



CURRICULUM VITAE



Associate Professor
Dr. Noorfaizal Bin Dato' Yidris
Department of Aerospace Engineering,
Faculty of Engineering,
Universiti Putra Malaysia,
43400 UPM Serdang, Selangor

h-index: 18
Telephone: 03-9769 4413
E-mail: nyidris@upm.edu.my
Mobile: 019-317 3026

Education

1. Ph.D. in Structural Instability, 2012, Loughborough University, United Kingdom
2. M.Sc. in Aerospace Engineering, 2007, Universiti Putra Malaysia
3. B.Eng. in Aeronautics, 1999, Universiti Teknologi Malaysia

Areas of Interest

1. Structural instability of thin-walled metal and composite structural systems
2. Elastic and elasto-plastic post-buckling characteristics of metal structures
3. Lightweight aerospace and automotive structural components
4. Failure mechanics of metal and composite structures
5. Finite element numerical modeling
6. Artificial intelligence, machine learning and deep learning using Python

Professional Qualification / Membership / Affiliations

1. Member, International Association of Engineers (IAENG)
2. Graduate member, Institution of Engineers Malaysia (IEM)
3. Graduate member, Board of Engineers Malaysia (BEM)
4. Honorary Treasurer, Malaysia Society of Structural Health and Monitoring (MSSHM)



Appointment

Professional

Date	Designation	Remarks
2022 - present	Head	Aerospace Engineering Department, Faculty of Engineering, UPM
2020 - 2022	Head	Aerospace Malaysia Research Center (AMRC), Faculty of Engineering, UPM
2012 - Present	Lecturer	Department of Aerospace Engineering, Faculty of Engineering, UPM
2001-2012	Tutor	Department of Aerospace Engineering, Faculty of Engineering, UPM
2000-2001	M&E Engineer	VALDUN Consulting Engineers
1999-2000	M&E Engineer	Ingenieur KEME Consulting Engineers

Administrative

Date	Designation	Remarks
2020	Member Curriculum Review Panel	Bachelor Aerospace Engineering Program
2019	Committee Member	Master of Aerospace Engineering System Design
2018	Lead Curriculum Review Panel	Master of Innovation & Engineering Design Program
2018	Associate Researcher	Aerospace Malaysia Research Center (AMRC), Faculty of Engineering, UPM



2017	Lead JKPP Organizing Committee	Master of Innovation & Engineering Design Program
2017-2020	Program Coordinator	Master of Innovation & Engineering Design Department of Aerospace Engineering, UPM
2017-2019	Associate Researcher	Institut Perhutanan Tropika dan Produk Hutan (INTROP)
2013-2020	Technical Manager (Aerospace Structure Laboratory) in an accreditation Committee MS ISO/IEC 17025:2005	Universiti Putra Malaysia
2013-2020	Signatory in an accreditation Committee MS ISO/IEC 17025:2005	Universiti Putra Malaysia
2012-2015	Development Coordinator	Department of Aerospace Engineering, UPM
2012-Present	Head of Aerospace Structure Laboratory	Department of Aerospace Engineering, UPM

Teaching Experiences

Undergraduate Courses (10 courses)

Course	Code	Credit	Year
AEROMEKANIK 2	EAS3423	3	2012/2013
KAEDAH BERANGKA	EAS3102	2	2012/2013
AEROMEKANIK 2	EAS3423	3	2013/2014
STRUKTUR PESAWAT 1	EAS3414	2	2013/2014
MAKMAL AEROANGKASA 1	EAS3921	1	2013/2014
AEROMEKANIK 2	EAS3423	3	2014/2015
STRUKTUR AEROANGKASA 1	EAS3424	2	2014/2015
AEROMEKANIK 2	EAS3423	3	2014/2015
MAKMAL AEROANGKASA 1	EAS3921	1	2014/2015
AEROMEKANIK 2	EAS3423	3	2015/2016
STRUKTUR AEROANGKASA 1	EAS3424	2	2015/2016
MAKMAL AEROANGKASA 1	EAS3921	1	2015/2016
STRUKTUR AEROANGKASA 1	EAS3424	2	2016/2017
AEROMEKANIK 2	EAS3423	3	2016/2017



MAKMAL AEROANGKASA 1	EAS3921	1	2016/2017
ANALISIS UNSUR TERHINGGA	EAS4401	3	2016/2017
STRUKTUR AEROANGKASA 1	EAS3424	2	2017/2018
MAKMAL AEROANGKASA 2	EAS3922	1	2017/2018
PENGATURCARAAN KOMPUTER	ECC3005	3	2017/2018
MAKMAL AEROANGKASA 1	EAS3932	1	2017/2018
STRUKTUR AEROANGKASA 1	EAS3424	3	2018/2019
MAKMAL AEROANGKASA 2	EAS3922	1	2018/2019
MAKMAL AEROANGKASA 1	EAS3932	1	2018/2019
ANALISIS BERANGKA UNTUK APLIKASI			
KEJURUTERAAN	EAS3122	3	2018/2019
STRUKTUR AEROANGKASA 1	EAS3434	2	2019/2020
ANALISIS UNSUR TERHINGGA	EAS4411	3	2019/2020
MAKMAL AEROANGKASA 1	EAS3932	1	2019/2020
STATIK	EMM3103	3	2020/2021

Postgraduate Courses (4 courses)

