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RESEARCH AND PUBLICATION

1.1 Research Grant

1.1.1 Research Grant (as Principal Investigator)

(Project Title),(Sponsorship),(Total Grant),(Date/Duration)

1. Pengaruh Teknik Penyebatian dan Kesan Penambah/Aditif Terhadap Sifat-Sifat Mekanik Sistem Polimer Ternari Berasaskan PP/EPDM. , IRPA J/P , RM0.00, 1/8/1998-31/12/1999
2. Production And Development Of Synthetic Polyelectrolytes Based On Acrylamide, Acrylic Acid And Related Comonomers , RM7 , RM162,000.00, 1/10/1999-30/4/2002
3. Kesan Sambung Silang Secara Proses Pemvulkanan Dinamik Terhadap Sifat-Sifat Mekanik Sistem Adunan Polimer Berasaskan PP/EPDM. , IRPA J/P , RM0.00, 1/5/2000-30/4/2001
4. Kesan Agen Pengkupel Multifungsi Titanate terhadap Polipropilena Terisi Kalsium Karbonat , J/PENDEK , RM0.00, 1/3/2002-28/2/2003
5. Developement Of A Cost Effective, Modified Polypropylene Composites With Multicomponent Filler Reinforcement (Based On Calcium Carbonate) For Automotive Application , RM8 - KATEGORI EA , RM176,640.00, 1/12/2002-30/11/2004
6. Fracture and Biocompatibility Studies of Hydroxyapatite Filled Polyethylene Blends , USM JANGKA PENDEK , RM0.00, 1/5/2007-30/4/2009
7. Development Of A Modified, Cost Effective Kaolin Filled Thermoplastic Composites For Automotive Application , KEMENTERIAN SAINS, TEKNOLOGI DAN INOVASI , RM183,760.00, 1/10/2007-30/9/2009
8. Studies on the Mechanism and Strength of Interfacial Interactions in Polymer Composites Containing Kaolin: Modification of Interactions by Surface Treatment , KEMENTERIAN PENGAJIAN TINGGI , RM50,000.00, 15/10/2007-15/10/2009
9. Optimization and Characterization of Raw Waste Latex/Polystyrene Blends , AUN / SEED - NET , RM46,219.52, 1/7/2009-15/3/2013
10. Synthesis of Various Molecular Structure Polyamine Demulsifier for The Treatment of Water in Oil Emulsion , USM (JANGKA PENDEK) , RM38,424.00, 15/3/2010-14/3/2012
11. Biodegradable Polymeric Flocculant Based on Cassava Starch-Grafted PolyDiallyldimethylammonium Chloride , USM (RU) , RM222,685.00, 1/5/2011-31/10/2014
12. Thermal Degradation Behaviour and Flocculation Optimization for Enhancement of Poly (Diallyldimethylammonium Chloride) (PolyDADMAC) Characteristic as a Wastewater Treatment Agent , USM (JANGKA PENDEK) , RM39,471.00, 15/5/2011-14/5/2013
13. Floc Characteristic Optimization of Synthetic Polymeric Flocculant Based On DADMAC Monomer For Selective Waste Water Treatment , KEMENTERIAN SAINS, TEKNOLOGI DAN INOVASI , RM112,751.00, 1/11/2011-31/10/2013

14. Preparation Of Pour Point Depressant Based On Ethylene Vinyl Acetate Copolymer For The Enhancement Of Progressive Wax Inhibition , USM (RU) , RM122,800.00, 1/12/2013-30/11/2016

1.1.2 Research Grant (as Co-Researcher)

(Project Title),(Sponsorship),(Total Grant),(Project Leader),(Date/Duration)

1. Sintesis dan Pencirian Kopolimer Berasaskan ϵ -Kapolaktan. , IRPA J/P , RM0.00, Azanam Shah Bin Hashim , 1/5/1999-31/12/2000
2. Preparation And Characterisation Of Caprolactone Based Polymer Mixture (Tajuk Asal: Synthesis And Characterisation Of Caprolactone Based Copolymers) , RM7 , RM74,000.00, Azanam Shah Bin Hashim , 1/10/1999-30/4/2001
3. Simultaneous Process Of Extraction And Fractionation Of Palm Kernel Into Refined Bleached Deodorised (RBD) Oil And Value Added Food Materials , RM7 , RM410,000.00, Mohd Omar Bin Ab Kadir , 1/10/1999-31/10/2002
4. The Use Of Natural Polymer (Natural Starch) As An Alternative Coagulant Aids In Removing Turbidity, Nitrat, Sulphate, Chloride And Heavy Metals From Water And Waste Water , RM7 , RM244,988.00, Hamidi Bin Abdul Aziz @ Abdul Rahman , 1/2/2000-31/1/2003
5. Development Of A Cost-Effective,Multicomponents Degradable Plastics, Through The Combination Of Sago Starch And Polyethylene/Poly (E-Caprolactone) Blends. , RM8 - KATEGORI EA , RM249,780.00, Ahmad Marzio Bin Mohd Yusof , 1/6/2003-31/5/2005
6. Development Of Hydroxyapatite Filled Poly(Methyl Methacrylate) Dental Materials With High Mechanical Performance, Enhanced Environmental Stability And Radio Opacity Behavior , KEMENTERIAN SAINS, TEKNOLOGI DAN INOVASI , RM116,997.00, Chow Wen Shyang , 1/12/2006-1/4/2009
7. Development of Poly (Methyl Methacrylate) / Nano-Hydroxyapatite Dental Base Biomaterials , USM (RU) , RM516,800.00, Zainal Arifin Bin Mohd Ishak , 22/10/2007-21/9/2011
8. Modelling and Characterization Of the Mechanical Response Of Polyolefin Foams , KEMENTERIAN PENGAJIAN TINGGI , RM86,600.00, Zulkifli Bin Mohamad Ariff , 1/11/2008-31/10/2011
9. Synthesis And Water Absorption Of Superabsorbent Polymer Based On Waste Polystyrene Foam-g-acrylic Monomer And Composite , USM (RU) , RM68,100.00, Nadras Binti Othman , 1/1/2009-31/3/2012
10. Innovative Approach For Production Of Epoxy Syntactic Foams Consisting Epoxy Hollow Spheres , KEMENTERIAN SAINS, TEKNOLOGI DAN INOVASI , RM126,900.00, Zulkifli Bin Mohamad Ariff , 1/4/2012-31/3/2014
11. Development of Composite Coagulant for Treatment of Partially stabilized Landfill Leachate,Universiti Sains Malaysia,751260, 14/7/2012 - 14/7/2016

