
- 6) Ramli, M. W. A, **Alias, N. E.**, Yusof, H. M, Yusop, Z., Taib, S. M., Wahab, Y. F. A, Hassan, S. A., (2023) Spatial multidimensional vulnerability assessment index in urban area – A case study Selangor, Malaysia, *Progress in Disaster Science*. Vol. 20, 100296. December 2023 <https://doi.org/10.1016/j.pdisas.2023.100296>
- 7) Sa'adi, Z., Yusop, Z., **Alias, N. E.**, Shiru, M. S., Muhammad, M. K. I., Ramli, M. W. A., (2023) Application of CHIRPS dataset in the selection of rain-based indices for drought assessments in Johor River Basin, Malaysia, *Science of the Total Environment*. [Volume 892](https://doi.org/10.1016/j.scitotenv.2023.164471), 20 September 2023, 164471 <http://dx.doi.org/10.1016/j.scitotenv.2023.164471> (Q1)
- 8) Sa'adi, Z., Yusop, Z., **Alias, N. E.** (2023). Long-term homogeneity and trend analysis of seasonality and extreme rainfall under the influence of climate change in Johor River basin, Malaysia. *Natural Hazards*, 117(2):1-33. April 2023 10.1007/s11069-023-05930-1 (Q2)
- 9) Amlan, H. A., Hassan, S. A., **Alias, N. E.** (2023). Discovering the global landscape of vulnerability assessment method of transportation network studies: A bibliometric review. *Physics And Chemistry of The Earth*, Vol.129. 103336 , February 2023 10.1016/j.pce.2022.103336 (Q2)
- 10) Sanin, Fara Aiza Md, **Alias, Nor Eliza**, Kanniah, Kasturi Devi, Kadir, Mariyana Aida Ab., Mohamad, Izni Izzati and Paramasivam, Rasnavi, (2022). "Open data application to evaluate exposure of wildfire to water resources: A case study in Johor, Malaysia" *Journal of Hydrology and Hydromechanics*, vol.70, no.4, pp.475-480 December 2022 <https://doi.org/10.2478/johh-2022-0029> (Q3)
- 11) Hassan, Sitti and Amlan, Hamizah Amalina and **Alias, Nor Eliza** and Kadir, Mariyana Aida Abd and Mashros, Nordiana and Sukor, Nur Sabahiah Abdul, (2022). Vulnerability of Road

Transportation Networks: A Bibliometric Analysis. *International Journal of Disaster Risk Reduction*. [Volume 83](#), December 2022, 103393 Available at SSRN: <https://ssrn.com/abstract=4002940> or DOI: 10.1016/j.ijdr.2022.103393 (Q1)

- 12) Bernhofen, M. V., Cooper, S., Trigg, M., Mdee, A., Carr, A., Bhawe, A., Solano-Correa, Y. T., Pencue-Fierro, E. L., Teferi, E., Haile, A.T., Yusop, Z., **Alias, N. E.**, Sa'adi, Z., Bin Ramzan, M. A., Dhanya, C. T., Shukla, P. (2022). The Role of Global Data Sets for Riverine Flood Risk Management at National Scales, *Water Resources Research*, 58(4) 29 March 2022 10.1029/2021WR031555
- 13) Sa'adi, Z., Yusop, Z. & **Alias, N.E.** (2022), Inter-comparison on the Suitability of Rain-Based Meteorological Drought in Johor River Basin, Malaysia. *KSCE J Civ Eng.*, 26, 2519–2537. 28 February 2022 <https://doi.org/10.1007/s12205-022-1481-7> (Q3)
- 14) Ramli, M. W. A, **Alias, N. E.**, Yusof, H. M, Yusop, Z., Talib M.S (2021).Development of A Local Integrated Disaster Risk Assessment Framework for Malaysia , *Sustainability*, 13(19), 10792. 28 September 2021 <https://doi.org/10.3390/su131910792> (Q2)
- 15) Lokoman, R. M., Yusof, F., **Alias, N. E.**, Yusop, Z. (2021). Construction of Dependence Structure for Rainfall Stations by Joining Time Series Models with Copula Method, *Malaysian Journal of Fundamental and Applied Sciences*, 17(4): 306-320. August 2021 <https://doi.org/10.11113/mjfas.v17n4.2345>
- 16) **Alias, N. E.**, Haniffah, M. R. M., Harun, S. (2021). Editorial: Water as Resources and For Livelihood: Impact and Assessment in Asia's Changing Climate, *Journal of Water and Climate Change*, 11(4); 933-934. Dec 2020. 10.2166/wcc.2020.300
- 17) Muhammad Saiful Adham Shukor, Zulkifli Yusop, Fadhilah Yusof, Zulfaqar Sa'adi and **Nor Eliza Alias** (2020). Detecting Rainfall Trend and Development of Future Intensity Duration Frequency (IDF) Curve for the State of Kelantan, *Water Resource Management*, 34:3165–3182. 06 July 2020 <https://doi.org/10.1007/s11269-020-02602-8> (Q1)
- 18) Ahammed, S. J., Homsy, R., Khanu, N., Shahid, S., Shiru, M. S., Mohsenipour, M., Ahmed, K., Nawaz, N., **Alias, N. E.**, Yuzir, A., (2020). Assessment of changing pattern of crop water stress in Bangladesh. *Environment Development and Sustainability*, 22(5); 4619-4637. 11 June 2019 10.1007/s10668-019-00400-w (Q2)
- 19) **Alias N. E.**, Salim N. A., Taib S. M., Yusof M.B.M., Saari R., Ramli M.W.A, Othman I.K., Annammala K.V., Yusof H.M., Ismail N., Yuzir A., Blesnkinsop S., (2020). Community responses on effective flood dissemination warnings—A case study of the December 2014 Kelantan Flood, Malaysia. *J Flood Risk Management*; e12552. May 2019 <https://doi.org/10.1111/jfr3.12552> (Q1)
- 20) Mahiuddin Alamgir, Morteza Mohsenipour, Rajab Homsy, Xiaojun Wang, Shamsuddin Shahid, Mohammed Sanusi Shiru, **Nor Eliza Alias**, Ali Yuzir., (2019) Parametric Assessment of Seasonal Drought Risk to Crop Production in Bangladesh. *Sustainability*, 11(5), 1442. 8 March 2019 <https://doi.org/10.3390/su11051442> (Q2)
- 21) Mohamad, N. A., Jamal, M. H., Annammala, K. V., Yusop, Z., **Alias, N. E.**, Sugumaran, D., (2018). Impact of forest conversion to agricultural plantation on soil erosion. 12th International Civil Engineering Post Graduate Conference (SEPKA) - The 3rd International Symposium on Expertise Of Engineering Design (ISEED) (SEPKA-ISEED 2018), *MATEC Web of Conferences*, Vol. 250., 10.1051/mateconf/201825004004 (*Indexed in WOS*)
- 22) Duan W., He B., Takara K., Luo P., Hu M., **Alias N.E.**, Nover D. (2015). Changes of precipitation amounts and extremes over Japan between 1901 and 2012 and their connection to climate indices. *Climate Dynamics*, 45 (7-8), pp. 2273-2292. (Q1)