Course	Code	Credit	Year
GLOBAL DESIGN	EAS3423	3	2012/2013
COMPUTER AIDED DESIGN	EAS5703	2	2017/2018
FINITE ELEMENT ANALYSIS	EAS5403	3	2018/2019
DISSERTATION	EAS5990	10	2017
DISSERTATION	EAS5990	10	2018
DISSERTATION	EAS5990	10	2019
DISSERTATION	EAS5990	10	2020

Postgraduate Supervision

PhD

Student	Title	Role	Status
Ayad Abdullah Mohammed Mutafi GS41807	Finite element analysis to predict residual stress and strain in pressed-braked cold formed steel sections	Chairman	Graduated - 2020
Shahan Bin Mazlan GS43248	Optimization of stiffened panel fatigue life by using finite element analysis	Chairman	Graduated - 2021



Saeid Seyed Rahimian Koloor GS53665	Damage mechanics of curved FRP composite structures for aerospace application	Chairman	On-going
Ayorinde Oladele Oladipo GS50057	The post-buckled coupled mode interaction behavior of thin-walled members with various thickness imperfection profiles using FEM	Chairman	On-going
Sri Johara Binti Darmin GS50827	The influence of thickness variation on the post-buckled coupled mode interaction behavior of stiffened panels in compression	Chairman	On-going
Muhammad Asyraf Muhammad Rizal GS52841	Development of creep test rig for composite cross arm in transmission line tower	Member	Graduated
Sharaf Hussein Kadhim Sharaf GS51524	Study of a creep behavior of the cross arm of transformation towers	Member	Graduated
Waqas Ashraf GS50333	Investigation of mechanical behavior of sandwich composites for the application of composite cross arm	Member	Graduated
Mohd Saffuan Yaakob GS49112	Hybrid renewable energy using planetary gear system and eco-friendly material	Member	On-going
Mohammed M.A.S. Aldhufairi GS49063	Functional material using graphene in aerospace application	Member	Graduated
Alowaid ARO Alotaibi GS49058	Design, manufacture, and analysis of graphene oxide: Applicable for nano scale piezoelectric sensing devices for aerospace applications	Member	Graduated
Shazmira Azwa Binti Sauli GS42669	Design optimization of motorized adjustable vertical platform using TRIZ tools	Member	On-going
Nur Afifah Binti Zakaria GS41525	Optimization of energy output for hybrid vertical axis wind turbine energy systems	Member	On-going

Master (Research)

Student	Title	Role	Status
Mohd Nizam Hassan GS41472	The influence of stiffener on aircraft aluminium perforated plates subjected to in-plane shear loading	Chairman	Graduated - 2017
Nur Hazwani Binti Isham GS53880	Buckling and post buckling of steel box section	Chairman	Graduated - 2021
Iman Syahirah Binti Osman GS53860	Influence of thickness imperfection of the buckling performance of thin plates subjected to shear loading	Chairman	Graduated - 2022
Noorshazlin Binti Razali GS34697	High velocity and low velocity impact analysis of glass fiber reinforced polymer	Member	Graduated
Syafiqah Nur Azrie Binti Safri GS34928	Damage characterization and detection in carbon fiber reinforced polymer laminates	Member	Graduated
Amin Khajeh GS35844	The effects of high temperature on the structural integrity of civil aircraft passenger door panel	Member	Graduated
Qistina Binti Mohd Jamal GS38996	Low velocity impact on a bio composite aircraft radome structure	Member	Graduated
Nor Hafizah Binti Manan GS44690	Development of honeycomb bio composites of kenaf in transverse fiber direction for aerospace application	Member	Graduated

Master of Innovation and Engineering Design (MIED)

Student	Title	Role	Status
Fakhrul Radhi Kamarul Azmi GS47241	Highway Wind Harresting for Electrical Generation	Chairman	Graduated - 2018
Look Hou Xuan GS49456	Composite roof module designed for coach building	Chairman	Graduated - 2019



Arian Kiasat GS51646	Development of crash box mechanisms	Chairman	Graduated - 2019
Muhammad Azahari Abu Bakar	Adjustable trestle for lightweight aircraft	Chairman	Graduated - 2016

Bachelor of Aerospace Engineering

Student	Title	Role	Status
Mohd Nizam Hassan 160541	Finite element simulation of cut-out pates subjected to in-plane shear loading	Chairman	Graduated - 2014
Zaty Nadira Bt. Muhamad Zuhari	Finite element analysis of cone and pyramid shaped structures subjected to compression	Chairman	Graduated - 2014
Muhammad Imran Najeeb 180333	Finite element analysis on the effects of the loading conditions on buckling performance of C-channel setions	Chairman	Graduated - 2018
Christapaul a/l Mathalamuthu	Experimental investigation on the effects of loading conditions towards the buckling performance of C-channel sections	Chairman	Graduated - 2018
Muhammad Imran Najeeb	Investigation on buckling performance of a fixed supported squared thin plate	Chairman	Graduated - 2017
Nurfaizah Mohamad	The influence of crack angle on edge slanted crack to crack propagation in aluminium and steel plates	Chairman	Graduated - 2019
Lingesh a/l Shanmugam	Crack propagation behavior of aluminium 7075-T6 and steel 4340	Chairman	Graduated - 2019