1.2 Research Publication

Journal

(Author),(Title of Article),(Name of Journal),(Year),(Volume),(Edition),(Number Of Pages)

1. S.M. Sapuan, H.H. Masjuki, A.Azlan,, The use of palm oil as diesel fuel substitute, Journal Of Power and Energy Part A,Proc Inst Mech Engrs, 1996, 210, , 47-53
2. Aludin M.S., Ariffin A., Hashim A. S., Shirahama H., Yasuda , H, Synthesis And Characterisation of Cyclic Carbonate/ Lactone Random Stereocopolymers, Regional Conference On Polymeric Materials $\hat{\text{a}}\text{c}^{\text{TM}}98$; Penang, Malaysia, 1998, , , 0
3. Siriwardena S, Ismail H, Ariffin A and Ishiaku US, Land Development and Sustainable Bio Resources : A comparative Study of White Rice Husk Ash and Silica Filled EPDM Rubber, The Third Regional IMT-GT UNINET Conference : IMT-GT 2000 ; Medan Indonesia, 2000, , , 0
4. Z.A Mohd Ishak, A.Ariffin and R. Senawi,, Effect of Hygrothermal Ageing and a Silane Coupling Agent on the Tensile Properties of Injection Moulded Short Glass Fiber Reinforced Poly(Butylene Terephthalate) Composites, European Polymer Journal, 2001, Vol 37, , 1635-1647
5. I.S. Md. Zaidul, A Abd. Karim, D.M.A. Manan, B.M.N. Mohd. Azemi, A.K. Mohd. Omar, A. Azlan, Nik Norulaini N.A., Textural Properties of Sago Starch and Wheat Flour Mixtures, The International Symposium on Sago 2001, Tsukuba, Japan, 2001, , , 0
6. H P S Abdul Khalil, H Ismail, M N Ahmad, A Ariffin, K Hassan, The effect of various anhydride modifications on mechanical properties and water absorption of oil palm empty fruit bunches reinforced polyester composite, Polymer International, 2001, Vol: 50, 4, , 395-402

7. I.S. Md Zaidul, A.Abd. Karim, D.M.A. Manan, A.Ariffin, Nik Norulaini, N.A. and A.K. Mohd Omar, Study of Rheological Profile Analysis Related to Texture for Mixtures of Sago-Wheat Gel.,, International Journal of Food Properties, 2002, Vol. 5 (3), , 585-598
8. Ariffin, A. , Raid S. A. S., Abdul Kadir, M.O.,, Synthetic polyelectrolytes of varying Charge Densities But Similar Molar Mass Based On Acrylamide And Their Applications On Palm Oil Mill Effluent Treatment,, Regional Symposium on Chemical Engineering (RSCH),Volume 2, 1805-1811, Kuala Lumpur, 2002, , , 0
9. I.S. Md Zaidul, A.Abd. Karim, D.M.A. Manan, A.Ariffin, Nik Norulaini, N.A. and A.K. Mohd Omar,, Stress Relaxation Test for Sago-Wheat Mixtures Gel, International Journal of Food Properties, 2003, Vol. 6 (3), , 431-442
10. N.A. Nik Norulaini, I.S. Md Zaidul, O. Anuar, A. Azlan and A.K. Mohd. Omar, Supercritical Fractionation for Separation of Unsaturated Fatty Acids in Palm Kernel Oil (PKO) as a Cocoa Butter Equivalent (CBE), Mini Symposium on Supercritical Fluid Extraction, 15-17 January, 2003, Kyoto, Japan, 2003, , , 0
11. S.H Mohamed, A.Ariffin, Z.A Mohd Ishak, AB. R. Samsudin, Composites Consisting of Poly (Methyl Methacrylate) and Hydroxyapatite Denture Base Material: An Evaluation of Their Mechanical Properties.,, 7th Arab International Conference On Polymer Science and Technology,5-9 October 2003, Cairo-Hurghada, Egypt. , 2003, , , 0
12. H. Osman, H. Ismail and A.Ariffin, The Effects of Feldspar Loading on Properties of SMR L and ENR 50, 3rd International Conference on Recent Advances In Materials, Minerals and Environment (RAMM 2003), 2â€”22nd October 2003, 2003, , , 0
13. Y.W. Leong, M.B. Abu Bakar, Z.A. Mohd Ishak, A. Ariffin, Mechanical And Thermal Properties Of Talc And Calcium Carbonate Filled Polypropylene Hybrid Composites,, 3rd International Conference on Recent Advances In Materials, Minerals and Environment (RAMM 2003), 2â€”22nd October 2003., 2003, , , 0
14. A.Ariffin, R.S.A. Shatat, A.R. Nik Norulaini and A. K. Mohd Omar,, Synthetic polyelectrolytes based on acrylamide and their application on palm oil mill effluent treatment,, 3rd International Conference on Recent Advances In Materials, Minerals and Environment (RAMM 2003), 2â€”22nd October 2003., 2003, , , 0
15. Y.W. Leong, M.B. Abu Bakar, Z.A. Mohd Ishak, A.Ariffin,, Mechanical and Morphological Study of Talc/Calcium Carbonate Filled Polypropylene Hybrid Composites weathered in Tropical Climates, Jurnal Teknologi (Special Edition), 2003, No. 39, , 23-34
16. S.H. Mohamed, A. Ariffin, Z.A Mohd Ishak and A.R. Samsudin, The Effect Of Physical Mixing on the mechanical properties of hydroxyapatite filled poly (methyl methacrylate),, Journal Institute of Materials Malaysia, 2003, vol 4, , 31-42.
17. Nik Norulaini, I.S. Md Zaidul, O. Anuar, A. Azlan and A.K. Mohd. Omar,, Supercritical Reduction of Lauric Acid in Palm Kernel Oil (PKO) to Produce Cocoa Butter Equivalent (CBE) Fat., N.A, Journal of Chemical Engineering of Japan, 2004, Vol. 37 (2),, , 0
18. Y.W. Leong, M.B.A Bakar, Z.A.M. Ishak, A. Ariffin, B. Pukanzsky, Comparison Of Mechanical Properties and Interfacial Interaction Between Talc, Kaolin and Calcium Carbonate Filled Polypropylene Composites and Mechanical and Thermal Properties of Talc and Calcium Carbonate Filled Polypropylene Hybrid Composites, Journal of Applied Polymer Science,, 2004, Vol.91, , 3315 -3326
19. Y.W. Leong, M.B.A Bakar, Z.A.M. Ishak, A. Ariffin, B. Pukanzsky,, Mechanical and Thermal Properties of Talc and Calcium Carbonate Filled Polypropylene Hybrid Composites, Journal of Applied Polymer Science, 2004, Vol.91, , 3327 -3336
20. Y.W. Leong, M.B. Abu Bakar, Z.A. Mohd Ishak, A.Ariffin,, Characterization of Talc/Calcium Carbonate Filled Polypropylene Hybrid Composites Weathered in a Natural Environment., Journal of Polymer Degradation and Stability, 2004, Vol 83, , 411-422
21. 19. Ariffin, A., Raid S.A. Shatat, Nik Norulaini A.R. and Mohd Omar A.K, Synthetic Polyelectrolytes Based on Acrylamide and their Application As a Flocculant in the Treatment of Palm Oil Mill Effluent, Journal Of Applied Sciences, 2004, vol 4 (3), , 393-397
22. Md Zaidul, I.S.; Abd Karim, A.; Manan, D.M.A.; Ariffin, A.; Nik Norulaini, N. A.; Mohd Omar, A.K.,, Farinograph Study on Viscoelastic Properties of Dual Mixtures of Sago-Wheat Dough System, Journal of the Science of Food and Agriculture, 2004, vol 84, , 616-622
23. H. Ismail H. Osman and A. Ariffin,, The Effect of Feldspar Loading on Curing Characteristics, Mechanical Properties, Swelling Behaviour and Morphology of Natural Rubber Vulcanizates, International Journal of Polymeric Materials., 2004, 54, , 43-62

