

## CURRICULUM VITAE



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### ACADEMIC QUALIFICATION

1. Doctor of Philosophy (PhD), 2002, Universiti Sains Malaysia.
2. Degree of Licentiate, 2001, Royal Institute of Technology (KTH), Stockholm, Sweden.
3. Masters in Science, 1999, Universiti Sains Malaysia.
4. Bachelor in Engineering (Materials Eng), 1996, Universiti Sains Malaysia.

### AREAS OF INTEREST

1. Polymer Matrix Composites (PMC)
2. Fiber Reinforced Polymer Composites
3. Metal filled Polymer Composites
4. Polymer Composites for electronic applications
5. Biomaterials

### TEACHING EXPERIENCE

No.	Course Code	Course Name
1.	EBB 113/3	Materials Engineering
2.	EBB 337/3	Advance Materials & Composites
3.	EBB 220/3	Polymer Engineering
4.	EBB 317/2	Laboratory (Materials Processing)
5.	EBB 325/2	Laboratory (Microscopy)
6.	EBB 427/3	Technology and Application of Engineering Polymer

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| 7.  | EBB 405/3 | Non-destructive Testing                |
| 8.  | EBB 401/6 | Final Year Project                     |
| 9.  | EBB 555   | Research Project (Master by Mix-Modes) |
| 10. | EBB 524   | Electronic Packaging                   |
| 11. | EBB 526   | Composite Materials                    |

#### PROFESSIONAL QUALIFICATION / MEMBERSHIP

1. Professional Engineer, Board Engineer Malaysia
2. Corporate Member, The Institution of Engineers Malaysia
3. Associate Member, Plastic & Rubber Institute of Malaysia
4. Ordinary Member, Institute of Materials Malaysia
5. Member, Electron Microscopy Society
6. Member, International Association of Engineers (IAENG)

#### PUBLICATIONS

##### (Publications: 2014-2015)

1. W.A.D. Wan Dalina, M. Mariatti, R. Ramlee, Z. A. Mohd Ishak, and A. R. Mohamed (2014) Comparison on the Properties of Glass Fiber/MWCNT/Epoxy and Carbon Fiber/MWCNT/Epoxy Composites, *Advanced Materials Research*, 858, 32-39.
2. Yusriah, L., Sapuan, S.M., Zainudin, E.S. and Mariatti, M., (2014) Characterization of physical, mechanical, thermal and morphological properties of agro-waste betel nut (Areca catechu) husk fibre, *Journal of Cleaner Production*, 72, 174-180.
3. Z. A Ghaleb, M. Mariatti and ZM Ariff (2014) Properties of graphene nanopowder and multi-walled carbon nanotube-filled epoxy thin-film nanocomposites for electronic applications: the effect of sonication time and filler loading, *Composites: Part A*, 58, 77-83
4. M.S. Boon and M. Mariatti (2014) Optimization of magnetic and dielectric properties of surface-treated magnetite-filled epoxy composites by factorial design, *Journal of Magnetism and Magnetic Materials*, 355, 319-324.
5. Kong, K.T.S., Mariatti, M., Rashid, A.A., Busfield, J.J.C. (2014) Enhanced conductivity behavior of polydimethylsiloxane (PDMS) hybrid composites containing exfoliated graphite nanoplatelets and carbon nanotubes, *Composites Part B: Engineering*, 58, 457-462.
6. C. L. Poh, M. Mariatti, M. N. Ahmad Fauzi, C. H. Ng, C. K. Chee, T. P. Chuah (2014) Tensile, dielectric, and thermal properties of epoxy composites filled with silica, mica, and calcium carbonate, *J Mater Sci: Mater Electron*, 25, 2111-2119.
7. Sheril, R.V., Mariatti, M., Samayamutthirian, P. (2014) Single and hybrid mineral fillers (talc/silica and talc/calcium carbonate)-filled polypropylene composites: Effects of filler loading and ratios, *Journal of Vinyl and Additive Technology*, 20 (3), 160-167
8. Saidina, D.S., Mariatti, M., Julie, M.J. (2014) Properties of calcium copper titanate and barium titanate filled epoxy composites for electronic applications: effect of filler loading and hybrid fillers, *J Mater Sci: Mater Electron*, 25 (11), 4923-4932.
9. M.S. Boon, M. Mariatti (2014) Silane treatment of magnetite filler and its effect on the properties of magnetite-filled epoxy thin film composites, *Polymer Bulletin*, In-press.
10. MS Hamzah, IN Hidayah, M Mariatti, M Kamarol (2014) Dielectric and thermal