- 23) Weili Duan, Bin He, Kaoru Takara, Pingping Luo, Maochuan Hu, **Nor Eliza Alias**, Masahito Ishihara, and Yi Wang,(2014). Climate Change Impacts on Wave Characteristics along the Coast of Japan from 1986 to 2012. *Journal of Coastal Research*: 97-104. (Q2)
- 24) Ismail, H., Abd Wahab, A. K., & **Alias, N. E.** (2012). Determination of mangrove forest performance in reducing tsunami run-up using physical models. *Natural Hazards*, 63(2), 939-963. doi: 10.1007/s11069-012-0200-y. (Q1)

SCOPUS

- 1) Jafry N. A., Suhaila, J., Yusof F., Nor S.R.M, **Alias, N.E** (2024), Modeling the dependency structure of four-dimensional flood variables using the copula approach, *AIP Conference Proceedings*, Vol 3128, Issue 1, 12 July 2024, 080002, 4th International Conference on Applied and Industrial Mathematics and Statistics 2023: Mathematics and Statistics for Technological Society, ICoAIMS 2023
- 2) Sa'adi, Z. , **Alias, N.E.** , Yusop, Z., Adli Ramli, M.W., Muhammad, M.K.I., (2024) CHIRPS rainfall product application for analyzing rainfall concentration and seasonality in Johor river basin, Malaysia, *Journal of Atmospheric and Solar-Terrestrial Physics*, 256, 106203, March 2024, 10.1016/j.jastp.2024.. (Scopus)
- 3) Sa'adi, Z. , **Alias, N.E.** , Yusop, Z., Chow, M.F., Muhammad, M.K.I., Mazilamani, L.S., Adli Ramli, M.W., Shiru, M. S., Mohamad, N.A, Rohmat, F.I.W., Khambali, M.H.M, (2024) Spatiotemporal assessment of rainfall and drought projection for integrated dam management in Benut River Basin, Malaysia under CMIP6 scenarios, *Environmental Challenges*, 15, April 2024, 100892, <https://doi.org/10.1016/j.envc.2024.100892>. (Scopus)
- 4) Jafry, N.A., Suhaila, J., Yusof, F., Nor, S.R.M., **Alias, N.E.** (2023). Bivariate copula for flood frequency analysis in Johor River basin, *IOP Conference Series: Earth and Environmental Science*, 1167 (1), art. no. 012018. DOI: 10.1088/1755-1315/1167/1/012018
- 5) Paramasivam, R., **Alias, N.E.**, Lokoman, R.M. (2023), Validation of Hershfield probable maximum precipitation estimation using homogeneous region in Malaysia. *IOP Conference Series: Earth and Environmental Science*, 1143 (1), art. no. 012009. DOI: 10.1088/1755-1315/1143/1/012009
- 6) Faudzi, A.A.M., Raslan, M.M., **Alias, N.E.** (2023), IoT based real-time monitoring system of rainfall and water level for flood prediction using LSTM Network. *IOP Conference Series: Earth and Environmental Science*, 1143 (1), art. no. 012015. DOI: 10.1088/1755-1315/1143/1/012015
- 7) Rasnavi Paramasivam, **Nor Eliza Alias**, Sitti Asmah Hassan, and Fara Aiza Md. Sanin,(2023), Bibliometric Analysis of Global Research on Probable Maximum Precipitation Estimation Using Scopus Database. *Lecture Notes in Civil Engineering*, 293, pp. 37-49. Oct 2022 DOI: 10.1007/978-981-19-5947-9_4
- 8) **Alias, N. E.**, Bari, S. H., Paramasivam, R., & Abdullah, F. N. (2022). Computations of probable maximum precipitation estimates. *Handbook of HydroInformatics: Volume II: Advanced machine learning techniques* (pp. 35-47) doi:10.1016/B978-0-12-821961-4.00014-2
- 9) Ramli, M. W. A, **Alias, N. E**, Yusop, Z., Talib M.S., (2020), Disaster Risk Index: A Review of Local Scale Concept and Methodologies. *IOP Conf. Series: Earth and Environmental Science*. doi:10.1088/1755-1315/479/1/012023 (Scopus)
- 10) Khomsati, N. L., Suryoputro, N., Yulistyorini, A., Idafi, G., & **Alias, N. E. B.** (2021). The effect of forest area change in tropical islands towards baseflow and streamflow. Paper presented at the