24. Y.W. Leong, M.B.A Bakar, Z.A.M. Ishak, A. Ariffin, B. Pukanzsky,, Effects Of Filler Treatments On Mechanical, Flow, Thermal And Morphological Properties of Talc and Calcium Carbonate Filled Polypropylene Hybrid Composites, *Journal of Applied Polymer Science*,, 2004, , , 0
25. H. Ismail H. Osman and A. Ariffin, A Comparative Study On Curing Characteristics, Mechanical Properties, Swelling Behavior, Thermal Stability, And Morphology Of Feldspar And Silica In SMR L Vulcanizates., *Polymer-Plastic Technology and Engineering*,, 2004, Vol. 43. No. 5, , 1323 – 1344
26. Ariffin, A., Raid S.A. Shatat, Nik Norulaini A.R. and Mohd Omar A.K, Synthesis And Characterization Of Different Molecular Weight Polyacrylamide,, *Euro-Asian Journal of Applied Sciences*, 2004, Vol. 1 No 2, , 14-21
27. 25. Supri, H. Ismail, A.M.M Yusof and A. Ariffin., The Effect Of Maleic Acid (MAC) On Properties Of Recycled Poly(Vinyl Chloride)/Acrylonitrile-Butadiene Rubber (PVC/NBR) Blends.,, *EMNEX 2004 Engineering Materials Seminars and Exhibition, Bandung Institute of Technology*, 2004, , , 0
28. S.H. Mohamed, A. Ariffin, Z.A Mohd Ishak, A. Nizam and A.R. Samsudin, (, Mechanical and thermal properties of hydroxyapatite filled poly (methyl methacrylate), *The Medical Journal of Malaysia*,, 2004, vol 59, , 25-26.
29. K.L.K. Lai, A. Roziyanna, D.S. Ogunniyi, M.I. Zainal Arifin, A. Azlan,, Mechanical Properties of HDPE/UHMWPE Blends: Effect of filler loading and Filler Treatment,, *The Medical Journal of Malaysia*,, 2004, vol 59, , 61-62
30. A. Nizam, S.H. Mohamed, A. Ariffin, Z.A Mohd Ishak and A.R. Samsudin,, Tensile Strength And Water Absorption Of Alumina Filled Poly (Methyl Methacrylate) Denture Base Material,, *The Medical Journal of Malaysia*, 2004, vol 59, , 147-148
31. S.H. Mohamed, A. Ariffin, Z.A Mohd Ishak, A. Nizam and A.R. Samsudin, Effect of powder to liquid ratio on tensile strength and glass transition temperature of alumina filled pol methyl methacrylate (PMMA) denture base material,, *The Medical Journal of Malaysia*, 2004, vol 59, , , 147-148
32. S.M. Sapuan, A. Ariffin and M.F. Alias., Aplikasi Komposit dalam Industri automobil, *Journal Of Industrial Technology*,, 2004, , , 93-113.
33. Ariffin, A., Raid S.A. Shatat, Nik Norulaini A.R. and Mohd Omar A.K., Synthetic Polyelectrolytes Of Varying Charge Densities With Similar Molar Mass Based On Acrylamide And Their Applications On Palm Oil Mill Effluent Treatment., *Desalination*, 2005, Vol. 172, No. 3, , 271-280
34. Y.W. Leong, M.B.A Bakar, Z.A.M. Ishak, A. Ariffin, B. Pukanzsky, Filler treatment effects on the weathering of talc, CaCO₃, and kaolin filled polypropylene hybrid composites., *Composite Interfaces*, 2006, Vol. 13, No. 8-9, , 659-684
35. A. Ariffin, S.S. Jikan, M.S.F. Samsudin, Z.M. Ariff and Z.A.M Ishak., melt elasticity phenomenon of multicomponent (Talc and calcium Carbonate) filled Polypropylene., *Journal of Reinforced Plastic & Composites*, 2006, Vol. 25, No. 9, , 913-923
36. M.S.F. Samsudin , Z.A. Mohd Ishak, S. S Jikan, Z.M. Ariff, A. Ariffin,, Effect of Filler Treatments on Rheological Behavior of Calcium Carbonate and Talc filled Polypropylene Hybrid Composites., *Journal of Applied Polymer Science*, 2006, Volume 102, No. 6, , 5421-5426
37. M.B.A Bakar, Y.W. Leong, A. Ariffin, Z.A.M. Ishak, (, Mechanical, Flow, and Morphological Properties of Talc- and Kaolin-Filled Polypropylene Hybrid Composites., *Journal of Applied Polymer Science*, 2007, Volume 104, No 1, , 434-441
38. H. Ismail; H. Osman; A. Ariffin, Curing Characteristics, Fatigue and Hysteresis Behaviour of Feldspar Filled Natural Rubber Vulcanizates, *Polymer-Plastics Technology and Engineering*, 2007, Volume 46 Issue 6, , 579-584
39. A. Ariffin, A. S. Mansor, S.S.Jikan and Z. A. Mohd. Ishak, Mechanical, Morphological And Thermal Properties Of Polypropylene/Kaolin Composite: Part I - The Effects Of Surface Treated Kaolin And Processing Enhancement, *Journal of Applied Polymer Science*, 2008, Volume 108, No. 6, , 3901-3916
40. W.S. Chow, Y.K. Loo, A. Ariffin, Z.A.M Ishak, Flexural Properties Of Hydroxyapatite Reinforced Poly (Methyl Methacrylate) Composites, *Journal of Reinforced Plastic & Composites*, 2008, Volume 27, No. 9, , 945-952
41. M.B.A Bakar, Y.W. Leong, A. Ariffin, Z.A.M. Ishak,, Effect of Chemical Treatments on the Mechanical, Flow, and Morphological Properties of Talc- and Kaolin-filled Polypropylene Hybrid Composites., *Journal of Applied Polymer Science*,, 2008, Vol. 110, No, 5, , 2770-2779
42. Raid S.A. Shatat, Ariffin, A., Nik Norulaini A.R. and Mohd Omar A.K., the effect of molecular weight and