Research Funding

Project Title	Amount (RM)	Year	Source	Role
Damage model and simulation process of FRP composite materials for aerospace composite structures	50,000.00	2018-2020	UPM Putra Grant	Leader
Development of a new spline-type finite strip method based on higher order plate theory for composite	121,700.00	2015-2019	MOHE FRGS	Leader
The post-buckled coupled mode interaction behavior of aircraft aluminum stiffened panels in compression	59,000.00	2013-2015	MOHE FRGS	Leader
The effects of loading conditions on the local/overall failure mechanics of UAV wing spars – an experimental approach	50,000.00	2013-2015	UPM IPM Grant	Leader
Investigation of the filament wound sandwich structures as a substitute to the existing pultruded glass fiber reinforced polymer composite in the cross-arm structure of the high transmission towers	149,000.00	2019-2022	MOHE FRGS	Member
Upstream Fundamental Research in Bamboo – Determining the Characterization of Different Species of Bamboo Found in Peninsular Malaysia as Reinforced Composite Material	79,000.00	2014-2016	MOHE FRGS	Member
Three-Dimensional System-of-Systems Modeling for Personal Air Vehicle (PAVE) Operation in Malaysia	73,000.00	2013-2015	MOHE FRGS	Member



Preliminary study of vertical seat design for standing cabin concept in commercial transport aircraft	79,000.00	2013-2015	UPM	Member
Design, simulation and characterization of new composite cross arm of power transmission tower	26,000.00	2018-2020	UPM	Member
Study of the effect of different reinforcement on mechanical behavior of hybrid reinforced composites	25,000.00	2018-2020	UPM	Member

Publications

Selected Citation (ISI Thompson) Index Journal Papers

1. Khan, S.A., Rahimian Koloor, S.S., King Jye, W., Yidris, N., Tamin, M.N., Johar, M., "Strain Rate Effect on Mode I Debonding Characterization of Adhesively Bonded Aluminum Joints", Processes, 2023, 11(1), 81. **(Senior author)**
2. Zakaria, N.A., Ishak, M.R., Mustapha, F., Yidris, N., "Tensile properties of a hybrid kenaf-glass fibre composite shaft", Materials Today: Proceedings, 2023, 74, pp. 492–498.
3. Yidris, N., Osman, I.S., Gires, E., "Influence of shear direction on the buckling of CFRP composite perforated plate", Forces in Mechanics, 2022, 9, 100146. **(Senior author)**
4. Israr, H.A., Chwen, T.S., Latif, A.A., Yidris, N., Yahya, M.Y., "Preliminary Structural Design of Coreless Spoiler by Topological Optimization", Processes, 2022, 10(10), 2076.
5. Al Qahtani, T., Yidris, N., Sulaiman, S., Yaakob, M.S., Ahmad, K.A., "Experimental Analysis of a Free-Swimming Water Pipe Leakage Sensor", Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, 2022, 100(1), pp. 116–136.
6. Hamat, S., Ishak, M.R., Sapuan, S.M., Yidris, N., Hussin, M.S., Abd Manan, M.S., "Influence of filament fabrication parameter on tensile strength and filament size of 3D printing PLA-3D850", Materials Today: Proceedings, 2022.
7. Aldhufairi, M., Muda, M.K.H., Mustapha, F., Ahmad, K.A., Yidris, N., "Design of Wind Nozzle for Nozzle Augmented Wind Turbine", Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, 2022, 95(1), pp. 36–43.



8. Alotaibi, A., Muda, M.K.H., Mustapha, F., Halin, I.A., Yidris, N., “Perpetual Motion Wind Turbine Generator for Novelty Energy Harvesting System; Conceptual Design Approach”, *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences*, 2022, 94(2), pp. 166–173.
9. Ashraf, W., Ishak, M.R., M.Y.M, Z., Yidris, N., Ya’Acob, A.M., “Investigation of Mechanical Properties of Honeycomb Sandwich Structure with Kenaf/glass Hybrid Composite Face-sheet”, *Journal of Natural Fibers*, 2022, 19(13), pp. 4923–4937.
10. Amir, A.L., Ishak, M.R., Yidris, N., Zuhri, M.Y.M., Asyraf, M.R.M., “Advances of composite cross arms with incorporation of material core structures: Manufacturability, recent progress and views”, *Journal of Materials Research and Technology*, 2021, 13, pp. 1115–1131.
11. Mazlan, S., **Yidris, N.**, Kolor, S.S.R., Petru, M., “Experimental and numerical analysis of fatigue life of aluminum al 2024-t351 at elevated temperature”, (2020) *Metals*, 10 (12), art. no. 1581, pp. 1-14. **Q1 (Senior author)**
12. Mutaifi, A., **Yidris, N.**, Kolor, S.S.R., Petru, M., “Numerical prediction of residual stresses distribution in thin-walled press-braked stainless steel sections”, (2020) *Materials*, 13 (23), art. no. 5378, pp. 1-31. **Q2 (Senior author)**
13. Asyraf, M.R.M., Rafidah, M., Ishak, M.R., Sapuan, S.M., **Yidris, N.**, Ilyas, R.A., Razman, M.R., “Integration of TRIZ, morphological chart and ANP method for development of FRP composite portable fire extinguisher”, (2020) *Polymer Composites*, 41 (7), pp. 2917-2932. **Q2**
14. **Yidris, N.**, Isham, N.H., Gires, E., Mutaifi, A., “The effects of loading conditions on the behaviour of fixed-ended plain channel columns”, (2020) *Materials*, 13 (6), art. no. 1441. **Q2 (Senior author)**
15. Asyraf, M.R.M., Ishak, M.R., Sapuan, S.M., **Yidris, N.**, “Conceptual design of multi-operation outdoor flexural creep test rig using hybrid concurrent engineering approach”, (2020) *Journal of Materials Research and Technology*, 9 (2), pp. 2357-2368. **Q2**
16. Asyraf, M.R.M., Ishak, M.R., Sapuan, S.M., **Yidris, N.**, Ilyas, R.A., “Woods and composites cantilever beam: A comprehensive review of experimental and numerical creep methodologies”, (2020) *Journal of Materials Research and Technology*, 9 (3), pp. 6759-6776. **Q2**
17. Kolor, S.S.R., Karimzadeh, A., **Yidris, N.**, Petru, M., Ayatollahi, M.R., Tamin, M.N., “An Energy-based Concept for Yielding of Multidirectional Fiber-reinforced Polymer Composite Structures“, *Polymers*, Vol. 12(1), 157, (2020) **Q1 (Senior author)**