IOP Conference Series: Earth and Environmental Science,847(1) doi:10.1088/1755-1315/847/1/012032

- 11) Anuar, U. H. M., **Alias, N. E.** (2021). Modelling The Impact of Climate Change on the Streamflow of Langat River Basin, *Water Management and Sustainability in Asia: Community Environment and Disaster Risk Management*. Editors: Alias, N. E., Haniffah, M. R. M., Harun, S., 23:65-76. 10.1108/S2040-726220210000023013
- 12) M W A Ramli, **N E Alias**, Z Yusop, and S M Taib (2020). Disaster Risk Index: A Review of Local Scale Concept and Methodologies, IOP Conf. Series: Earth and Environmental Science 479. doi:10.1088/1755-1315/479/1/012023 (SCOPUS & WOS)
- 13) Abd Rashid, M. H. S., Zakaria, R., Aminudin, E., Adzar, J. A., Shamsuddin, S. M., Munikanan, V., **Alias, N. E.**, Sooria, S. Z., Saha, K. M. (2020). Critical green road criteria for malaysia green rural road index. Paper presented at the IOP Conference Series: Materials Science and Engineering, , 849(1) doi:10.1088/1757-899X/849/1/012039
- 14) **Alias, N. E.**, Haniffah, M. R. M., & Harun, S. (2020). Editorial: Water as resources and for livelihood: Impact and assessment in Asia's changing climate. *Journal of Water and Climate Change*, 11(4), 933-934. doi:10.2166/wcc.2020.300
- 15) N Suryoputro, A Yulistyorini, G Idfi, and **N E B Alias**, (2019). Base flow identification using conceptual hydrology model. IOP Conf. Series: Materials Science and Engineering 669 (2019), doi:10.1088/1757-899X/669/1/012030. (SCOPUS & WOS)
- 16) Redzuan, A. A., Anuar, A. N., Zakaria, R., Aminudin, E., **Alias, N. E.**, Yuzir, M. A. M., & Alzahari, M. R. (2019). A review: Adaptation of escape route for a framework of road disaster resilient. Paper presented at the IOP Conference Series: Materials Science and Engineering, , 615(1) doi:10.1088/1757-899X/615/1/012002
- 17) Muhammad Wafiy Adli Ramli, **Nor Eliza Alias**, Shazwin Mat Taib, (2018). Evaluating Transportation Modes and Routes for Disaster Relief in Kelantan Using Geographical Information System, in Zulkifli Yusop , Azmi Aris , Nor Eliza Alias , Kogila Vani Annammala , William L. Waugh, Jr (ed.) *Improving Flood Management, Prediction and Monitoring (Community, Environment and Disaster Risk Management, Volume 20)* Emerald Publishing Limited, pp.63 – 71, ISBN 978-1-78756-552-4
- 18) **Alias, N.E.**, Mohamad, Chin H., W.Y., Yusop Z. (2016). Rainfall Analysis of the Kelantan Big Yellow Flood 2014. *Jurnal Teknologi*, 78 (6), 112-120. eISSN 2180-3722 (SCOPUS)
- 19) Jusoh, S. N., Mohamad, H., Marto, A., **Alias, N. E.**, Hezmi, M. A., Abdullah, R. A., & Mohd. Yunus, N. Z. (2016). Investigation on the mechanics of precast segment tunnel lining. *Jurnal Teknologi*, 78(8-6), 61-66. doi:10.11113/jt.v78.9640
- 20) **Alias, N.E.**, Takara, K. (2013). Estimating the probable maximum precipitation of Kuala Lumpur, Malaysia and yodo river basin, Japan using statistical methods. *Journal of Disaster Research*, 8 (1), pp. 197-198.

PUBLICATION (NON-INDEXED)

- 21) Jamaludin, A.R., Yusof, F., Lokoman, R. M., Noor, Z. Z., **Alias, N.E.**, (2017). Correlational study of air pollution-related diseases (asthma, conjunctivitis, URTI and dengue) in Johor Bahru, Malaysia. *Malaysian Journal of Fundamental and Applied Sciences*, 354-361. eISSN 2289-599X (ESCI)

- 22) Sahrin, S., Ismail, N., **Alias, N. E.**, (2018). Regional Frequency Analysis on Peninsular Malaysia using L-Moments. Far East Journal of Mathematical Sciences, ISSN 0972-0871, 103 (8), 1379-1398, <http://dx.doi.org/10.17654/MS103081379>
- 23) **Alias, N. E.**, Luo, P., & Takara, K. (2013). Probable maximum precipitation using statistical method for the Yodo river basin, Annual Journal of Hydraulic Engineering, JSCE, Vol.57, 2013, pp. 157-162.
- 24) **Alias, N. E.**, Luo, P., & Takara, K. (2013). A Basin-scale Spatial Distribution of Probable Maximum Precipitation for the Yodo River Basin, Japan, Annuals of Disas. Prev. Res. Inst., Kyoto Univ. No.56B, 2012, pp.65-72.