charge density on floc size distribution of palm oil mill effluent flocculated with cationic polyelectrolytes., Journal of Basic and Applied Sciences, 2008, Vol. 4, No. 2, , 95-103

43. S.S. Jikan, Z.M. Ariff and Z.A.M. Ishak, A. Ariffin,, Relationship Of Rheological Study With Morphological Characteristics Of Multicomponent (Talc And Calcium Carbonate) Filled Polypropylene Hybrid Composites., Journal of Reinforced Plastic & Composites, 2009, Vol. 28, No. 21, , 2577-2587
44. A. Ariffin, Z. M. Ariff, S. S. Jikan, Evaluation on nonisothermal crystallization kinetics of polypropylene/kaolin composites by employing Dobreva and Kissinger methods, Journal of Thermal Analysis and Calorimetry, 2010, , , 0
45. S. S. Jikan, Z. M. Ariff, A. Ariffin, Influence of filler content and processing parameter on the crystallization behaviour of PP/kaolin composites, Journal of Thermal Analysis and Calorimetry, 2010, , , 0
46. M.A Razali, Z. Ahmad and A. Ariffin, Treatment of Pulp and Paper Mill Wastewater with Various Molecular Weight of PolyDADMAC Induced Flocculation,, Chemical Engineering Journal, 2010, Vol. 166, No. 2, , 529-535
47. A. Ariffin, A.S. Mansor, S.S. Jikan and Z.A.M. Ishak, Evaluation Of Hybridizing Talc And Surface-Treated Kaolin On The Properties Of PP Hybrid Composites,, Journal of Reinforced Plastic & Composites, 2010, Vol. 23, No. 21, , 3429-3441
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49. Nor Azura Abdul Rahim, Zulkifli Mohamad Ariff and Azlan Ariffin, Flow Behaviour and Viscoelasticity of Polypropylene-Kaolin Composites Extruded at Different Temperatures, Pertanika J. Sci. & Technol, 2011, 19 (2), , 383 - 388

Non-citation Indexed Journal

(Author),(Title of Article),(Name of Journal),(Year),(Volume),(Edition),(Number Of Pages)