18. Asyraf, M.R.M., Ishak, M.R., Sapuan, S.M., **Yidris, N.**, Ilyas, R.A., Rafidah, M., Razman, M.R., “Potential application of green composites for cross arm component in transmission tower: A brief review”, (2020) International Journal of Polymer Science, 2020, art. no. 8878300. **Q2**
19. Asyraf, M.R.M., Ishak, M.R., Sapuan, S.M., **Yidris, N.**, Ilyas, R.A., Rafidah, M., Razman, M.R., “Evaluation of Design and Simulation of Creep Test Rig for Full-Scale Crossarm Structure”, (2020) Advances in Civil Engineering, 2020, art. no. 6980918. **Q3**
20. Asyraf, M.R.M., Ishak, M.R., Sapuan, S.M., **Yidris, N.**, “Conceptual design of creep testing rig for full-scale cross arm using TRIZ-Morphological chart-analytic network process technique”, (2019) Journal of Materials Research and Technology, 8 (6), pp. 5647-5658. **Q2**
21. Hashim, N., Majid, D.L.A., Mahdi, E.-S., Zahari, R., **Yidris, N.**, “Effect of fiber loading directions on the low cycle fatigue of intraply carbon-Kevlar reinforced epoxy hybrid composites”, (2019) Composite Structures, 212, pp. 476-483. **Q1**
22. Mutafi, A., **Yidris, N.**, Loughlan, J., Zahari, R., Ishak, M.R., “Investigation into the distribution of residual stresses in pressed-braked thin-walled steel lipped channel sections using the 3D-FEM technique”, Thin-Walled Structures, 135, (2019) pp. 437-445, **Q1 (Senior author)**
23. Sauli, S.A., Ishak, M.R., Mustapha, F., **Yidris, N.**, Hamat, S., “Hybridization of TRIZ and CAD-analysis at the conceptual design stage”, (2019) International Journal of Computer Integrated Manufacturing, 32 (9), pp. 890-899. **Q2**
24. Ghavamian, A., Mustapha, F., Baharudin, B.T.H.T., **Yidris, N.**, “Detection, localisation and assessment of defects in pipes using guided wave techniques: A review”, Sensors (Switzerland) 18(12), (2018) 4470, **Q1**
25. Mutafi, A., **Yidris, N.**, Ishak, M.R., Zahari, R., “An investigation on longitudinal residual strains distribution of thin-walled press-braked cold formed steel sections using 3D FEM technique”, Heliyon 4(11), (2018) e00937, **Q2 (Senior author)**
26. Shah, A.U.M., Sultan, M.T.H., Cardona, F., Jawaid, M., Talib, A.R.A., **Yidris, N.**, “Thermal analysis of bamboo fibre and its composites”, (2017) BioResources, 12 (2), pp. 2394-2406. **Q1**
27. Hashim, N., Abdul Majid, D.L., Zahari, R., **Yidris, N.**, “Tensile properties of woven carbon/kevlar reinforced epoxy hybrid composite”, (2017) Materials Science Forum, 890 MSF, pp. 20-23. **Q4**



28. Loughlan, J., **Yidris, N.**, “The local-overall flexural interaction of fixed-ended plain channel columns and the influence on behaviour of local conditions at the constituent plate ends”, (2014) *Thin-Walled Structures*, 81, pp. 132-137. **Q1 (Senior author)**
29. Loughlan, J., **Yidris, N.**, Jones, K., “The failure of thin-walled lipped channel compression members due to coupled local-distortional interactions and material yielding”, (2012) *Thin-Walled Structures*, 61, pp. 14-21. **Q1 (Senior author)**
30. Loughlan, J., **Yidris, N.**, Cunningham, P.R., “The effects of local buckling and material yielding on the axial stiffness and failure of uniformly compressed I-section and box-section struts”, (2011) *Thin-Walled Structures*, 49 (2), pp. 264-279. **Q1 (Senior author)**