7. PUBLICATION (OTHERS)– PROCEEDINGS, BOOK CHAPTER, MAGAZINE, NEWSPAPER

- 1) Mohd Khairolden Ghani, **Nor Eliza Alias**, (2023), Penilaian banjir elak infrastruktur penting terjejas, Rencana, Berita Harian, 16 Februari 2023 <https://www.bharian.com.my/rencana/lain-lain/2023/02/1065009/penilaian-risiko-banjir-elak-infrastruktur-penting-terjejas-teruk> (**Newspaper**)
- 2) Bahar, A. F., Yusop, Z., **Alias N. E.**, (2021), Influence of Dam to Rainfall-Runoff Response in a Tropical Climate – A Case Study of Selangor River Basin, Malaysia. *IOP Conf. Series: Materials Science and Engineering*. doi:10.1088/1757-899X/1153/1/012004 (**Conference Proceeding**)
- 3) Amin, M. Z. M., Jusoh, A. M., Yusop Z., Alias N. E., Zaidi, N. S., Syafiuddin A., Ghani N. H. A., Adnan, N. H. M., Mohamad, N. A., Zainol Z., Yin T. S., Zulkifli H., Ramli M. A. (2021), *Climate Change Adaptation Framework for Water Sectors*, National Water Research Institute Malaysia (NAHRIM), ISBN 978-967-0382-46-3 (**Original Book**)
- 4) **Nor Eliza Alias** (2021), Climate Anomaly, in UTM Nexus Magazine, Issue No.5, August 2021, ISSN 9772716647008 <https://indd.adobe.com/embed/6d96e160-c3eb-42d1-9e0d-c9c7dba7e4c5>
- 5) Ignasius D.A. Sutapa, Apip, M. Fakhrudin, **Alias N. E.** (2021), Understanding Peat Water Quality in Central Kalimantan Ex-Mega Rice Project to Support Water Resources Management in Peatland Areas, in Nor Eliza Alias, Kogila Vani Annammala (ed.) *Ecohydrology & Ecohydraulics-Water Quality and Sediment Control*, Penerbit UTM Press, pp 11-28. ISBN 978-983-52-1813-2 (**Book Chapter**)
- 6) **Alias N. E.**, Annammala K. V. (2021), Ecohydrology and Ecohydraulics Approach for Sustainable Catchment Management, in Nor Eliza Alias, Kogila Vani Annammala (ed.) *Ecohydrology & Ecohydraulics-Water Quality and Sediment Control*, Penerbit UTM Press, pp 1-10. ISBN 978-983-52-1813-2 (**Book Chapter**)
- 7) Apip, M. Fakhrudin, Ignasius DA Sutapa, **Alias N. E.** (2021), Rainfall-Runoff-Sediment Modeling System in the Saguling Ecohydrological Demo Site, Indonesia, in Nor Eliza Alias, Kogila Vani Annammala (ed.) *Ecohydrology & Ecohydraulics-Water Quality and Sediment Control*, Penerbit UTM Press, pp 177-192. ISBN 978-983-52-1813-2 (**Book Chapter**)
- 8) **Nor Eliza Alias**, Sheikh Hefzul Bari, Rasnavi Paramasivam, and Farizul Nizam Abdullah, (2021) Computations of Probable Maximum Precipitation Estimates, in Saeid Eslamian, Faezeh Eslamian (ed.) *Handbook of HydroInformatics*. Elsevier, pp 35-48 <https://doi.org/10.1016/B978-0-12-821961-4.00014-2> (**Book Chapter**)
- 9) Nor Eliza Alias, Mazlin Jumain (2020), Konsep ‘Bandar Span’, manfaat hujan melampau, Rencana Berita Harian, 16 September 2020. (**Newspaper**)

- 10) **Nor Eliza Alias**, Ilya Khairanis Othman, M Hidayat M Jamal, (2019). Pengaruh Hujan dan Pasang Surut, in Zulkifli Yusop, Abdul Hamid Mar Iman (ed.) Bah Kuning di Kelantan. Penerbit UTM Press, pp 57-74. ISBN 978-983-52-1670-1. **(Book Chapter)**
- 11) U. H. M. Anuar, **N. E. Alias**, K. A. M. Nassir and A. Yuzir (2019). Modelling the impact of climate change on flood: case study at Upper Sungai Segget catchment, Proceeding of the 4th International Conference on Water Resource, Langkawi, Malaysia, 27-28 November 2018, 318-327. ISBN 978-967-2171-90-4 **(Conference Proceeding)**
- 12) Farah Amirah Kamis, Nor Eliza Alias, M. Asyraf Haiqal Baharum. (2018). Future Climate Effects On Lake Volume Of Sembrong Dam Using Mri-Agcm3.2s 3rd Proceeding Of Civil Engineering Water And Environmental Engineering. 68-75. ISBN 978-967-2171-63-8 **(Conference Proceeding)**
- 13) Chebby, M. S., and **Alias, N. E.**, (2017). Return Period Analysis of Major Flood Events in East Malaysia, 2nd Proceeding of Civil Engineering – Environmental Engineering, Hydraulics and Hydrology, Vol (3), 185-190. ISBN 978-967-2171-06-5 **(Conference Proceeding)**
- 14) Tarmizi, M. M. M., and **Alias, N. E.**, (2017). Return Period Analysis of Major Flood Events in Peninsular Malaysia, 2nd Proceeding of Civil Engineering – Environmental Engineering, Hydraulics and Hydrology, Vol (3), 191-196. ISBN 978-967-2171-06-5 **(Conference Proceeding)**
- 15) Alias, M. A., and **Alias, N. E.**, (2016). Extreme Rainfall Analysis on the December 2014 Flood, Pahang, 1st Proceeding of Civil Engineering – Environmental Engineering, Hydraulics and Hydrology, Vol (3), 265-282. ISBN 978-967-0194-75-2 **(Conference Proceeding)**
- 16) Bakar, M. F. A., and **Alias, N. E.**, (2016). Extreme Rainfall Analysis on the December 2014 Flood, Terengganu, 1st Proceeding of Civil Engineering – Environmental Engineering, Hydraulics and Hydrology, Vol (3), 283-300. ISBN 978-967-0194-75-2 **(Conference Proceeding)**
- 17) **Nor Eliza Alias**, Hadibah Ismail (2010). Experimental Test in the Determination of Mangrove - Tsunami Run-up Relationship. Proceedings of the National Seminar on Coastal Morphology 2010- the Muddy Coast of Malaysia, NAHRIM (National Hydraulic Research Institute), 2010. **(Conference Proceeding)**