1. Saad Omar Alsharif, Zainal Arifin, Mohd Ishak, Azlan Ariffin, An Overview On Dental Composite Restorative White Filling, ANNALS OF FACULTY ENGINEERING HUNEDOARA - INTERNATIONAL JOURNAL OF ENGINEERING, 2010, , 2, 0
2. Orathai Boondamnoen, Azura A. Rashid, Masahiro Ohshima, Saowaroj Chuayjuljit, Azlan B. Ariffin, Effect of Latex Treatment on Properties of WNRL/PS Blends, ADVANCE MATERIALS RESEARCH, 2012, (Volumes 488 - 489), Key Engineering Materials II, 478-482
3. O. BOONDAMNOEN, M. OHSHIMA, A. R. AZURA, S. CHUAYJULJIT, A. ARIFFIN, RECYCLING WASTE NATURAL RUBBER LATEX BY BLENDING WITH POLYSTYRENE - CHARACTERIZATION OF MECHANICAL PROPERTIES, International Journal of Modern Physics: Conference Series, 2012, 6 (2012), , 391-396
4. A.M.A Abudalazez, S.R. Kasim, A.Ariffin, Z.A. Ahmad , Electrophoretic Deposition of Biphasic Calcium Phosphate (BCP) Coatings on 316L Stainless Steel at Room Temperature, Advance Materials Research, 2012, 501, Solid State Science and Technology XXVI, 169-175
5. A.M.A Abudalazez, S.R. Kasim, A.Ariffin, Z.A. Ahmad, Effect of Temperature on BCP Ceramics Coating on 316L Stainless Steel Using Electrophoretic Technique, Advance Materials Research, 2012, 501, Solid State Science and Technology XXVI, 60-70
6. MAA Razali, Z Ahmad, A Ariffin, Treatment of Pulp and Paper Mill Wastewater with Various Molecular Weight of PolyDADMAC Induced Flocculation with Polyacrylamide, Advances in Chemical Engineering and Science, 2012, 2, 4, 490-503
7. ASAM M. A. ABUDALAZEZ, SHAH RIZAL KASIM, AZLAN B. ARIFFIN, ZAINAL ARIFIN AHMAD, Preparation and Characterization of Biphasic Calcium Phosphate Coatings on 316L Stainless Steel Fabricated by Electrophoretic Deposition, Advanced Materials Research, 2012, 620, , 373-377
8. Asam M. A. Abudalazez, Shah Rizal Kasim, Azlan B. Ariffin, Zainal Arifin Ahmad, Effect of the Solid Concentration in the Suspension on Electrophoretic Deposition (EPD) Coating Parameters, International Journal of Engineering Research in Africa, 2012, Vol. 8, , 47-54

E-Journal

(Author),(Title of Article),(Name of Journal),(Year),(Volume),(Edition),(Number Of Pages)

1. A. Ariffin, Z.M. Ariff, S.S. Jikan,, Effects of kaolin and maleic anhydride contents on melt elasticity and flexural behaviour of polypropylene/kaolin and unplasticised poly(vinyl chloride)/kaolin composites,, e-Polymers Journal, 2010, , , 0

Citation Indexed Journal

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1. N. A. Abdul Rahim, Z. M. Ariff, A. Ariffin, S.S. Jikan, Study on Effect of Filler Loading on the Flow and Swelling Behaviors of Polypropylene-Kaolin Composites Using Single-Screw Extruder, *Journal of Applied Polymer Science*, 2011, 119, 1, 73-83
2. A.Ariffin, M.S.B.Ahmad, Review: Single Screw Extruder in Particulate Filler Composite, *Polymer-Plastics Technology and Engineering*, 2011, 50, 4, 395-403
3. A.Ariffin, Z.M. Ariff, S.S. Jikan , Evaluation on Extrudate Swell and Melt Fracture of Polypropylene/Kaolin Composites at High Shear Stress, *Journal of Reinforced Plastic Composites*, 2011, 30, 7, 609-619
4. A. Ariffin, M.A.A.Razali, Z. Ahmad, PolyDADMAC and PolyAcrylamide as a Hybrid Flocculation System in the Treatment of Pulp and Paper Mills Waste water, *Chemical Engineering Journal*, 2011, doi:10.1016/j.cej.2011.10.067, , 0
5. Mohamad Riduwan Ramli , Muhammad Bisyrul Hafi Othman, Azlan Ariffin, Zulkifli Ahmad , Cross-link network of polydimethylsiloxane via addition and condensation (RTV) mechanisms. Part I: Synthesis and thermal properties, *Polymer Degradation and Stability*, 2011, Volume 96, issues 12, , 2064-2070
6. A. Ariffin M.A.A. Razalia Z. Ahmad , PolyDADMAC and polyacrylamide as a hybrid flocculation system in the treatment of pulp and paper mills waste water, *Chemical Engineering Journal*, 2012, Volume 179, , 107-111
7. M. A. A. RAZALI, N. SANUSI, H. ISMAIL, N. OTHMAN, A. ARIFFIN, Application of Response Surface Methodology (RSM) for optimization of Cassava Starch Grafted PolyDADMAC Synthesis for Cationic properties, *Starch-Technologie*, 2012, 64, 12, 935-943
8. Orathai Boondamnoen, Azura A Rashid, Saowaroj Chaiyuljit, Masahiro Ohshima and Azlan Ariffin, Comparison of mechanical, morphological and swelling properties of WNRL/PS and NRv/PS blends, *Journal of Elastomers and Plastics*, 2012, doi: 10.1177/0095244312458603, , 0
9. Hanafi Ismail, Wee Shen Khoo, Azlan Ariffin , Effects of halloysite nanotubes and kaolin loading on the tensile, swelling, and oxidative degradation properties of poly(vinyl alcohol)/chitosan blends, *Journal of Vinyl and Additive Technology*, 2013, 19, , 55-64
10. Nur Shaylinda Mohd Zin, Hamidi Abdul Aziz Nordin Mohd Adlan Azlan Ariffin Mohd Suffian Yusoff Irvan Dahlan, Suspended Solid, Color, Chemical Oxygen Demand, and Ammonia Removal from Partially Stabilized Leachate by Prehydrolyzed Iron under the Influence of Basicity, Dose, and pH, *Caspian Journal of Applied Sciences Research*, 2013, 2(4), , 7
11. Nur Shaylinda Mohd Zin Hamidi Abdul Aziz Nordin Mohd Adlan Azlan Ariffin Mohd Suffian Yusoff Irvan Dahlan, A Comparative study of Matang and Kuala Sembeling landfills leachate characteristics., *Applied Mechanics and Materials Vols. 361-363 (2013) pp 776-781* © (2013) Trans Tech Publications, Switzerland doi:10.4028/www.scientific.net/AMM.361-363.776, 2013, 361-363, doi:10.4028/www.scientific.net/AMM.361-363.776, 776-781
12. Nur Shaylinda Mohd Zin Hamidi Abdul Aziz Nordin Mohd Adlan Azlan Ariffin Mohd Suffian Yusoff Irvan Dahlan, Comparative Study on the Impacts of Dose on the Removal of Suspended Solid, Color, Chemical Oxygen Demand and Ammonia from Partially Stabilized Leachate by Using Ferric (III) Chloride and Polyferric, *Advances in Mechanical Engineering*, 2013, 3, 1, 0
13. O.BOONDAMNOEN, A.R. AZURA, M. OHSHIMA, S. CHUAYJULJIT, A. ARIFFIN, THE EFFECT OF BLEND RATIO AND COMPATIBILIZER ON SOLUTION CASTED TREATED WASTE NATURAL RUBBER LATEX/POLYSTYRENE (TWL/PS) BLENDS, *Songklanakarin Journal of Science and Technology*, 2013, , SJST-2013-0017.R1, 0
14. Azlan Arifi-□n Muhamad Sharan Musa Muhammad Bisyrul Hafi Othman Mohd Amin Ahmad Razali Fouzi Yunus, Effects of various fillers on anionic polyacrylamide systems for treating kaolin suspensions, *Colloids and Surfaces A: Physicochemical and Engineering Aspects* , 2013, 441, , 306-311 - 6 pages
15. Nur Shaylinda Mohd Zin, Hamidi Abdul Aziz, Mohd Nordin Adlan, Azlan Ariffin, Mohd Suffian Yusoff & Irvan Dahlan, Application of a pre-hydrolyzed iron coagulant on partially stabilized leachate, *Desalination and Water Treatment*, 2014, , , 8
16. A. Ariffin, M.S. Musa, M.B.H. Othman, M.A.A. Razali, F. Yunus, Effects of various fillers on anionic polyacrylamide systems for treating kaolin suspensions, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 2014, 441, , 5
17. N.A.A. Rahim, Z.M. Ariff, A. Ariffin, Z. Zakaria, H. Osman and H.C. Metselaar, Viscosity analysis of

