

## CURRICULUM VITAE



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### ACADEMIC QUALIFICATION

1. Ph.D. Polymer Technology, 2004, Universiti Sains Malaysia.
2. M.Sc. Polymer Science & Technology, 1998, UMIST, United Kingdom.
3. B. Tech. Polymer Technology, 1997, Universiti Sains Malaysia.

### AREAS OF INTEREST

1. Preparation and characterisation of various polymeric foams
2. Polymer melt rheology
3. Real-time measurement of parameter changes during polymer processing
4. Simple instrumentation development as an aid for polymer processing

### TEACHING EXPERIENCE

No.	Course Code	Course Name	Year
1.	EBP 202/3	Polymer Structure	2004 – to date
2.	EBP 207/2	Transport Phenomena in Polymers	2007 – 2013
3.	EBP 212/2	Latex Processing	2015
3.	EBP 303/3	Plastic Materials	2004 – 2006
4.	EBP 307/2	Polymer Rheology	2004 – 2013
5.	EBP 400/3	Product Design and Failure Analysis	2006 – to date
6.	EBP 402/3	Mould and Die Design	2006 – to date
7.	EBP 420/2	Rubber Engineering	2006

### PROFESSIONAL QUALIFICATION / MEMBERSHIP

1. Member, Plastics & Rubber Institute Malaysia (PRIM)
2. Member, Polymer Processing Society (PPS), USA
3. Editorial Board Member, Malaysian Polymer Journal (UTM/PRIM)
4. Editorial Board Member, Journal of Cellular Plastics (Sage Publication)

## PUBLICATIONS

### (5 Selected Publications: 2012-2015)

1. C.Y. Khor, M.Z. Abdullah, Z.M. Ariff, W.C. Leong (2012) Effect of stacking chips and inlet positions on void formation in the encapsulation of 3D stacked flip-chip package, International Communications in Heat and Mass Transfer, 39, 670–680.
2. T.H. Khang and Z.M. Ariff (2012) Vulcanization kinetics study of natural rubber compounds having different formulation variables, Journal of Thermal Analysis and Calorimetry, 109, 1545-1553.
3. Norwanis Hasan, Syed Fuad Saiyid Hashim and Zulkifli Mohamad Ariff (2013) Low-Frequency Sound Proof Cement-Based Syntactic Foam, International Journal of Materials, Mechanics and Manufacturing, Vol. 1, No. 4, 385-387.
4. Khang, T. H., and Z. M. Ariff (2014) Mold Filling Simulation Dependence on Material Data Input for Injection Molding Process of Natural Rubber Compound, International Polymer Processing, Vol. 29(3) 325-331.
5. Rahim, N.A.A., Ariff, Z.M., Ariffin, A., Zakaria, Z., Osman, H. and Metselaar, H.C., (2014) Viscosity analysis of polypropylene-kaolin composites measured using single-screw extruder, Journal of Vinyl and Additive Technology, 20(4), 275-283

## RESEARCH GRANTS

### (As Project Leader)

No.	Project Title	Amount (RM)	Year	Source
1.	A Study on Production and Optimisation of Rubber Foam from Natural Rubber	16,843	2005-2007	USM
2.	Development of Natural Rubber Foams and Characterisation of Its Structure-Properties Relationship for Sound Proofing and Shock Absorbing Applications	139,995	2006-2009	SCIENCEFUND
3.	Modelling and Characterization of Mechanical Response of Polyolefin Foams	86,600	2008-2011	FRGS
4.	Innovative Approach for Production of Epoxy Syntactic Foams Consisting Epoxy Hollow Spheres	126,900	2012-2014	SCIENCEFUND
5.	Plastic Product Failure Associated with Polymer Flow Behaviour in Complex Geometries	104,000	2014-2017	FRGS

## POSTGRADUATE STUDENT SUPERVISION

### PhD (Main Supervisor)

No.	Name	Title	Status
1.	Zunaida Zakaria	Modelling and Characterization of The Mechanical Response of Polyolefin Foams	Graduated

2.	Mohd Shamsul Farid Samsudin	The formation of microcellular structure from dry natural rubber (NR) and its response towards mechanical deformation	Ongoing
3.	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

#### MSc – Research (Main Supervisor)

No.	Name	Title	Status
1.	Nor Azura Abd. Rahim	Flow Behaviour and Viscoelasticity of Polypropylene-Koalin Composites	Graduated
2.	Mohamad Azwan Mad Naser	Development of an Affordable Oscillating Rheometer to monitor cure Characteristics and Rheological Behaviour of Thermosets Polymers	Ongoing
3.	Thai Hong Khang	Simulation of Filling and Curing Phases In Injection Moulding Process of Natural Rubber Compound	Graduated
4.	Yoong Li Mei	Wrinkle Resistance Finish with Flame Resistant Properties on Cotton Fabric	Ongoing

#### MSc – Mixed mode (Main Supervisor)

No.	Name	Title	Status
1.	Zunaida Zakaria	Characterisation of Polyethylene Foam and Its Structure-Properties Relationship in Shock Absorbing Applications	Graduated

#### AWARDS / RECOGNITION

No.	Type	Title	Awarding Authority	Level/Medal	Year
1.	Academic Recognition	Appointment as Technical Advisor for Advance Material Technology (Polymer) course in ADTEC Taiping	Jabatan Tenaga Manusia	National	2012-2014 2014-2016
2.	Academic Recognition	Appointment as External Evaluator for Plastic Technology course in Politeknik Sultan Mizan Zainal Abidin, Terengganu.	Jabatan Pengajian Politeknik	National	2015-2018

**PROFESSIONAL SERVICES / CONSULTATION****Selected Major Activities**

<b>No.</b>	<b>Year</b>	<b>Title</b>	<b>Company</b>
1.	2009	Viscosity Number Determination for Polyamide Injection Moulded Parts.	Robert Bosch (M) Sdn. Bhd.
2.	2011	Material Degradation Test for Polyamide Product.	Silitech Technology Corp. Sdn. Bhd
3.	2012	Analysis of Electrical Cable Insulation.	Det Norske Veritas Sdn. Bhd
4.	2013	Rheological Properties Measurement of Latex.	MAPA Gloves Sdn. Bhd.
5	2014-2015	Failure Analysis of Injection Moulded Products Defects (1-year contract).	CPI (Penang) Sdn. Bhd.