



RESEARCHER PROFILE

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Google RUWAIDIAH IDRIS

EDUCATION



- PhD in Mathematics, Universiti Kebangsaan Malaysia
- Sarjana Sains (Matematik), Universiti Kebangsaan Malaysia
- Sarjana Muda Sains (Matematik) Dengan Kepujian, Universiti Kebangsaan Malaysia

AREAS OF EXPERTISE

- Fluid Dynamics
- Mathematical Modelling
- Convective Heat Transfer

SUPERVISION



COLLABORATORS



PRESIDENCY
UNIVERSITY



DR. RUWAIDIAH IDRIS

ASSOCIATE PROFESSOR

Dr. Ruwaidiah's research passions is in applied of mathematics especially in the area of fluid dynamics focus on the onset of convective heat transfer field specialties in instability of Rayleigh-Benard convection and chaotic convection.

CONTACT

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SELECTED RESEARCH PROJECTS

- ✓ Fundamental Research Grant (FRGS) from Ministry of Higher Education Malaysia. Mathematical Modelling and Simulations of Chaotic Convection in Waste Palm Oil-Copper/Kitchen Waste Oil-Copper Nanofluid Layer Using Deep Learning Strategies. (2024 – 2027). RM133,300.
- ✓ UMT & CHRIST University: International Partnership Research Grant (IPRG). The Development of Five-Dimensional Rayleigh-Benard Chaotic Convection in Nanaofluids Using Fourier Spectral Method and Its Behaviour in Nanofluids. (2023 – 2026). RM100,000.
- ✓ UMT: Postgraduate Research Grant. Mathematical Models For Convective Heat Transfer and MHD Effects on Casson Nanofluid Flow. (2019 – 2022). RM20,000.

SELECTED PUBLICATIONS

- ✓ Ruwaidiah Idris, Azwari Alias, Abdallah Miqdady. 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, (2023), 17(3), pp: 441-458.
- ✓ Bakar M.A., Ibrahim N.F., Idris R., Mohamed N., Pratama D.A. Physical Restriction Neural Networks With Restarting Strategy For Solving Mathematical Model Of Thermal Heat Equation For Early Diagnose Breast Cancer. Results In Applied Mathematics, (2023).
- ✓ Kanchana C., Idris R., Laroze D., Siddheshwar P.G., Rayleigh-Benard Convection of Water-Copper And Water-Alumina Nanofluids Based On Minimal- And Higher-Mode Lorenz Models: International Journal Of Bifurcation And Chaos, (2023), 33(9).
- ✓ Keerthana, S., Siddheshwar, P.G., Tarannum, S., Idris, R., Rayleigh-Benard Convection in a Bi-Viscous Bingham Fluid with Weak Vertical Harmonic Oscillations: Linear and Non-Linear Analyses International Journal of Applied and Computational Mathematics, (2023), 9(3).
- ✓ Heena Firdose, Siddheshwar, P. G., Ruwaidiah Idris, A Study of a Thermally-Vigorous Rayleigh-Benard Convection In a Hybrid Nanofluid Using Non-Classical Boundary Condition, Journal of Nanofluids, (2023), 12(4), 1049-1066.

"Menjalinkan penyelidikan dan pengajaran dalam mencipta pengalaman pembelajaran berharga dan memupuk jati diri generasi akan datang."