polypropylene-kaolin composites measured using single-screw extruder, Journal of Vinyl and Additive Technology, 2014, DOI: 10.1002/vnl.21371, , 0

18. M.A.A. Razali, H. Ismail, A. Ariffin, Graft copolymerization of polyDADMAC to cassava starch: evaluation of process variables via central composite design, Industrial Crops & Products, 2014, , , 0

Proceeding

(Author),(Year),(Title),(Publisher),(Name Of Conference),(Venue),(Number Of Pages)

1. O. BOONDAMNOEN,M. OHSHIMA,A. R. AZURA, S. CHUAYJULJIT, A. ARIFFIN , 2011, Recycling Waste Natural Rubber Latex by blending with Polystyrene -Characterization of Mechanical Properties, 6th International Conference on Advanced Materials Development&Performance, , University of Tokushima, Japan, 6
2. O.Boondamnoen, A.R. Azura, M. Ohshima, S. Chuayjuljit, A. Ariffin , 2011, Effect of compatibilizer on tensile properties and fracture surface of waste natural rubber latex and polystyrene blends, Conference of the Microscopy Society of Malaysia (EMSM), , Permaisuri Resort at Port Dickson, 5
3. O.Boondamnoen, A.R. Azura, M. Ohshima,S. Chuayjuljit, A. Ariffin, 2011, Preparation and Characterization of Treated Waste Natural Rubber Latex/Polystyrene Blend, Conference of the Microscopy Society of Malaysia (EMSM), , Permaisuri Resort at Port Dickson, 6

Chapter In Research Book

(Author),(Title of Article),(Name of Book),(Publisher),(Year),(Number Of Pages)

1. Zulkifli Mohamad Ariff, Azlan Ariffin, Suzi Salwah Jikan and Nor Azura Abdul Rahim, Rheological Behaviour of Polypropylene Through Extrusion and Capillary Rheometry, Polypropylene, InTech, 2012, 29-48

1.3 Publication Related to Teaching

Teaching Modules

(Authors),(Year),(Title),(Publisher),(Number Of Pages)

1. , 2002, Teaching Module for Malaysian Institute of Chemical Engineering Technology (MICET)., , 0
2. , 2002, Laboratory Module for Malaysian Institute of Chemical Engineering Technology (MICET)., , 0

1.4 Other Publication

Editing of Books/Videos and Others

(Authors),(Year),(Title),(Publisher),(Number Of Pages)

1. Leong Yew Wei, Zainal Arifin Mohd Ishak, Azlan Ariffin,, 2006, "Polypropylene Hybrid Composites Based On Talc And Calcium Carbonate", chapter 6, Robert K Bregg, Nova Science Publisher, Pg 189-259

1.5 Book

- No Record -

TEACHING AND SUPERVISION

2.1 Graduate Teaching

(Course Title),(Semester),(Year),(Number of Lecturers),(Number of Students)

1. Resin Technology, 2 , 1999, 1, 70
2. Polymer Engineering,, 1 , 2004, 2, 140

2.2 Undergraduate Teaching

(Course Title),(Semester),(Year),(Number of Lecturers),(Number of Students)

1. OCCUPATIONAL SAFETY AND HEALTH ,EBB398
2. OCCUPATIONAL SAFETY AND HEALTH ,EBB428
3. POLYMERIC MATERIALS ,EBP200
4. POLYMER RHEOLOGY ,EBP307
5. RESIN MANUFACTURING ,EBP314
6. LATEX LABORATORY ,EBP316
7. RUBBER LABORATORY ,EBP320
8. POLYMER DEGRADATION AND THE ENVIRONMENT ,EBP324
9. PRODUCT DESIGN AND FAILURE ANALYSIS ,EBP400