Selected Citation (SCOPUS) Index Journal Papers

1. Asyraf, M.R.M., Ishak, M.R., Sapuan, S.M., **Yidris, N.**, Shahroze, R.M., Johari, A.N., Rafidah, M., Ilyas, R.A., “Creep test rig for cantilever beam: fundamentals, prospects and present views”, (2020) *Journal of Mechanical Engineering and Sciences*, 14 (2), pp. 6869-6887.
2. Al Mayas, A.A., Aolin, C., Aziz, F.A., **Yidris, N.**, Ahmad, K.A., “Investigation of solid propellant rocket motor nozzle via CFD simulation”, (2020) *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences*, 68 (2), pp. 1-8.
3. Al Qahtani, T., Yaakob, M.S., **Yidris, N.**, Sulaiman, S., Ahmad, K.A., “A Review on water leakage detection method in the water distribution network”, (2020) *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences*, 68 (2), pp. 152-163.
4. Zaki, M.M.M., Qahtani, T.A., **Yidris, N.**, Sulaiman, S., Ariffin, A.H., Yaakob, M.S., Ahmad, K.A., “Design and analysis of a water pipe leakage sensor”, (2020) *CFD Letters*, 12 (9), pp. 51-59.
5. **Yidris, N.**, Sultan, M.T.H., Harmin, M.Y., Rafie, A.S.M., “Local-overall flexural interaction of pinned-ended thin-walled I-section columns”, (2014) *Applied Mechanics and Materials*, 564, pp. 444-448. **(Senior author)**
6. Jamal, Q.M., Majid, D.L., Haris, M.Y., **Yidris, N.**, Sultan, M.T.H., “Quasi static analysis of a biocomposite aircraft radome”, (2014) *Applied Mechanics and Materials*, 629, pp. 78-81.
7. Razali, N., Sultan, M.T.H., Safri, S.N.A., Basri, S., **Yidris, N.**, Mustapha, F., “High velocity impact test on glass fibre reinforced polymer (GFRP) using a single stage gas



- gun (SSGG) - An experimental based approach”, (2014) Applied Mechanics and Materials, 564, pp. 376-381.
8. Safri, S.N.A., Sultan, M.T.H., Razali, N., Basri, S., **Yidris, N.**, Mustapha, F., “The effect of layers and bullet type on impact properties of Glass Fibre Reinforced Polymer (GFRP) using a Single Stage Gas Gun (SSGG)”, (2014) Applied Mechanics and Materials, 564, pp. 428-433.
 9. Sultan, M.T.H., Basri, S., Rafie, A.S.M., **Yidris, N.**, Mustapha, F., Zahari, R., Ajir, M.R., “Impact damage analysis for glass reinforced epoxy laminated plates using single stage gas gun”, (2014) Applied Mechanics and Materials, 564, pp. 382-387.
 10. Sultan, M.T.H., Rafie, A.S.M., **Yidris, N.**, Mustapha, F., Majid, D.L., “Damage classification in CFRP laminates using principal component analysis (PCA) approach”, (2012) Applied Mechanics and Materials, 225, pp. 189-194.
 11. Sultan, M.T.H., **Yidris, N.**, Mustapha, F., Rafie, A.S.M., Majid, D.L., “Damage identification and classification in CFRP laminates - A SEM based study”, (2012) Applied Mechanics and Materials, 225, pp. 138-143.
 12. Zainol, M.Z., Mustapha, F., Sultan, M.T.H., **Yidris, N.**, “Implementation of extreme low power micro-controller for a wireless structural health monitoring (SHM) system”, (2012) Applied Mechanics and Materials, 225, pp. 344-349.
 13. Cheong, X.H., Mohd Rafie, A.S., Romli, F.I., Hameed Sultan, M.T., **Yidris, N.**, “A study on the effect of upstream square blockage of a rotating cylinder”, (2012) Applied Mechanics and Materials, 225, pp. 13-17.
 14. **Yidris, N.**, Loughlan, J., Sultan, M.T.H., Rafie, A.S.M., “Failure mechanics of uniformly compressed thin-walled box-section struts”, (2012) Applied Mechanics and Materials, 225, pp. 172-177. **(Senior author)**
 15. **Yidris, N.**, Zahari, R., Majid, D.L., Mustapha, F., Sultan, M.T.H., Rafie, A.S.M., “Crush simulation of woven c-glass/epoxy unmanned ariel vehicle fuselage section”, (2010) International Journal of Mechanical and Materials Engineering, 5 (2), pp. 260-267. **(Senior author)**
 16. Loughlan, J., **Yidris, N.**, Cunningham, P.R., “The influence of post-local buckling mechanics on the stress variations, axial stiffness and ultimate failure strength of uniformly compressed thin-walled I-Section struts”, (2009) Journal of Physics: Conference Series, 181 (1), art. no. 012031. **(Senior author)**



Scientific Conference Papers

1. **Yidris, N.**, Koloor, S.S.R., “Numerical Study on the Structural Behavior of Eccentrically Loaded GFRP Pultruded Members”, Symposium on Damage Mechanisms in Materials and Structures 2018 (SDMMS2018), Universiti Teknologi Malaysia (KL-campus), Kuala Lumpur, Malaysia, 6th Dec 2018. **(Senior author)**
2. Koloor, S.S.R., Ariff, I.M., **Yidris, N.**, Ayatollahi, M.R., Tamin*, M. N., "Fracture Energy of CFRP Composite Lamina in Fiber Breakage Mode Using Digital Image Correlation and Finite Element Method", The 6th International Conference on Composites: Characterization, Fabrication and Application (CCFA-6), Iran University of Science and Technology, Tehran, Iran, Dec 11-12, 2018. **(Senior author)**
3. Zahari, R., Pillai, J.R., Ordys, A., Hameed Sultan, M.T., **Yidris, N.**, “Ballistic impact analysis of double-layered metal plates”, (2018) IOP Conference Series: Materials Science and Engineering, 405 (1), art. no. 012012. **(SCOPUS)**
4. Hashim, N., Majid, D.L., Uda, N., Zahari, R., **Yidris, N.**, “Vacuum infusion method for woven carbon/Kevlar reinforced hybrid composite”, (2017) IOP Conference Series: Materials Science and Engineering, 270 (1), art. no. 012021. **(SCOPUS)**
5. **Yidris, N.**, Mustapha, F., Zahari, R., Sultan, M.T.H., “The influence of loading conditions on the carrying capacity of thin-walled plain channel columns”, International Conference on Mechanical, Automotive and Aerospace Engineering 2013, IIUM, Kuala Lumpur, 2-4 July 2013. **(Senior author)**
6. **Yidris, N.**, Sultan, M.T.H., Harmin, M.Y., Rafie, A.S.M., “Local-overall flexural interaction behaviour of pinned-ended thin-walled I-section columns”, International Conference on Advances in Mechanical and Manufacturing Engineering 2013, Kuala Lumpur, 25-28 November 2013. **(Senior author)**
7. Safri, S.N.A., Sultan, M.T.H., Razali, N., Basri, S., **Yidris, N.**, Mustapha, F., “The effect of thickness and bullet type on impact properties of glass fibre reinforced polymer (GFRP) using a single stage gas gun (SSGG)”, International Conference on Advances in Mechanical and Manufacturing Engineering 2013, Kuala Lumpur, 25-28 November 2013.
8. Razali, N., Sultan, M.T.H., Safri, S.N.A., Basri, S., **Yidris, N.**, Mustapha, F., “High velocity impact test on glass fibre reinforced polymer (GFRP) using a single stage gas gun (SSGG) – an experimental based approach”, International Conference on Advances in Mechanical and Manufacturing Engineering 2013, Kuala Lumpur, 25-28 November 2013.