properties of flame retardant fillers in polypropylene/ethylene propylene diene monomer composites, *Journal of Reinforced Plastics and Composites*, 33(21), 1931–1940

11. MS Hamzah, M Mariatti, M Kamarol (2014) Insulation Characteristics of Alumina, Titania, and Organoclay Nanoparticles Filled PP/EPDM Nanocomposites, *Journal of Applied Polymer Science*, In-press.
12. Aulia, Z., Abdul-Malek, Z., Ariel Y.Z., Piah M.AM, M Jaafar (2014) Partial Discharge Characteristics of Linear Low Density Polyethylene and Silica Nanocomposites, *Applied Mechanics and Materials*, 554, 133-136.
13. Netnapa Eawwiboonthanakit, Mariatti Jaafar, Zuratul Ain Abdul Hamid, Todo Mitsugu and Banhan Lila (2014) Tensile properties of Poly(L-lactic) acid (PLLA) blends, *Advanced Materials Research*, 1024, pp 179-183.
14. Ismail Nurul Hidayah, M. Mariatti, H. Ismail, M. Kamarol (2014) Electrical Properties of LLDPE/SR with Nano-Silica and Nanoboron Nitride, *Advanced Materials Research* 858, 80-87.
15. Noor Syazwani Mansor, Muhammad Safwan Hamzah, M. Kamarol, M. Mariatti (2014) A Comparative Study of Dielectric Strength between SiR/EPDM and PP/EPDM Blends with Various Type of Nanofillers, *Advanced Materials Research*, 832, 483-487.
16. A.A.Abd. Jamil , Mohd Hafizi Bin Ahmad, M. Kamarol, M. Mariatti, M.A.M. Piah (2014) Short-Term Breakdown in Silicone Rubber Based Nanocomposites Caused by Electrical Treeing, *Advanced Materials Research*, 845, 482-486.
17. Z. A. Ghaleb, M. Mariatti, Zulkifli Mohamad Ariff, Abdul Rahman Mohamed (2014) Comparison on Tensile Properties of Graphene and Multi-Walled Carbon Nanotubes/Epoxy Thin Film Composites, *Advanced Materials Research*, 1024, 140-143.
18. Netnapa Eawwiboonthanakit, Mariatti Jaafar, Zuratul Ain Abdul Hamid, Todo Mitsugu and Banhan Lila (2014) Poly(L-lactic) acid (PLLA) blends: Melt Flow Indexes and Tensile Properties, *Australian Journal of Basic and Applied Sciences*, 8(5), 336-340.
19. AR Azrin Hani, A Roslan, M. Mariatti (2014) Impact Behavior of Woven Coir-Epoxy Composite Prepared by Compression Molding and Vacuum Bagging Methods, *Journal of Applied Science and Agriculture*, 9(11), 333-340.
20. W.A.D. Wan Dalina, M. Mariatti, Z. A. Mohd Ishak, and A. R. Mohamed (2014) Effect of Hybrid Reinforcement of MWCNT and Carbon Fiber on Properties of Epoxy Laminated Composites, *J. Polym. Mater.*, 31 (4), 409-424.
21. W.A.D. Wan Dalina, M. Mariatti, Z. A. Mohd Ishak, and A. R. Mohamed (2014) Comparison of properties of MWCNT/Carbon fiber/epoxy laminates composites prepared by solvent spraying method, *International Journal of Automotive and Mechanical Engineering (IJAME)*, 10, 1901-1909.
22. S. Muhammad Firdaus, M. Mariatti (2015), Nano-sized boron nitride epoxy composites for underfill application: effect of diluent and filler loading, *J Mater Sci: Mater Electron*, 26, 774–783.

