


## CURRICULUM VITAE

	<p>Assoc. Prof. Dr. Razaina Mat Taib            Polymer Engineering Programme            School of Materials &amp; Mineral Resources Engineering            14300 Nibong Tebal, Pulau Pinang</p> <p>Tel: 04-5996123            Fax: 04-5941011            Email: <a href="mailto:razaina@usm.my">razaina@usm.my</a></p>
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### ACADEMIC QUALIFICATION

1. Ph.D. Polymer Technology, 2004, Universiti Sains Malaysia.
2. M.Sc. Wood Science & Forest Products, 1998, Virginia Polytechnic Institute and State University (Virginia Tech), USA.
3. B. Tech. Polymer Technology, 1997, Universiti Sains Malaysia.

### AREAS OF INTEREST

1. Utilization of wood and non-wood waste materials in thermoplastics
2. Structure-property relationship in composites
3. Composites performance in adverse environmental conditions
4. Bio-composites

### TEACHING EXPERIENCE

No.	Course Code	Course Name	Year
1.	EBP 216/3	Polymer Synthesis	2014
2.	EBP 303/3	Plastic Materials	2004 – 2013
3.	EBP 306/3	Properties of Polymer Materials Engineering	2008 – to date
3.	EBP 307/2	Polymer Rheology	2004 – to date
4.	EBP 317/3	Advanced Composite Materials	2007 – to date
5.	EBP 415/3	Fiber Processing	2005 – to date

### PROFESSIONAL QUALIFICATION / MEMBERSHIP

1. Member, Polymer Processing Society (PPS), USA
2. Member, Electron Microscopy Society of Malaysia
3. Member, Forest Products Society, USA (1998 – 2012)

### PUBLICATIONS

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

1. Taib, R., Ghaleb, Z. A., & Mohd Ishak, Z. A. (2012). Thermal, mechanical, and

- morphological properties of polylactic acid toughened with an impact modifier. *Journal of Applied Polymer Science*, 123(5), 2715-2725.
- Lee, J. M., Ishak, Z. M., Taib, R. M., Law, T. T., & Thirmizir, M. A. (2013). Mechanical, thermal and water absorption properties of kenaf-fiber-based polypropylene and poly (butylene succinate) composites. *Journal of Polymers and the Environment*, 21(1), 293-302.
  - Taib, R. M., Hassan, H. M., & Mohd Ishak, Z. A. (2014). Mechanical and morphological properties of polylactic acid/kenaf bast fiber composites toughened with an impact modifier. *Polymer-Plastics Technology and Engineering*, 53(2), 199-206.
  - Majid, R. A., Ismail, H., & Taib, R. M. (2014). Effects of Polyethylene Grafted Maleic Anhydride on the Mechanical, Morphological, and Swelling Properties of Poly (Vinyl Chloride)/Epoxidized Natural Rubber/Kenaf Core Powder Composites. *BioResources*, 9(4), 7059-7072.
  - Taib, R. M., Ariawan, D., & Ishak, Z. A. M. (2014). Effects of Alkali Treatment on the Properties of Kenaf Fiber-Unsaturated Polyester Composites Prepared by Resin Transfer Molding. *Molecular Crystals and Liquid Crystals*, 603(1), 165-172.

#### Chapter in Research Book

- R. Mat Taib, Z. A. Mohd Ishak, H. D. Rozman and W. G. Glasser. Chapter 20: Steam exploded wood fibers as reinforcement of polymer composites. In *Engineering biopolymers: homopolymers, blends and composites*. Eds. S. Fakirov and D. Bhattacharrya. Hanser. Pages: 581 – 610.
- Z. A. Mohd Ishak, R. Mat Taib and U. Ishiaku. Chapter 4: Topical starches filled plastics. In *Engineering biopolymers: homopolymers, blends and composites*. Eds. S. Fakirov and D. Bhattacharrya. Hanser. Pages: 109 – 155.
- Z. A. Mohd Ishak and R. Mat Taib. Chapter 3: Multifunctional polymer composites using natural fiber reinforcements. In *Multifunctionality of Polymer Composites*. Eds. Klaus Friedrich and Ulf Breuer. Elsevier (In press).

