

FIRDAUS BIN MOHAMAD (Dr.)
School of Mechanical Engineering
College of Engineering
Universiti Teknologi MARA (UiTM)
40450 Shah Alam, Selangor
MALAYSIA



Tel: (Off.) +603-55442977 (Mobile) +6011-11515779
Email: firdausmohamad@uitm.edu.my

PERSONAL BACKGROUND

Age	: 37 years	Date of Birth	: 18 June 1984
Nationality	: Malaysian	Gender	: Male
Marital Status	: Married	I.C Number	: 840618-03-5697

EDUCATION/ACADEMIC QUALIFICATION/FIELD/INSTITUTION AND YEARS OF AWARD

2021	:	Doctor of Philosophy in Engineering (PhD) Osaka University, OSAKA Japan
2012	:	Master of Science in Mechanical Engineering (MSc.) Universiti Teknologi MARA, UiTM, Shah Alam
2009	:	Bachelor. of Eng. (Hons.) Mechanical Universiti Teknologi MARA, UiTM, Shah Alam,
2005	:	Diploma in Mechanical Engineering Universiti Teknologi MARA, UiTM, Pulau Pinang

YEAR OF EXPERIENCE

2017 – Present	:	Senior Lecturer at School of Mechanical Engineering, UiTM
2012 – 2017	:	Lecturer at Faculty of Mechanical Engineering, UiTM
2009	:	MCAT Engineer (MSO) at Malaysia Marine and Heavy Engineering (MMHE)

AREA OF EXPERTISE

Computational Fluid Dynamics, CFD, Fluid Dynamics, Thermal Engineering, Aerodynamics of Subsonic Vehicles

RESEARCH GRANT

1. Blended Wing Body Micro Class Unmanned Aircraft Prototype for Aerial Surveillance-(Co-Researcher) PRGS- RM180 000
2. Flight Dynamics of Blended Wing Body (BWB) with Blended Tail Body- FRGS- RM 123 200
3. Air Flow Properties Investigation Through New Plenum of Open Cathode PEM Fuel Cell (PI)- FRGS- RM 91 000
4. Flight Dynamics, Stability and Control of a Bio- Inspired Blended-Wing-Body Small Unmanned Aircraft (RIF)- RM 32 000
5. Turbulent Flow Separation in Airbone Containment for Baffle Geometry Optimization (RIF)- RM 32000
6. Aerodynamic Design and Analysis of Yaw Control Surfaces for UiTM BWB Baseline-II UAV (Excellent Fund)- RM 6500