8. PUBLICATION – NATIONAL MANUALS, GUIDELINES, FRAMEWORK

- 1) Manual for Flood Risk Assessment and Flood Vulnerability Index for Critical Infrastructure in Malaysia, Construction Research Institute of Malaysia (2022) Contributing Authors: Mohd Khairolden Ghani Rohaizi Mohd Jusoh, Yusrin Faiz Abd Wahab, Gerald Sundaraj, Mohamad Razi Ahmad Suhaimi, Zulkifli Yusop, **Nor Eliza Alias**, Muhammad Najib Mohamed Razali, Zulfaqar Sa'adi, and Kogila Vani Annamala.
- 2) Climate Change Adaptation Framework for Water Sectors, National Hydraulics Research Institute Malaysia (NAHRIM), Mohd Zaki Mat Amin, Azman Mat Jusoh, Zulkifli Yusop, **Nor Eliza Alias**, Nur Syamimi Zaidi, Achmad Syafuddin, Noor Hisham Ab. Ghani, Nurul Huda Md Adnan, Nur Aiza Mohamad, Zurina Zainol, Thian Siaw Yin, Harlisa Zulkifli, Mohd Asri Ramli, National Water Research Institute of Malaysia (NAHRIM), 2021. ISBN 978-967-0382-46-3
- 3) Sabo National Technical Guideline 1: Sabo Works Feasibility Study, National Water Research Institute of Malaysia (NAHRIM), Ministry Of Natural Resources, Environment, and Climate Change (NRECC), 2023. ISBN 978-967-0382-67-8. (As contributing Authors: **Nor Eliza Alias**)

9. EDITOR

High Impact Special Publication

- 1) Lead Author, Special Report on Climate Change and Cities, Intergovernmental Panel for Climate Change (IPCC) Assessment Report, Cycle 7 (2025-2027)

International publisher

- 2) IOP Conference Series: Earth and Environmental Science, International Conference for Environmental Sustainability and Resource Security, IC-ENSURES 2022.
- 3) Community, Environment, and disaster risk management (CEDRM) book series, Volume 23 - Water Management and Sustainability in Asia. Editors: **Nor Eliza Alias**, M Ridza M Haniffah, and Sobri bin Harun. **Emerald Publisher**. Published: July 2021
- 4) Water as resources and for livelihood: impact and assessment in Asia's changing climate– Journal of Water and Climate Change, **IWA publishing**. Editors: **Nor Eliza Alias**, M Ridza Hanafiah, Sobri Harun. <https://doi.org/10.2166/wcc.2020.300>
- 5) Community, environment and disaster risk management (CEDRM) book series, Volume 20 - Improving Flood Management, Prediction and Monitoring: Case Studies in Asia. **Emerald Publisher**. ISBN: 978-1-78756-552-4, eISBN: 978-1-78756-551-7, Edited by: Zulkifli Yusop, Azmi Aris, **Nor Eliza Alias**, Kogila Vani Annammala, William L. Waugh, Published: November 2018

National

- 4) Proceeding of AUN-SEED Net Alumni Symposium 2019. Edited by: Mohd Fadhil Md Din, **Nor Eliza Alias**, Shazwin Mat Taib, Dianah Mazlan and Nazleatul Najiha M. Nazif. Publisher: **UTM Campus Sustainability** (UTM CS), Universiti Teknologi Malaysia. eISBN 978-967-18001-0-2.
- 5) Proceeding of 4th International Conference on Water Resources 2018 (ICWR 2018) – IHP VIII Technical Documents in Hydrology. Edited by: Sobri bin Harun, Zulkifli bin Yusop, Rohani binti Ahmad, Mohd Ridza bin Mohd Haniffah, Mohamad Hidayat bin Jamal, **Nor Eliza binti Alias**, Ilya Khairanis binti Othman, Kogilavani Annammala, Thanalechumi Paramalinggam, Ainul Syarmimi binti Rosli. Publisher: **School of Civil Engineering**, Faculty of Engineering, Universiti Teknologi Malaysia. ISBN: 978 967 2171 904

10. CONFERENCES AND SEMINAR

- 1) Alias, N. E, Tarmizi, M. M. M, Chebby, M. S., Annammala, K. V., Yuzir, A., 2019. Return Period Analysis of Major Flood Events Considering Homogeneous Regions, 4th Global Summit of Research Institutes for Disaster Risk Reduction Kyoto, Japan, March 13-15, 2019
- 2) Kamarul Azlan M Nassir, Muhamad Syamil M Zaini, Nor Eliza Alias., 2019. Conceptual Design for Flood Warning Study at Recreational Area – Case study Gunung Pulai Mountain, Johor,

Malaysia, 4th Global Summit of Research Institutes for Disaster Risk Reduction Kyoto, Japan, March 13-15, 2019

