









Aviation Technology Research

TIER 5 – RESEARCH INITIATIVE GROUP (RIG)

Name of RIG	:	Aviation Technology Research (ATR)
Registration Code	:	
Tier	:	5
Leader	:	Prof. Dr. Ir. Wahyu Kuntjoro
CoRe	:	Frontier Materials and Industrial Application (FMIA)
Registered Faculty	:	Mechanical Engineering
Registration date (Senate Approval)	:	
UiTM Niche Area	:	Transportation and Mobility
RIG Niche Area	:	Research in Aviation Technology (Civil and Military)

BACKGROUND OF MEMBERS

	Name of Leader & Members	Faculty & Staff No.	Qualification	Area of Expertise
	<i>Prof. Wahyu Kuntjoro</i>	Mechanical Engineering	PhD, PEng, CEng	Aircraft Design, Structural Integrity, Flight Performance
	<i>Prof. Wirachman Wisnoe</i>	Mechanical Engineering	PhD	Aerodynamics, Propulsion
	<i>Rizal Effendy Mohd Nasir</i>	Mechanical Engineering	PhD	Flight Dynamics & Control, Flight Simulation
	<i>Khairul Nizam Tahar</i>	Seni Bina Perancangan dan Ukur	PhD	GIS, Aerial Mapping, UAV Operations
	<i>Ramzyzan Ramly</i>	Mechanical Engineering	PhD	Aircraft Structure & Testing, Mechanical System
	<i>Noor Iswadi</i>	Mechanical Engineering	PhD	Aerodynamics, Fluid Structure Interaction
	<i>Zurriati Mohd Ali</i>	Mechanical Engineering	PhD	Aerodynamics, Computational Fluid Dynamics
	<i>Bibi Intan Suraya Murat</i>	Mechanical Engineering	PhD	Wave-based Structural Monitoring

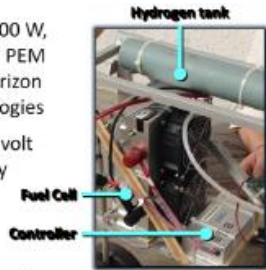
ATR ACHIEVEMENT(2015-2017)

PENCAPAIAN	2015	2016	2017
Master Degree – Enrolled/On-Going	12	11	14
Master Degree - Graduated	1	1	2
PhD – Enrolled/On-Going	9	9	8
PhD – Graduated	1	2	1
No. of research grants	11	14	11
Total value of research grants (RM)	936,000.00	1,155,700.00	750,600
Total publication (Indexed Journals) (Note: not updated)	19	10	30
IPR	1 ?	1	2

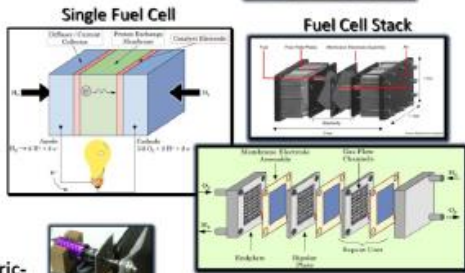
Niche Area and Relevance of RIG

Self-humidified 500 W, 36 cell, hydrogen PEM stack built by Horizon Fuel Cell Technologies

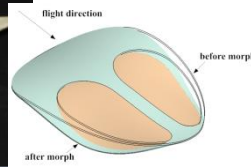
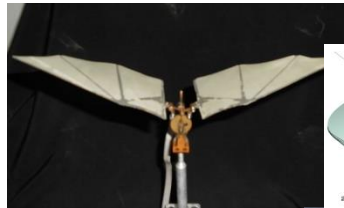
Started by a 13 volt power supply



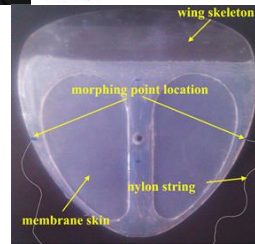
MH370 and 17 Interview



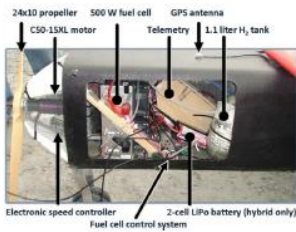
Electric-motor & propeller



Morphing and Flapping wings



NAMTOR -copter

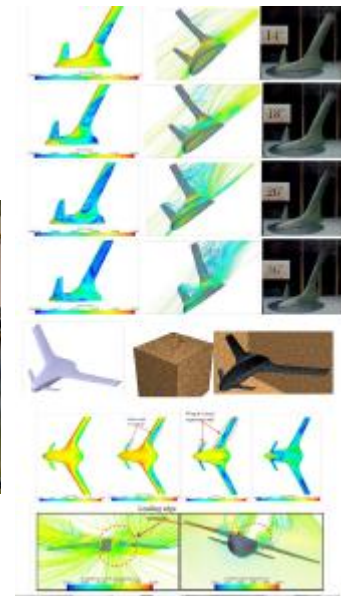


Mindef - RMAF



Fuel Cell Powered Propulsion

Blended Wing Body



Research domain of ATR is aviation technology both in civil and military applications. Currently ATR is conducting research and development which covers:

- Surveillance and Mapping (copters and UAV platform).
- Advanced flight technology: Blended Wing Body UAV (platform).
- Structural Integrity and Monitoring: Royal Malaysian Air Force and others