PUBLICATIONS

- 1 Firdaus Mohamad, Kajishima T. "Large-Eddy Simulation of Unsteady Pitching Aerofoil using a One equation Subgrid Scale (SGS) Model based on Dynamic Procedure" Journal of Mechanical Engineering, Volume 18, Issue 1, 15 January 2021, Pages 157-173
- 2 Mohamad, F., Kajishima, T. "Large Eddy Simulation using One-Equation SGS Model Based on Dynamic Procedure for Flows in Laminar-Transition Region" Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, Volume 60, Issue 2, 1 August 2019, Pages 166-177
- 3 Wirachman Wisnoe, Rizal E. M. Nasir, Ramzyzan Ramly, Wahyu Kuntjoro, Firdaus Mohamad, "Aerodynamics of UiTM Blended Wing Body Unmanned Aerial Vehicle BASELINE-II Equipped with One Central Vertical Rudder, 2015 International Conference on Advances of Mechanical Engineering (ICAME 2015)
- 4 Rizal E. M. Nasir, Nur A. H. Zulkifli, Firdaus Mohamad, Wahyu Kuntjoro, Wirachman Wisnoe "Aerodynamics of Bird-Inspired Blended Wing-Body Aircraft: Wind Tunnel Experiment", World of UAV International Conference 2015 (WoUCON 2015)
- 5 Norhisyam Jenal, Wahyu Kuntjoro, Thomas A. Ward, Khairul Imran Sainan, Firdaus Mohamad "Performance Analysis of Ground-Based Static Test for Hydrogen Fuel Cell Propulsion System", Applied Mechanics and Materials Vol. 393 (2013) pp 510-515 Online: 2013-09-03 © (2013) Trans Tech Publications, Switzerland doi:10.4028/www.scientific.net/AMM.393.510
- 6 Firdaus Mohamad, Wirachman Wisnoe, Rizal E. M.Nasir, Khairul Imran Sainan and Norhisyam Jenal "Yaw Stability Analysis for UiTM's BWB Baseline-II UAV E- 4", Applied Mechanics and Materials Vol. 393 (2013)pp323-328©(2013)Trans Tech Publications, Switzerland doi:10.4028/www.scientific.net/AMM.393.323
- 7 Firdaus Mohamad, Wirachman Wisnoe, Wahyu Kuntjoro, Rizal E. M. Nasir, "The Effects of Split Drag Flaps on Directional Motion of UiTM's BWB UAV Baseline-II E-4: Investigation Based on CFD Approach", Advanced Materials Research Vols. 433-440 (2012) pp 584-588, © (2012) Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/AMR.433-440.584, ISBN: 978-3-03785-319-1
- 8 Firdaus Mohamad, Wirachman Wisnoe, Rizal E.M.Nasir, Wahyu Kuntjoro, "A Study about the Split Drag Flaps Deflections to Directional Motion of UiTM's BWB Aircraft Based on CFD Simulation", The 4th International Meeting of Advances in Thermofluids, Melaka, Malaysia, October 3rd & 4th, 2011, ISBN: 978-967-0194-07-3
- 9 Zurriati Mohd. Ali, Wahyu Kuntjoro, Wirachman Wisnoe, Rizal Effendy M. Nasir, Firdaus Mohamad, Nor F.Reduan, "The Aerodynamics Performance of Blended Wing Body Baseline-II E2", 2011 International Conference on Computer and Communication Devices (ICCCD 2011), Bali Island,Indonesia. April 1-3, 2011, ISBN: 978-1-4244-9831-4
- 10 Nor Fazira Reduan, Wirachman Wisnoe, Wahyu Kuntjoro, Rizal Effendy Mohd Nasir, Firdaus Mohamad, Zurriati Ali, "Aerodynamics Characteristic of UiTM's BWB UAV Baseline-II at Different Canard Deflection Angles at Low Pitching Angle", 2010 International Conference on Science and Social Research (CSSR 2010), Kuala Lumpur, Malaysia, December 5-7, 2010, ISBN: 978-142448986-2 DOI: 10.1109/CSSR.2010.5773677
- 11 Firdaus Mohamad, Wirachman Wisnoe, Wahyu Kuntjoro, Rizal E.M.Nasir, Zurriati Mohd.Ali, Nor Fazira Reduan, "Wind Tunnel Experiments of UiTM's Blended Wing Body (BWB) Baseline-II Unmanned Aerial Vehicle (UAV) at Low Subsonic Speed", 2010 International Conference on Science and Social Research (CSSR 2010), Kuala Lumpur, Malaysia, December 5-7, 2010, ISBN: 978-142448986-2 DOI: 10.1109/CSSR.2010.5773934
- 12 Rizal E. M. Nasir, Wahyu Kuntjoro, Wirachman Wisnoe, Zurriati Mohd. Ali, Norfazira Reduan, Firdaus Mohamad, Ramzyzan Ramly, "Static Stability of Baseline-II Blended Wing-Body Aircraft at Low Subsonic Speed: Investigation via Computational Fluid Dynamics Simulation", 2010 International Conference on Science and Social Research (CSSR 2010), Kuala Lumpur, Malaysia, December 5-7, 2010, ISBN: 978-142448986-2 DOI: 10.1109/CSSR.2010.5773932
- 13 Wirachman Wisnoe, Zurriati M.A., Firdaus M., Nor Fazira R., Rizal E.M. Nasir, Wahyu Kuntjoro, "Experimental Investigation of Center Elevator Deflection on Aerodynamics of UiTM's Baseline-I Blended Wing Body (BWB) Unmanned Aerial Vehicle (UAV)", 2010 International Conference on Science and Social Research (CSSR 2010), Kuala Lumpur, Malaysia, December 5-7, 2010, ISBN:

- 14 Nor Fazira Reduan, Wirachman Wisnoe, Wahyu Kuntjoro, Rizal Effendy Mohd Nasir, Firdaus Mohamad, Zurriati Ali, "Study of Aerodynamics Characteristic of BWB Baseline-II", 2010 International Conference on Advances in Mechanical Engineering (ICAME 2010), Shah Alam, Malaysia, December 2-5, 2010, ISBN: 9789673631865
- 15 Firdaus Mohamad, Wirachman Wisnoe, Wahyu Kuntjoro, Rizal E.M. Nasir, Zurriati M.Ali, Nor Fazira Reduan, "Experiment Results of UiTM's Blended Wing Body (BWB) Baseline-II UAV using Low Speed Wind Tunnel", 2010 International Conference on Advances in Mechanical Engineering (ICAME 2010), Shah Alam, Malaysia, December 2-5, 2010, ISBN: 9789673631865
- 16 Rizal E. M. Nasir, Wahyu Kuntjoro, Wirachman Wisnoe, Zurriati Ali, Norfazira Reduan, Firdaus Mohamad, Ramzyzan Ramly, "Aerodynamics and Longitudinal Static Stability of Baseline-II Blended Wing-Body Aircraft Variants", 2010 International Conference on Advances in Mechanical Engineering (ICAME 2010), Shah Alam, Malaysia, December 2-5, 2010, ISBN: 9789673631865
- 17 Wirachman Wisnoe, Wahyu Kuntjoro, Firdaus Mohamad, Rizal Effendy Mohd Nasir, Nor F Reduan, Zurriati Ali, "Experimental Results Analysis for UiTM BWB Baseline-I and Baseline-II UAV Running at 0.1 Mach number", International Journal of Mechanics, Issue 2, Volume 4, 2010, ISSN: 1998-4448, pp. 23-32, included in ISI/SCI Web of Science and Web of Knowledge (<http://www.naun.org/journals/mechanics/>)
- 18 Wirachman Wisnoe, Firdaus Mohamad, Rizal Effendy Mohd Nasir, Nor F Reduan, Zurriati Ali, Wahyu Kuntjoro, "Experimental Results Analysis of UiTM BWB Baseline-I and Baseline-II UAV Running at 0.1 Mach number", in the Book "New Aspects of Fluid Mechanics, Heat Transfer & Environment", ISBN: 978-960-474-215-8, Taipei, Taiwan, 2010, pp. 142-146, included in ISI/SCI Web of Science and Web of Knowledge
- 19 Wirachman Wisnoe, Firdaus Mohamad, Rizal Effendy Mohd Nasir, Nor F. Reduan, "Wind Tunnel Experiments of UiTM BWB Baseline-I and Baseline-II UAV at 0.1 Mach Number", Proceedings of the 4th World Engineering Congress 2010 (WEC 2010), Kuching, Sarawak, Malaysia, August 2-5, 2010
- 20 Rizal E.M. Nasir, Wahyu Kuntjoro, Wirachman Wisnoe Zurriati M. Ali, Nor F. Reduan, Firdaus Mohamad, "The Effect of Canard on Aerodynamics and Static Stability of Baseline-II Blended Wing-Body Aircraft at Low Subsonic Speed", Proceedings of the 4th World Engineering Congress 2010 (WEC 2010), Kuching, Sarawak, Malaysia, August 2-5, 2010
- 21 Rizal E. M. Nasir, Wahyu Kuntjoro, Wirachman Wisnoe, Zurriati Ali, Nor F. Reduan, Firdaus Mohamad, Shahrizal Suboh, "Preliminary Design of "Baseline-II" Blended Wing-Body (BWB) Unmanned Aerial Vehicle (UAV): Achieving Higher Aerodynamic Efficiency Through Planform Redesign and Low-Fidelity Inverse Twist Method", Proceedings of 3rd Engineering Conference on Advancement in Mechanical and Manufacturing for Sustainable Environment (EnCon2010), Kuching, Sarawak, Malaysia, April 14-16, 2010