9. Sultan, M.T.H., Basri, S., Rafie, A.S.M., **Yidris, N.**, Mustapha, F., Zahari, R., Ajir, M.R., "Impact damage analysis for glass reinforced epoxy laminated plates using single stage gas gun (SSGG)", International Conference on Advances in Mechanical and Manufacturing Engineering 2013, Kuala Lumpur, 25-28 November 2013.
10. Loughlan, J., **Yidris, N.**, "The local-overall flexural interaction of fixed-ended plain channel columns and the influence on behavior of local conditions at the constituent plate ends", The 6th International Conference on Coupled Instabilities in Metal Structures, Strathclyde University, Scotland, UK, 3-5 December 2012. (**Senior author**)
11. Loughlan, J., **Yidris, N.**, "The local-flexural-distortional elasto-plastic interactive failure mechanics of steel thin-walled lipped channel columns", Stability and Structures XIII-th Symposium Zakopane, Poland, 17-21 September 2012. – **Keynote paper (Senior author)**
12. Loughlan, J., **Yidris, N.**, "The influence of end support boundary conditions on the local-overall interactive failure mechanics of plain channel section columns", The 6th International Conference on Thin-Walled Structures, Timisoara, Romania, 5-7 September 2011. – **Keynote paper (Senior author)**
13. Loughlan, J., **Yidris, N.**, Jones, K., "The failure of thin-walled lipped channel compression members due to coupled local-distortional interactions and material yielding", The 6th International Conference on Thin-Walled Structures, Timisoara, Romania, 5-7 September 2011. (**Senior author**)
14. Loughlan, J., **Yidris, N.**, "The coupled post-local buckling and overall bending interaction mechanics of thin-walled plain channel columns", The 4th International Conference on Structural Engineering, Mechanics and Computation, Cape Town, South Africa, 6-8 September 2010. – (**Senior author**) (**SCOPUS**)
15. Loughlan, J., **Yidris, N.**, "The mechanics of post-local buckling and overall bending interaction in thin-walled I-section compression members", The 4th International Conference on Structural Engineering, Mechanics and Computation, Cape Town, South Africa, 6-8 September 2010. – **Invited paper (Senior author) (SCOPUS)**
16. **Yidris, N.**, Loughlan, J., Rafie, A.S.M., Sultan, M.T.H., "The influence of post-local buckling mechanics on the stress variations, axial stiffness and ultimate failure strength of uniformly compressed thin-walled channel section struts", Proceedings of the AEROTECH III, 18-19 November 2009, Kuala Lumpur, Malaysia (**Senior author**)
17. Loughlan, J., **Yidris, N.**, "The post-local buckling mechanics and ultimate carrying capability of uniformly compressed thin-walled I-section struts and columns", Stability



and Structures XII-th Symposium Zakopane, Poland, 7-11 September 2009. – **Keynote paper (Senior author)**

18. Sultan, M.T.H., Basri, S., Zahari, R., Ajir, M.R., **Yidris, N.**, Rafie A.S.M., “Design and development of ballistic impact test facility”, Proceeding of the AEROTECH II 2007.
19. Rafie, A.S.M., Basri, S., Attaran, A.H., Majid, D.L., Sultan, M.T.H., **Yidris, N.**, “Computational analysis for Eagle 150b aircraft wings”, Proceedings of AEROTECH-II 2007 conference on Aerospace Technology of XXI Century, 20-21 June 2007, Kuala Lumpur.
20. Rafie, A.S.M., Basri, S., Attaran, A.H., Majid, D.L., **Yidris, N.**, Sultan, M.T.H., “Experimental analysis for Eagle 150b aircraft wings”, Proceedings of AEROTECH-II 2007 conference on Aerospace Technology of XXI Century, 20-21 June 2007, Kuala Lumpur.