10. SPECIALITY ENGINEERING POLYMER ,EBP412
11. FIBRE PROCESSING ,EBP415
12. PLASTIC LABORATORY ,EBP418
13. Physics Polymer 2, 1 , 1998, 2, 70
14. Resin Technology,, 2 , 1998, 2, 70
15. Fiber and Adhesive Technology, 2 , 1998, 2, 70
16. Introduction to Polymer, 1 , 1999, 2, 70
17. Pysics Polymer 2, 1 , 1999, 2, 70
18. rubber Technology Laboratory, 2 , 1999, 2, 70
19. Introduction to Polymer, 1 , 2000, 2, 70
20. Plastic Technology laboratory,, 1 , 2000, 2, 70
21. Resin Technology, 2 , 2000, 1, 70
22. Introduction to Polymer,, 1 , 2002, 2, 10
23. Plastic Technology Laboratory,, 1 , 2002, 2, 70
24. Resin Technology,, 2 , 2002, 1, 10
25. Polymer Engineering, 1 , 2003, 2, 140
26. Polymer Engineering, 1 , 2006, 2, 150
27. Fiber Processing,, 1 , 2006, 2, 50
28. , Rubber Engineering,, 1 , 2006, 4, 60
29. Resin Manufacturing,, 2 , 2006, 1, 46
30. Latex Laboratory,, 2 , 2006, 1, 50

2.3 Graduate Supervision

(Student Name),(Category),(Thesis Title),(Year Graduated)

1. ASAM M.A. ABUDALAZEZ,Master(Research), Preparation and characterization of opaque Dental porcelain powder as a filler in Dentulre base poly (merhyl methacrylate), 2009
2. SAAD OMAR ALSHARIF,Master(Research), Physical, Mechanical and Environmental Properties of Dental Resin Composites Based On Hydroxyapatite Filled Bis-GMA/TEGDMA, 2011
3. ASAM M.A. ABUDALAZEZ,PhD, Electrophoretic Deposition of Ceramic Coatings on Dental Implant, 2013
4. ORATHAI BOONDAMNOEN,PhD, Characterization and Optimazation of Waste Natural Rubber Latex and Polystyrene Blend (WNRL/PS), 2013
5. SUZI SALWAH BINTI JIKAN,PhD, Evaluation on Flow Behaviour of Polypropylene/Kaolin Composites at High Shear Stress, 2011
6. NUR SHAYLINDA BINTI MOHD ZIN,PhD, Treatment of Partially Stabilized Leachate using Prehydrolyzed Iron and Tapioca Starch as a Composite Coagulant, 2011
7. MOHAMAD AZWAN BIN MAD NASER,Master(Research), Development of an Affordable Oscillating Rheometer to Monitor Cure Characteristics and Rheological Behaviour of Thermoset Polymers , 2011
8. MOHD SHAMSUL FARID BIN SAMSUDIN,PhD, The formation of microcellular structure from dry natural rubber (NR) and its response towrds mechanical deformation., 2011
9. NOR AZURA BINTI ABDUL RAHIM,Master(Research), Flow Behavior and Viscoelasticity of Polypropylene-Kaolin Composites, 2010
10. WAN MOHD HAFIZ FAISAL BIN WAN HARUN,PhD, Functionalized carbon material for gas separation application., 2010
11. MOHD AMIN BIN AHMAD RAZALI,PhD, Biodegradable polymeric flocculant based on cassava starch-grafted polydiallyldimethylammonium choride., 2010
12. MOHD AMIN BIN AHMAD RAZALI,Master(Research), A Study of Polydadmac Induced Flocculation in Treatment of Pulp and Paper Mills Wastewater, 2012
13. MOHAMMAD SHAHRULHAFIZ BIN BASIR AHMAD,Master(Research), Properties of Recycled Crosslink Polyethylene Filled High Density Polyethelene Composites, 2013
14. AFRIZAL BIN ADMIRAL,PhD, Depressant for Crude Oil Flow Improver Utilization, 2013

15. KHOO WEE SHEN, Master (Research), The Effect of Filler Loading, Glutaraldehyde and Polyethylene Glycol on Properties of Polyvinyl Alcohol/Chitosan Blend, 2012
16. MOHAMAD DANIAL SHAFIQ, Master (Research), Preparation and Properties of Rubber Seed Shell Flour (RSSF)-Filled Polypropylene (PP) Composites, 2014
17. MUHAMAD RIDHWAN HAFIZ BIN ROSDI, Master (Research), Preparation and Development of an Eva Copolymer Emulsification System, 2014

2.4 Undergraduate Supervision

(Student Name), (Year Graduated), (Thesis/Project Title)

1. Noor Azah Enon @ Asnon, 2012, Mechanical and electrical properties of silane crosslink polyethylene/high density polyethylene blend for electrical cable application
2. Muhamad Ridhwan Hafiz Rosdi, 2012, Flocculation assessment and optimization with a photometric dispersion analyzer for different cassava content of cassava starch grafted polydmac
3. Muhamad Sharan Musa, 2012, Effects of various fillers on anionic polyacrylamide system

2.5 Professional Service

(Category), (Description), (Place/location), (Frequency), (Year)

PAPERWORK PRESENTATION

(Title), (Venue), (Duration), (Level)

