

CURRICULUM VITAE



Dr. Muhammad Khalil Abdullah @ Harun
 Polymer Engineering Programme
 School of Materials & Mineral Resources Engineering
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ACADEMIC QUALIFICATION

1. Ph.D. Mechanical Engineering, 2012, Universiti Sains Malaysia.
2. M.Sc. Mechanical Engineering, 2007, Universiti Sains Malaysia.
3. B. Eng (Hons) Mechanical Engineering, 2004, Universiti Sains Malaysia.

AREAS OF INTEREST

1. Electronic Packaging
2. Electronic Cooling

TEACHING EXPERIENCE

No.	Course Code	Course Name	Year
1.	EBP 400/3	Product Design and Failure Analysis	2013 – to date
2.	EBP 402/3	Mould and Die Design	2014 – to date
3.	EBP 310/3	Polymer Processing	2014 – to date
3.	EBP 207/2	Transport Phenomena in Polymers	2014 – to date

PROFESSIONAL QUALIFICATION / MEMBERSHIP

1. Board of Engineers Malaysia (BEM) – 52442A (Mechanical)
2. Institute of Engineers (IEM) – G54509 (Mechanical)
3. Associate ASEAN Engineer(AAE) – (Mechanical)
4. Electronic Packaging Research Society

PUBLICATIONS

(5 Selected Publications: 2012-2015)

1. H Yusoff, MZ Abdullah, KA Ahmad, MK Abdullah, S Suhaimi (2014) Experimental Study on the Effect of Skin Flexibility on Aerodynamic Performance of Flapping Wings for Micro Air Vehicles. Applied Mechanics and Materials 629, 18-23.
2. SF Sufian, MZ Abdullah, **MK Abdullah**, JJ Mohamed (2013) Effect of Side and Tip Gaps of a Piezoelectric Fan on Microelectronic Cooling. IEEE Transactions on Components Packaging and Manufacturing Technology, 3: (9), 1545-1553.

3. Fairuz ZM, Abdullah MZ, H. Yusoff, **Abdullah MK** (2013) Fluid structure interaction of unsteady aerodynamic of flapping wing at low Reynolds number, *Engineering Applications of Computational Fluid Mechanics*, 7: (1), 144-158.
4. **Abdullah MK**, Ismail NC, Mujeebu MA, Abdullah MZ, Ahmad KA, Husaini M, Hamid MNA (2012) Optimum Tip Gap and Orientation of Multi-Piezofan for Heat Transfer Enhancement of Finned Heat Sink in Microelectronic Cooling. *International Journal of Heat and Mass Transfer*, 55: (21–22), 5514-5525.
5. Shaker SF, Abdullah MZ, Mujeebu MA, Ahmad KA, **Abdullah MK** (2012) Study on the Effect of Number of Film Cooling Rows on the Thermal Performance of Gas Turbine Blade. *ISI Bilimive Teknigi Dergisi-Journal of Thermal Science and Technology* (in press).

RESEARCH GRANTS

(As Project Leader/Co-Project)

No.	Project Title	Amount (RM)	Year	Source
1.	Plastic Product Failure Associated with Polymer Flow Behaviour in Complex Geometries	104,000	2014-2017	FRGS
2.	FSI Analysis Of The Effect Of Die Thickness And Aspect Ratio Of Stacked Chip In Encapsulation Process Of Moulded Underfill Packaging.	172,000	2014-2016	CREST
3.	Experimental and Numerical Studies on the Heat Transfer Enhancement in Microelectronic Cooling Using Multi-Piezo Electric Fan	10,000	2009-2012	USM

POSTGRADUATE STUDENT SUPERVISION

PhD (Co-Supervisor)

No.	Name	Title	Status
1.	Tan Yizong	Flow of Polymer in a Closed Cavity Evaluated by Utilization of Computer-aided Simulation and the Relationship with Failure of Polymer Parts	Ongoing
2.	Afrizal Bin Admiral	Depressant for Crude Oil Flow Improver Utilization	Ongoing
3.	Siti Noratikah Binti Che Deraman	Computational Fluid Mechanics (Cfd) Simulation On Airflow Performance Towards High Rise Buildings.	Ongoing

MSc – Research (Co-Supervisor)

No.	Name	Title	Status
1.	Mohd Syakirin Bin Rusdi	Numerical Simulation and Experimental Investigations on the Effect of Polypropylene Rheology in the Injection Molding Process.	Graduated

MSc – Mixed mode (Main Supervisor)

No.	Name	Title	Status
1.	Albert Ng Wei Keat	Numerical Study Of Pressurized Flip-Chip With Dynamic Underfill Encapsulation Process.	Ongoing

AWARDS / RECOGNITION

No.	Type	Title	Awarding Authority	Level/Medal	Year
1.	Academic Recognition	An Experimental Study Of Skin Flexibility In Flapping Flight.	UiTM Penang	National	2014
2.	Academic Recognition	Appointment as External Evaluator for 3rd PRIM Student Chapter Carnival.	UNiMAP	National	2014

PROFESSIONAL SERVICES / CONSULTATION**Selected Major Activities**

No.	Year	Title	Company
1.	2014	Heat Transfer in Electronic Packaging.	UiTM Penang.
2.	2014	Physical and Numerical Modeling of Spillway.	Swee Senderian Berhad, Brunei.
3.	2013	Aerodynamic and Impact analysis on Go-Kart Car.	Kolej Komuniti Bdr Darulaman.