Book Chapters

1. Mutafi, A., Yidris, N., Ishak, M.R., Zahari, R., “3D fem to predict residual stresses of press-braked thin-walled steel sections”, (2019) Lecture Notes in Civil Engineering, 9, pp. 215-224. **(Senior author) (SCOPUS)**
2. Yidris, N., Hassan, M.N., “The effects of cut-out on thin-walled plates”, (2018) Modelling of Damage Processes in Biocomposites, Fibre-Reinforced Composites and Hybrid Composites, pp. 19-26. **(Senior author) (SCOPUS)**

Professional Involvement

Invited and Keynote papers

1. Keynote presentation at the XII-th Symposium on Stability of Structures, Zakopane, Poland, 7-11 September, 2009.
2. Invited paper at The Fourth International Conference on Structural Engineering, Mechanics and Computation, Cape Town, South Africa, 6-8 September, 2010.
3. Keynote presentation at The Sixth International Conference on Thin-Walled Structures, Timisoara, Romania, 5-7 September, 2011.
4. Keynote presentation at the XIII-th Symposium on Stability of Structures, Zakopane, Poland, 17-21 September, 2012.



Committee / panel

Date	Designation	Remarks
2021	Editorial Board Member	Journal of Civil Engineering Inter Disciplinaries
2020	Treasurer	International Symposium on Sustainable Aviation (ISSA 2020)
2019	Treasurer	5th International Conference on Computational Methods in Engineering and Health Sciences (ICCMEH 2019)
2019	Judge	5th International Conference on Computational Methods in Engineering and Health Sciences (ICCMEH 2019)
2019	Judge	Program Global I-Lead STEM CAMP (GISC2019) and International STEM Olympiad (ISTEMO)-GISTEMO 2019
2018	Judge	Program Global I-Lead STEM CAMP (GISC2018) and International STEM Olympiad (ISTEMO)-GISTEMO 2018
2018	Session Chair	Aerotech VII Conference 2018
2016	Organizing Committee	Aerotech VI Conference 2016
2014	Organizing Committee	Aerotech V Conference 2014
2012	Organizing Committee	Aerotech IV Conference 2012

Article Reviewer

Journal / Proceeding	Organization	Year
Materials Journals Q1 ISI	MDPI	2021
Polymer Testing Journal Q1 ISI	Elsevier	2021
Engineering Structures Journal Q1 ISI	Elsevier	2021
Pertanika Journal of Scholarly Research Reviews	UPM Publisher	2021
Engineering Structures Journal Q1 ISI	Elsevier	2020
International Symposium on Sustainable Aviation (ISSA 2020)	SARES Turki	2020
11th International Conference on Numerical Analysis in Engineering (NAE 2020)	UKM	2020
Polymer Testing Journal Q1 ISI	Elsevier	2019



Modelling and Simulation in Engineering Journal	Hindawi	2019
5th International Conference on Computational Methods in Engineering and Health Sciences (ICCMEH 2019)	UPM/MANIPAL/KYUTECH	2019
Pertanika Journal of Scholarly Research Reviews	UPM Publisher	2018
IPB Research Grant	UPM RMC	2018
Thin-Walled Structures Journal Q1 ISI	Elsevier	2017

Consultancy Experiences and Activities in UPM

Project Title	Amount (RM)	Year	Organization	Role
Evaluating Stress Distribution on a Cover Plate of Spherical Vessel	5,500.00	2019	Tricol-Engineering	Member
Fatigue Testing on Carbon Fiber	4,388.40	2019	MIAT	Leader
Structural Analysis of (24L) 275Kv Quad Tower Composite Crossarms	19,080.00	2018	Electrius S/B	Leader
Structural Analysis of (23L) 132Kv Quad Tower Composite Crossarms Type 2 Top Phase For Tmja-Ptai, Negeri Sembilan Assembly	19,080.00	2018	Electrius S/B	Leader
Finite Element Analysis of (23L) 132Kv Quad Tower Composite Crossarms Type 3 Top Phase For Tmja-Ptai, Negeri Sembilan Assembly	31,482.00	2017	Electrius S/B	Leader
Design and Development of Motorised Adjustable Vertical Platform for Satellite Assembly, Integration and Test Facility	369,920.00	2015	ANGKASA	Member

Consultancy Experiences and Activities in Private Companies

Design, supervision, evaluation, testing, commissioning and tender preparation of mechanical services as follows:

- Cold & hot water system
- Internal sewerage system
- Swimming pool system
- Fire fighting installation - hose reel system, CO2 system, sprinkler system, wet riser system, down comer system, fire alarm system and wet chemical system
- Air-conditioning system – centralized system and split unit system
- Air ventilation installation
- LPG piping installation
- Medical gas piping installation

For:

A. Perunding Bakti Sdn. Bhd.

Apartments/Residential

- Six blocks 18-storey low cost housing at Lembah Pantai, Kerinchi Kuala Lumpur for SPNB
- Mixed development of low cost housing, medium cost housing, bungalow lots and shop houses at Kuala Kemaman, Mukim Chukai, Terengganu for SPM Property Management Sdn Bhd
- 31 unit 2-storey shop houses (24' x 70') and 18 unit 2-storey shop haouses (24' x 65') at Kg. Air Putih, Mukim Binjai, Terengganu for SPM Property Management Sdn Bhd
- 124 unit low cost housing, 49 unit low medium cost housing, 77 unit medium cost housing and 4 unit 1-storey shop houses at Mukim Sg. Karang, Cherating, Kuantan, Pahang for SPNB
- 10 unit 2-storey bungalows and club house at Seksyen 7, Shah Alam, Selangor for PKNS

Commercial

- One unit 10-storey pediatric block and 3-storey sub-basement at Petaling Jaya, Selangor for PPUM
- Ice factory with cold room at Kuala Kemaman, Mukim Chukai, Terengganu for SPM Property Management Sdn Bhd