**RESEARCH GRANTS**

**(As Project Leader: 2014-2015)**

No.	Project Title	Amount (RM)	Source
1.	Properties of natural fiber and mineral fillers filled polypropylene composites	13,750	AUN/SEED-Net
2.	Development of Functionalized Carbon Nanotubes Filled Woven Glass Fiber/Epoxy Composites for Light Weight Structure Applications	208,400	Research University Grant
3.	Dielectric materials based on ceramic/epoxy composites for electronic packaging application	139,000	ERGS
4.	Next generation capacitors for ultra-mobility computing	124,500	CREST Grant
5.	Mechanism of formation of exfoliated graphite and chemical functionalization of graphene nanoplatelets	104,000	FRGS
6.	Bioactive and bioresorbable hierarchical carbonate apatite scaffold/natural polymer layer/polylactic acid particle for tissue engineering applications	704,626	TRGS

**POSTGRADUATE STUDENT SUPERVISION**

**PhD (Main Supervisor)**

No.	Name	Title	Status
1.	Nurul Hidayah Ismail	Thermoplastic elastomer for insulator application	Ongoing
2.	Zaid Aws Ali Ghaleb Al-Bahiri	Fabrication And Characterization Of Multiwalled Carbon Nanotube Reinforced Epoxy Nano Composites	Ongoing
3.	Teoh Hui Chiang	Optimization of Ion Beam Etching (IBE) on the Slider ABS Patterning Process in Fabrication of Hard Disk Recording Head	Ongoing
4.	Haslan Fadli Ahmad Marzuki	Surface Treatment To Improve The Interfacial Properties of Aluminium-carbon Fiber Laminates Composites	Ongoing
5.	Wan Dalina Wan Ahmad Dahalan	Glass fiber/carbon nanotubes/epoxy composites	Ongoing
6.	Ervina Junaidi	Weight Reduction of Carbon Fiber/Carbon Based Filler/Epoxy Composites for Structural Applications	Ongoing

**MSc – Research (Main Supervisor)**

No.	Name	Title	Status
1.	Muhammad Safwan Hamzah	Polymer blends for insulator application	Ongoing
2.	Poh Chen Ling	Studies on Fabrication and Properties of Ceramic and Mineral Fillers Filled Epoxy Thin	Ongoing

		Film Composites for Embedded Capacitor Application	
3.	Phan Chee Hong	Development and Properties of Pad/Gaskets for Electronic Application	Ongoing
4.	Mohd Saidina Dandan Satia	Inorganic Filler Filled Epoxy Composite for Electronic Packaging Applications	Ongoing
5.	Norshamira Arshad	Properties of Graphene filled polymer composites	Ongoing
6.	Chin Seik Yee	Synthesis and Characterization of Graphene through Electrochemical Exfoliation	Ongoing

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

<b>No.</b>	<b>Name</b>	<b>Title</b>	<b>Status</b>
1.	Nur Amyra Shazni Zairani	Surface treatment of the Hydroxyapatite Scaffold	Ongoing

#### **AWARDS / RECOGNITION**

<b>No.</b>	<b>Type</b>	<b>Title</b>	<b>Awarding Authority</b>	<b>Level/Medal</b>	<b>Year</b>
1.	Academic Recognition	International Steering Committee	2 <sup>nd</sup> AUN/SEED-Net Regional Conference on Energy Materials	Regional	2014
2.	Academic Recognition	Top Research Scientist Malaysia 2014	Academy of Science Malaysia	National	2014
3.	Academic Recognition	Environmental friendly NanoFR-coating for epoxy hybrid laminates	Malaysia Technology Expo 2014	National/ Silver	2014