- 3) Annammala, K.V., Sugumaran, D., Mohammad, N.A., L.S. Mazilamani, A.R.M.Yusoff , Z. Yusop , N. Alias, Jamal,M.H, G.Khuneswari and A.Nainar, 2019. Impacts of Forest Disturbances and Large Scale Agricultural Plantation on Erosion and Sedimentation: The Step Forward, Johor, Malaysia, 4th Global Summit of Research Institutes for Disaster Risk Reduction Kyoto, Japan, March 13-15, 2019
- 4) Ramli, M. W. A, Alias, N. E, and Yusop, Z, 2019. A Review on Disaster Risk Index of Various Countries, 4th Global Summit of Research Institutes for Disaster Risk Reduction Kyoto, Japan, March 13-15, 2019
- 5) U. H. M. Anuar, N. E. Alias, K. A. M. Nassir, A. Yuzir, 2018. Modeling the impact of climate change on flood: Case study at Upper Sungai Segget Catchment, 4th International Conference on Water Resources, Langkawi, Malaysia, 27 – 28 November 2018.
- 6) Nor Eliza Alias, Sharainie Sahrin, Umami Hani M. Anuar, Trinah Wati, Apip, 2018. Trans-boundary extreme rainfall homogenous region of Malaysia-Indonesia, 5th JASTIP joint Symposium: Disaster Risk Reduction & Environmental Sustainability for Social Resilience, Sama-sama Hotel, KLIA, Sepang, Selangor, 16-19 October 2018.
- 7) Alias, N.E., Tarmizi, M. M. M., Chebby, M. S., Shahrin. S., 2017. The Return Period of Major Flood Events in Peninsular Malaysia Considering Homogeneous Zones , UNESCO-JASTIP Joint Symposium on Intra-Regional Water Security and Disaster Management and The 3rd Symposium on JASTIP Disaster Prevention International Cooperation Research (JASTIP-WP4 Symposium), 15-16 November 2017, Metro Manila, Philippine.
- 8) Alias, N.E., Ramli, M.W.A, Yusop, Z. 2016. Perceptions of the Community towards the December 2014 Extreme Flood, 3rd Global Summit of Research Institutes for Disaster Risk Reduction, 19-21 March 2017.
- 9) Alias, N.E., N.A, Taib, S. M, Annammala, K. V, Yusof, H.M, 2016. Perceptions of the Kelantan People towards the December 2014 Big Yellow Flood, Conference of Flood Catastrophes in a Changing Environment 2016 (CFCCE 2016), Kuala Lumpur, 15-16 November 2016.
- 10) Alias, N.E., Ramli, M.W.A, 2016. Assessing Early Warning System to Improve the Effectiveness of Evacuation Preparedness towards Flood Disaster by Using GIS: Lesson Learn from Kelantan Bah Kuning, The 2nd SouthEast Asia Network ForumL International Sustainable Technology, Energy and Civilization Conference (ISTECC2016), Kuala Lumpur, 13 February 2016.
- 11) Alias, N.E., Salim, N.A, Taib, S. M, Yusof, M. B. M, Sa'ari, R., Kamal, N, 2016. A community based study on the effectiveness of flood early warning system in Malaysia, Persidangan Kajian Bencana Banjir 2014, Putrajaya, 4 – 6 April 2016.
- 12) Alias, N.E., Mohamad, H., Yusop, Z., 2015. Extreme Rainfall Analysis of the Kelantan December 2014 Flood, The 3rd International Conference on Water Resources - ICWR 2015, Langkawi, Kedah, Malaysia. 24-25 November 2015.
- 13) Alias, N.E., Yusof, F., Alias, N., Yusop, Z., 2015. Identifying Regions with Equivalent Extreme Rainfall Characteristics to the Johor River Basin, JSPP Asian Core Program (5th Comprehensive Symposium), Kyoto, Japan. 19-21 November 2015.
- 14) Alias, N.E., Takara, K., Ishihara, M., 2015. Extreme Rainfall Homogeneous Regions for Japan. In: Malaysia, K.U.A. (Ed.), International Sustainable Technology, Energy and Civilization Conference - ISTECC 2015, Kuala Lumpur, Malaysia.

- 15) Alias, N.E., Takara, K., Ishihara, M. (2014). Considering regional frequency analysis towards future prediction of extreme rainfalls., Asia Oceanic Geosciences Society (AOGS) 2014, Sapporo, 28 July – 1 August 2014.
- 16) Alias, N. E. , & Takara, K. (2014). Incorporating extreme rainfall behaviours into flood risk management- an assessment on probable maximum precipitation, trends and future predictions, DPRI Annual Meeting., Kyoto Univ. 27-28 February 2014.
- 17) Alias, N. E. & Takara, K . Assessing probable maximum precipitation (PMP) and Extreme rainfall trend in Japan. Poster presentation in the Final GCOE-ARS International Symposium, Uji Campus, Kyoto University, 1-3 December 2013.
- 18) Alias, N. E. Extreme rainfall in Japan and Malaysia. Weekly seminar of School of Civil Engineering and Geosciences, Newcastle University, Newcastle Upon Tyne, UK, 30 September 2013.
- 19) Alias, N. E., Luo, P., & Takara, K. (2013). Probable maximum precipitation using statistical method for the Yodo river basin. *Annual Meeting of Hydraulic Engineering, Japan Society of Civil Engineering (JSCE)* 2013, Nagoya, 5-7 March 2013.
- 20) Alias, N. E., Luo, P., & Takara, K. (2012). A Basin-scale Spatial Distribution of Probable Maximum Precipitation for the Yodo River Basin, Japan, *DPRI Annual Meeting 2012*, Kyoto University, Uji Campus, 19-20 February 2013.
- 21) Alias, N. E. & Takara, K . Probability Distribution for Extreme Hydrological Values-Series in the Yodo River Basin, Japan and Kuala Lumpur, Malaysia. *International Conference on Water Resources 2012 (ICWR)*, Langkawi, Malaysia, 5-9 November 2012.
- 22) Alias, N. E. & Takara, K. Estimating the probable maximum precipitation (PMP) of Kuala Lumpur, Malaysia and Yodo River basin, Japan using Statistical Methods. Poster presentation in the *GCOE-ARS International Symposium*, Uji Campus, Kyoto University, 3-4 August 2012.
- 23) Nor Eliza Alias (2010), Experimental Test in the Determination of Mangrove-Tsunami Run Up Relationship. *National Coastal Morphology Seminar: The Muddy Coast of Malaysia, NAHRIM Seri Kembangan, Malaysia* , 17 June 2010.
- 24) Nor Eliza Alias (2009), Effects of a Mangrove Forest on Tsunami Run-Up. *South China Sea Tsunami Workshop 3 (SCSTW3)*, Penang, Malaysia, 3-5 November 2009.
- 25) Nor Eliza Alias (2008), *Tsunami Run-Up on a Vegetated Coastal Slope - A Literature Review and Future Study*. International Graduate Conference on Engineering and Science 2008, Johor Bahru, Malaysia, 23 and 24 December 2008.

