

DR. AZWANI BINTI ALIAS

SENIOR LECTURER

Dr. Azwani Alias is a senior lecturer at Universiti Malaysia Terengganu specializing in mathematical modeling of linear and nonlinear waves. Her research focuses on solving partial differential equation using numerical techniques, with applications ranging from oceanography to fluid dynamics. She also passionate about mathematics education and has received multiple awards for innovative teaching practices.



RESEARCHER PROFILE

Scopus[®] 55797131800

ORCID 0000-0003-1302-8996

Google AZWANI ALIAS

EDUCATION



- PhD in Mathematics, Loughborough University, UK
- Master in Mathematics, Universiti Teknologi Malaysia
- BSc. in Mathematics, University Teknologi Malaysia

AREAS OF EXPERTISE

- Mathematical Modelling
- Nonlinear Waves

SUPERVISION



CONTACT

+6016-2061887

azwani.alias@umt.edu.my

fskm.umt.edu.my

SELECTED RESEARCH PROJECTS

- ✓ RAGS from Ministry of Higher Education Malaysia. The dynamics of nonlinear wave packets in the variable coefficient perturbed Ostrovsky equation. (2015-2019). RM 32,000.
- ✓ TAPE-RG. Soliton Solutions within the Framework of Fifth-order Korteweg-de Vries equation. (2021-2024) RM20,000.

SELECTED PUBLICATIONS

- ✓ Roslan, U. A. M., Harun, F. N., and Alias, A., (2024) Dynamic modelling for assessing the impact of marine debris on the population of Sea Turtles. Journal of Quality Measurement and Analysis, 20 (2), pp. 1-14. ISSN 2600-8602.
- ✓ Idris, R., Alias, A., Miqdady, A., "Behaviour Of The Onset Of Rayleigh-Benard Convection In Double-Diffusive Micropolar Fluids Under The Influence Of Cubic Temperature And Concentration Gradient", Malaysian Journal of Mathematical Sciences 17(3), 441-458 (2023).
- ✓ Zakaria, S., Sulaiman, N. F. C., Roslan, U. A. M., Alias, A., Malik, S. M. A., " Impact of Covid-19 Pandemic on Malaysian Socio-Economics: Statistical-Dynamical Approach", Journal of Mathematical Sciences And Informatics 3(1), (2023).
- ✓ Amryeen, R., Harun, F. N., Al-Smadi, M., Alias, A., "Adaption of Conformable Residual Series Algorithm for Solving Temporal Fractional Gas Dynamics Models", Arab Journal of Basic and Applied Sciences 29(1), 65-76 (2022).
- ✓ Hlsmail, N. N. A. N., Alias, A., Harun, F. N., "Numerical Solution of Ostrovsky Equation Over Variable Topography Passes Through Critical Point Using Pseudospectral Method", Mathematics and Statistics 9(5), 825-834 (2021).