#### RESEARCH GRANTS

##### (As Project Leader)

No.	Project Title	Amount (RM)	Year	Source
1.	Designing High Water Resistance Wood Plastic Composites from Steam-Exploded Fiber and High Density Polyethylene	17,542	2005-2007	USM
2.	Utilization of Recycled Materials for the Production of Wood-Plastic Composites Intended for Outdoor applications	181,714	2006-2008	SCIENCEFUND
3.	Fiber-matrix interfacial characterization and kinetics of moisture absorption study in kenaf fiber reinforced polypropylene composites	80,000	2007-2009	FRGS
4.	Development and Properties of Bio-Composites from Kenaf and Polylactic	19,274	2007-2009	USM

Acid (PLA)			
5.	Preparation and Properties of Impact Modified Biodegradable Composites from Poly (Lactic Acid) and Kenaf Fibers	39,914	2009-2011 USM
6.	Effect Recycling and Accelerated Weathering on the Properties of Impact Modified Polylactic Acid	20,813	2011-2013 AUN/SEED-NET
7.	Influence of Accelerated Weathering on the Surface Properties, Color Stability and Mechanical Properties of Kenaf Fiber-Polylactic Acid Biodegradable Composites	39,141	2011-2013 USM
8.	Fabrication & Characterization of Non-woven Kenaf Bast Fibre Filled Polyester Composites	234,700	2011-2014 USM
9.	CRYSTALLIZATION KINETICS AND PHASE MORPHOLOGY OF ISOTHERMAL CRYSTALLIZATION OF POLY(LACTIC ACID)/ETHYLENE ACRYLATE COPOLYMER BLENDS	106,000	2014-2017 FRGS

#### POSTGRADUATE STUDENT SUPERVISION

##### PhD (Co- Supervisor)

No.	Name	Title	Status
1.	DODY ARIAWAN	Microstructure-properties characterization of kenaf fiber reinforced unsaturated polyester produced by resin transfer molding	Ongoing
2.	MOHAMAD BASHREE BIN ABU BAKAR	Effect of Additives on Mechanical, Water Absorption and Natural Weathering Properties of Wood Flour Filled Polypropylene Composites	Ongoing
3.	ROHANI BINTI ABDUL MAJID	THERMOPLASTIC CASSAVA STARCH HALLOYSITE NANOCOMPOSITES	Ongoing
4.	MUHAMMAD SAIFUDDIN BIN SALIM	MECHANICAL, THERMAL AND DEGRADATION BEHAVIOUR OF KENAF NONWOVEN FIBER MAT REINFORCED POLYCARBOXILIC COMPOSITES	

##### MSc – Research (Main Supervisor)

No.	Name	Title	Status
1.	ZAID AWS ALI GHALEB	Preparation and Properties of Impact Modified Poly(Lactic-Acid)/Kenaf Fiber Composites	Graduated
2.	KOUTH PHOMMACHANH	Effects of Accelerated Weathering on the Properties of Polylactic Acid Toughened With An Ethylene Copolymer As An Impact Modifier	Graduated
3.	SUGANTI A/P RAMARAD	Preparation and Properties of Kenaf Bast Fiber Filled (Plasticized) Poly(Lactic Acid) Composites	Graduated
4.	NORHAZARIAH BINTI SAMSIR	Effect of Zinc Borate and Filler Loading on the Properties of Post Biodegradation Meranti Wood Flour Filled Recycled High Density Polyethylene (rHDPE) Composite	Graduated
5.	NUR SYUHADA BINTI AHMAD ZAUZI	The Effects of Natural and Accelerated Weathering on the Properties of Meranti Wood Flour (WF) Filled Recycled High Density Polyethylene (rHDPE) Composites	Graduated

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| 6. | HUSNA MADIIHAH BINTI HASAN  | Preparation and Properties of Impact Modified Polylactic Acid And Its Composites With Short Kenaf Bast Fiber | <b>Graduated</b> |
| 7. | ASHRAF ROHANIZA BINTI ASARI | Preparation, Properties and Durability Studies of HDPE-Kenaf Core Filler Composites                          | <b>Graduated</b> |