11. ORGANIZING COMMITTEE FOR SHORT PROGRAMS

- 1) Chair, International Conference for Environmental Sustainability and Resource Security 2022 (IC-ENSURES 2022), 8-9 March 2022. Virtual Conference.
<https://www.utm.my/ipasa/icensures2022/>
- 2) Committee for Focus group discussion (FGD) for the Climate Change Adaptation Framework on Water Sector, 12 Feb 2020, Tenera Hotel, Selangor.
- 3) Committee member for *Water Leaders Forum*, organized by Johor State Government, 2 - 3 October 2017
- 4) Committee member for *Symposium Kelestarian Air Negeri Johor (Johor Water Sustainability Symposium)*, organized by Johor State Government, 7 - 8 August 2017
- 5) Committee member for the International Conference on Water Resources, organized by School of Civil Engineering, Faculty of Engineering, UTM, 27 – 28 November 2018.

- 6) Committee member for Conference on Flood Catastrophe in a Changing Environment (CFCCE 2016), organized by UTM and co-organized by Asia Network on Climate Science and Technology (ANCST)
- 7) Committee member for *BENGKEL I KAJIAN BENCANA BANJIR 2014*, Ministry of Higher Education – 14-15 September 2015
- 8) Committee member for the FLOOD FORENSIC REPORT OF THE KELANTAN DECEMBER 2014 FLOOD of the Malaysia Ministry of Higher Education – April to June 2015
- 9) Coordinator committee for the Workshop on POST-FLOOD DISASTER FOR POLICY PAPER- 11-12 March 2015, Marriot Hotel, Kuala Lumpur
- 10) Repertoire for the Flood National Conference National Council of Professors (PERSIDANGAN KEBANGSAAN BENCANA BANJIR MAJLIS PROFESOR NEGARA) 9-10 December 2014, Hotel Seri Pacific Kuala Lumpur.

12. VISITING RESEARCHER/ TRAINING PROGRAM EXPERIENCES

International

- 1) JICA trainee, LEP2.0 Enhancement of the Disaster Risk Management Capacity of the National Disaster Management Agency (NADMA)-Countermeasures against Sediment related Disaster, 9 - 22 July 2023
- 2) JICA trainee, Master of Disaster Risk Management (MDRM) Attachment Program (201702403-J010), 21 July 2019 – 3 August 2019
- 3) Visiting Researcher under JST SAKURA Exchange program to Nagoya Institute of Technology, Japan. 20 – 27 October 2019.
- 4) Visiting Researcher under *AUNSEED-SRJP* to Disaster Prevention Research Institute (DPRI), Kyoto University. 6 March – 30 March 2017
- 5) Visiting Scientist JSPS, 17-22 November 2015, JSPS ASIAN CORE PROGRAM supported by JSPS (Japan Society for the Promotion of Science) and MOHE (Ministry of Higher Education), 5th Comprehensive Symposium. '*Identifying Regions with Equivalent Extreme Rainfall Characteristics to the Johor River Basin*'.

National

- 1) Energy Manager, Faculty of Civil Engineering, Universiti Teknologi Malaysia - December 2014 to 2018
- 2) Tutor in Universiti Teknologi Malaysia- 31 December 2007 to August 2014
- 3) Shoreline changes analysis using ASDS and Arc-Gis for Malacca Tin Mining Project 2011(October 2011).
- 4) Tsunami Modeling and Impact Studies for the N-W Coast of Peninsular Malaysia - DRAFT FINAL REPORT MEETING AND WORKSHOP (19 July 2010) - Organizer committee (Coastal and Offshore Engineering Institute, UTM International Campus, KL)
- 5) Tsunami Modeling and Impact Studies for the N-W Coast of Peninsular Malaysia - TRAINING AND TRANSFER OF TECHNOLOGY PROGRAMME (14-16 July 2010) - Organizer committee (Coastal and Offshore Engineering Institute, UTM International Campus, KL) and participant.
- 6) Tsunami Modeling and Impact Studies for the N-W Coast of Peninsular Malaysia (Project by the Department of Irrigation and Drainage Malaysia) - Involves in the report on the Site description and wave analysis, assist in the information system using ArcGIS. July 2007.