- One unit 3-storey commercial block with sub-basement at Seremban II, Mukim Rasah, Seremban, Negeri Sembilan for PKNNS

B. VALDUN Consulting Engineers

Apartments/Residential

- 2-storey and sub-basement of Tan Sri Halim's bungalow with swimming pool and guardhouse at Mukim Batu, Bukit Tunku

Commercial

- Taman Selatan Putrajaya
- 2-storey hypermarket at Pusat Bandar Puchong for Tetuan Productive Shoppe Sdn Bhd – TESCO Puchong
- 28-storey (125 units) condominium block with 4-storey car parking podium at Bandaraya Georgetown, Lebuhraya Farquhar, Penang for Tetuan Eastern & Oriental Berhad and Eastern Oriental Hotel (1951) Sdn Bhd
- Taman negara restaurant, Taman Negara Pahang

Institutional

- 3-storey primary school & 4-storey secondary school, Bandar Seri Alam, Mukim Plentong Masai Johor
- Addition & renovation to PORIM admin building, Bangi Selangor

C. Ingenieur KEME Consulting Engineers

Apartments/Residential

- Taman Budaya Negeri Perlis
- Class E quarters at Kem Bina Negara Ulu Sepri, Ulu Kenas, Alor Gajah, Besut, Gunung Pulai, Langkawi, Kaki Bukit, Meru and Maran

Commercial

- Learjet 60 hangar at Sultan Abdul Aziz Shah Airport Subang
- Bridge shiphandling simulator complex for Royal Malaysian Navy
- Kompleks kemudahan kemasyarakatan (3K) at Taman Serdang Raya, Serdang
- 2-storey hawker center at Taman Setiawangsa, Kuala Lumpur

Institutional

- Secondary school at Damansara Kuantan, Daerah Kuantan, Pahang
- Secondary school at Taman Daya 2, Johor Bahru, Johor



Research and Innovation Product Exhibition

1. Clothes Hanger – Industrial Design Patent No. 16-00899-0101 – Granted 2017

Awards

Name of awards	Title	Award authority	Level	Year
Anugerah Kecemerlangan dalam Pengajaran (pra siswazah) Semester I 2018/2019	Program Inovasi dan Apresiasi 2018	Fakulti Kejuruteraan	Faculty	2018
Anugerah Kecemerlangan dalam Pengajaran (pra siswazah) Semester II 2017/2018	Program Inovasi dan Apresiasi 2018	Fakulti Kejuruteraan	Faculty	2018
Anugerah Kecemerlangan dalam Pengajaran	Program Inovasi dan Apresiasi 2017	Fakulti Kejuruteraan	Faculty	2017
Anugerah Perkhidmatan Cemerlang	Anugerah Perkhidmatan Cemerlang 2017	Universiti Putra Malaysia	University	2017
Anugerah Kecemerlangan dalam Pengajaran	Program Inovasi dan Apresiasi 2016	Fakulti Kejuruteraan	Faculty	2016



Thesis Examiners

Student	Examination	Organization	Role	Year
Chen Aolin	PhD	UPM	Internal examiner	2023
Murniwati binti Anwar	PhD	UPM	Internal examiner	2023
Norzaima binti Nordin	PhD	UPM	Internal examiner	2023
Mudassar Hussain Hashmi	PhD	UPM	External examiner	2022
Sarmad Dawood Salman Dawood	PhD	UPM	Internal examiner	2022
Elias Randjbaran	PhD	UPM	Internal examiner	2022
Tabrej Khan GS49088	PhD	UPM	VIVA Assistant Chairman	2020
Muhamad Hasfanizam bin Mat Yazik GS47710	PhD	UPM	VIVA Assistant Chairman	2020
Ahmad Fariduddin bin Ahmad Faris	MSc	UPM	Internal examiner	2021
Ahmad Nazrin Johari	MSc	UPM	Internal examiner	2019
Ahmad Syahmi Mohamed Latiff	MSc	UPM	Internal examiner	2019
Nur Farhana Binti Adnan GS49229	MIED	UPM	Internal examiner	2019
Aiman Saleh Alammari GS43389	MIED	UPM	Internal examiner	2018
Kiasat Bardia GS54949	MIED	UPM	Internal examiner	2019
Mohd Shahrom Ismail KGA130065	MSc	UM	External Examiner	2015
Hasnor Farah Fatehah Bt. Hassim	B.Eng	UPM	Internal examiner	2018
Muhammad Syafiq Rahim	B.Eng	UPM	Internal examiner	2018



Syamimi Auni Bt. Fuad Mirza	B.Eng	UPM	Internal examiner	2018
Jonathan Wong Guanjie	B.Eng	UPM	Internal examiner	2019
Tay Chai Hua	B.Eng	UPM	Internal examiner	2015
Wan Ahmad Syakirin Wan Ismail	B.Eng	UPM	Internal examiner	2014
Adeeb Fajobi Olamilekan	B.Eng	UPM	Internal examiner	2019
Anusha Baradi Dasan	B.Eng	UPM	Internal examiner	2017

Referees

1. Prof. Ir. Dr. Faizal Bin Mustapha
Aerospace Engineering Department,
Faculty of Engineering,
Universiti Putra Malaysia
faizalms@upm.edu.my
2. Prof. Ir. Dr. Mohd Khairul Anuar Bin Mohd Ariffin
Mechanical Engineering and Manufacturing Department
Faculty of Engineering,
Universiti Putra Malaysia
khairol@upm.edu.my