- 7) Research Assistant at Coastal and Offshore Engineering Institute, University Technology Malaysia. (Jun 2007 – Dec 2007) - Conducted the wave analysis for Port Dickson waters (Palm Spring Project at Port Dickson 2007)
- 8) Industrial training at Department of Irrigation and Drainage Pontian, Johor for 10 weeks from May 2nd 2006 to July 7th 2006.

13. INVITED SPEAKER

- 1) Invited Speaker for the Awareness Training to Local Authorities on the Guidelines and Manual for landslide, flood and erosion control with the Construction Industry Development Board – Shah Alam, Selangor 3 Oct 2022.
- 2) Invited Speaker for the Awareness Training to Local Authorities on the Guidelines and Manual for landslide, flood and erosion control with the Construction Industry Development Board – Kota Bharu, Kelantan 9-10 August 2022.
- 3) Invited Speaker for the Awareness Training to Local Authorities on the Guidelines and Manual for landslide, flood and erosion control with the Construction Industry Development Board – Sibu, 26 July 2022.
- 4) Invited Speaker for the Awareness Training to Local Authorities on the Guidelines and Manual for landslide, flood and erosion control with the Construction Industry Development Board - Sabah and Sarawak Zone Year 2021, 7-10 Dec 2021
- 5) Invited Speaker for the Awareness Training to Local Authorities on the Guidelines and Manual for landslide, flood and erosion control with the Construction Industry Development Board – Malaysia Northern Zone (Kedah, Penang, Perlis, Perak) Year 2021, 29-30 Nov 2021
- 6) Invited Speaker for the Awareness Training to Local Authorities on the Guidelines and Manual for landslide, flood and erosion control with the Construction Industry Development Board - Middle Zone (Kuala Lumpur, Selangor, Pahang) Year 2021, 3-5 August 2021
- 7) Invited Speaker for the Awareness Training to Local Authorities on the Guidelines and Manual for landslide, flood and erosion control with the Construction Industry Development Board - Southern Zone (Johor, Melaka) Year 2021, 13-15 Sept 2021
- 8) Invited Speaker for a Flood Risk Awareness Program for School Children organized by Universiti Teknologi Malaysia, 4 Sept 2021.
- 9) Invited Speaker Webinar on Climate Change Adaptation Framework organized by Centre for Environmental Sustainability and Water Security with National Hydraulic Research Institute, Malaysia, 10 June 2021.
- 10) Key-note speaker for Webinar on Water Security for School of Water and Environment, Chang'An University, China. 13-14 June 2020.
- 11) Invited Speaker for Program Kesedaran Perubahan Iklim kepada pelajar Sekolah Kebangsaan Sg Telor, Kota Tinggi, 6 Jun 2023.
- 12) Plenary Speaker, Panel Speaker at 2nd Asian Cooperative Program (ACP) International Bootcamp Webinar Series 2, 11 January 2022

- 13) Panel Speaker At 18th Asian Cooperative Program (ACP) International Field Studies Program 2023, 14 March 2023
- 14) Speaker, Climate Change Awareness Program Primary School Sg Telor, 6/06/2023
- 15) Speaker, and Facilitator, Climate Change Awareness Program High School Sri Pulai Perdana, Johor 27/09/2023

14. INTELLECTUAL PROPERTIES

- 1) Module Climate Change Awareness and Waste Management Primary School Level 1, Copyright MYIPO, LY2023J0669
- 2) Integrated Disaster Risk Index (IDRI) framework for Local Assessment, Copyright MYIPO, LY2023J02771
- 3) Community-based Questionnaire - Local Scale Disaster Risk Assessment in Malaysia, Copyright MYIPO, LY2020004316
- 4) Expert Questionnaire - Development of Integrated Disaster Risk Index Model For Local Assessment In Malaysia For Vulnerability Indicators, Copyright MYIPO, LY2019008832

AWARDS

- 1) Special Recognition Faculty (National Flood Conference), Faculty of Civil Engineering Quality Award 2014, August 2015
- 2) Special Recognition (Study Leave Staff), Faculty of Civil Engineering Quality Award 2014, August 2015
- 3) Excellent Service Award for the year 2014, UTM Excellence & Recognition Awards 2015
- 4) Best Researcher Award MJCE, Faculty of Civil Engineering Quality Award 2017, August 2018
- 5) Research Award, Staff Excellence Award RISE for the year 2017, November 2018
- 6) Research Award (University Grant) 2018, School of Civil Engineering Staff Recognition Ceremony, August 2019
- 7) Excellent Service Award, Faculty of Engineering Glorious Awards (MAGFE) 2021
- 8) Wiley Top Cited Article Award 2020-2021 Journal of Flood Risk Management, March 31, 2022
- 9) Promising Researcher Award, Staff Excellence Award Research Institute for Sustainable Environment (RISE) for the year 2021
- 10) Industry Engagement and Community Service Award, Staff Excellence Award Research Institute for sustainable Environment (RISE) for the year 2021
- 11) Book Award for Asian Works and Research, Staff Excellence Award Research Institute for Sustainable Environment (RISE) for the year 2021
- 12) Silver Award – Sustainability in Civil Engineering Exhibition and Competition 2021, USM June 2021
- 13) Gold Award – International Invention Innovation Competition in Canada, iCAN 2021, Toronto International Society of Innovation & Advanced Skills (TISIAS), August 2021.
- 14) Young Scientist Network Membership Award – Academy of Science Malaysia, 2023

15) Consultation Award, Staff Excellence Award Research Institute for Sustainable Environment (RISE)
for the year 2023

Personal motivation:

"If some-body can do it, why can't you so JUST DO IT!"

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