1. Mechanical Properties Of Propylene Hybrid Composites In The Presence Of Talc/Calcium Carbonate And Talc/Kaolin As Fillers, Penang, Malaysia, -, National
2. A Cationic Polyacrylamide as a Flocculant for Treatment of Palm Oil Mill Effluents, USM, Penang, Malaysia, -, National
3. A Comparison Study of Peat Paste and Alum for Treatment of High Suspended Solids Wood Processing Waste Water, USM, Penang, Malaysia, -, National
4. Characterization Of Talc/Calcium Carbonate Filled Polypropylene Hybrid Composites Weathered In Tropical Climates ,, UTM, Malaysia, -, National
5. Mechanical Properties of Alumina Filled Poly(Methyl Methacrylate) Dental Base Material, UTM, Malaysia, -, National
6. Floc Size studies on Palm Oil Mill Effluent With Cationic Polyacrylamide, UTM, Malaysia, -, ,
7. The Effect of Physical Mixing on Mechanical Properties of Hydroxyapatite Filled Poly (Methyl Methacrylate),, Johor Baru, Malaysia., 17/12/2002- 18/12/2002, National
8. The Effect of Different Charge Densities And Different Molecular Weight Cationic Polyacrylamides on POME Treatment, Penang, Malaysia, -, National
9. The Comparison Study on Effects of Feldspar and Commercial Silica on Mechanical Properties and Morphology of Natural Rubber Vulcanizates, , 15/12/2003- 17/12/2003, National
10. The Effects of Feldspar Loading on Swelling Behaviour and Morphology of SMR L and ENR 50 Vulcanizates, , 15/12/2003- 17/12/2003, National
11. Effects Of Partial Replacement of Feldspar by Silica on properties of Natural rubber vulcanizates.,, , 23/3/2004- 26/3/2004, National
12. Tensile and Morphological Properties Of Talc And Kaolin Filled Propylene Hybrid Composite: Effect Of Filler Surface Treatment., , 7/10/2004- 8/10/2004, National
13. Mechanical Properties Of Hydroxyapatite Filled Polyethylene Blends:Effect Of Filler Treatment Concentration, , 7/10/2004- 8/10/2004, National
14. Influence Of Kaolin Surface Treatment Agent On The Mechanical, Morphological, Thermal And Rheological Properties Of Pp/Talc/Kaolin Hybrid Composite, , -, National
15. Effects of Sodium hexametaphosphate (SHMP) on dispersion, morphological characteristics and impact strength of polypropylene/talc/kaolin hybrid composite, , -, National
16. Mechanical Properties and Morphology of Low Density Polyethylene/ Polycaprolactone/ Sago Starch Blends, , 5/12/2005- 7/12/2005, National
17. Kaolin Effect On Tensile And Morphological Properties Of Polypropylene/Kaolin Composite., Penang, -, National

18. Effects Of Kaolin And Maleic Anhydride Contents On Melt Elasticity Phenomenon Of Polypropylene/Kaolin Composite., Penang, -, National
19. The Flow Behaviour Of Kaolin-Filled Polypropylene At High Shear Stresse., Penang, -, National
20. A Morphological Study Of Kaolin-Filled Polypropylene At High Shear Stresse., Penang, -, National
21. Mechanical And Thermal Properties Of Hydroxyapatite Filled Poly(methyl methacrylate) Composites,, Solerno, Italy., 10/10/2008- 15/10/2008, International
22. Extrudate Swell and Melt Fracture of Polypropylene-Kaolin Composites at High Shear Stress., Penang, -, National
23. Effect of Kaolin Content On Thermal Analysis Of Polypropylene/Kaolin Composites., Penang, -, National
24. Flow Behaviour of Polypropylene-kaolin Composites at Various filler Loading, Temperatures And Multiple Extrusion Cycle., Penang, Malaysia., -, National
25. Effects of Kaolin Surface Treatment on The Properties of Polypropylene/Kaolin Composites., Yogyakarta, Indonesia, -, International
26. Effect of Mass Ratio Acrylic Acid to Waste Polystyrene Foam On Synthesis and Water Absorption of Superabsorbent Polymer., -, -, National
27. Effect Of Filler Loading On The MFI, Swelling Ratio And Melt Density Of Polypropylene Composites., Penang, -, National
28. Flow Behaviour And Viscoelasticity Of Polypropylene-Kaolin Composites At Different Temperature., Uniten, Selangor., -, National
29. Monomer Concentration Effect On Polyamine Synthesis And Its Demulsifying Ability On Water In Oil Emulsion., Uniten, Selangor., -, National
30. Various Monomer Concentrations On Synthesis Of Polydiallyldimethylammonium Chloride And Its Applications As Flocculants, Uniten, Selangor., -,
31. Effect of different irradiation time on the mechanical properties of conventional dental composite restoration by LED laser,, Unimap, Malaysia, -, National
32. Effect different Molecular Weight Of PolyDADMAC On The Treatment Of Suspension Kaolin, 10th National, Awana Porto Malai, Langkawi, Kedah., 8/11/2010- 10/11/2010, National
33. Development Of Crosslink Network Of Polydimethylsiloxane Via Addition And Condensation (RTV) Mechanism,, Awana Porto Malai, Langkawi, Kedah., 8/11/2010- 10/11/2010, National
34. Effect of Mass Ratio Methyl Acrylate To Waste Polystyrene Foam On Synthesis, Characterization And Swelling Studies Of Superabsorbent Polymer., Awana Porto Malai, Langkawi, Kedah, 8/11/2010- 10/11/2010, National
35. Contact Angle and Its Relationship With The Mechanical Properties of PP/Kaolin Composites,, USM, Penang, Malaysia, -, National
36. Thermal Stability And Morphology Of Treated Waste Natural Rubber Latex/Polystyrene Solution Blend (Twnrl/Ps) Using Polystyrene-Modified Natural Rubber (Snr) As A Compatibilizer ,, Bayview Hotel, Langkawi, Malaysia, 25/10/2010- 26/10/2010, National
37. Feasibility Of Natural Rubber Latex And Polystyrene Blend Through Solution Blending,, Awana Porto Malai, Langkawi, Malaysia,, -, National
38. Effect Of Polystyrene-Modified Natural Rubber (SNR) On Mechanical Properties Of Waste Natural Rubber Latex/Polystyrene Blend (WNRL/PS)., Taipei, Taiwan, 15/11/2010- 18/11/2010, International
39. Tensile Properties and Swelling Behavior of PVA/Chitosan Blend,, Putrajaya International Convention Centre, Malaysia., 6/6/2011- 8/6/2011, National
40. Tensile and Swelling Properties of Polyvinyl alcohol/Chitosan/Halloysite Nanotubes Nanocomposite,, Universiti Teknologi Petronas, Malaysia, 19/9/2011- 20/9/2011, National
41. Investigation of Tensile and Swelling Properties of Crosslinked Polyvinyl Alcohol/Chitosan/Halloysite Nanotubes Composite, , Univesiti Malaysia Perlis, Malaysia, 22/10/2011- 23/10/2011, National
42. 'Recyling Waste Natural Rubber Latex by blending with Polystyrene -Characterization of Mechanical Properties, University of Tokushima, Japan,, 15/7/2011- 18/7/2011, International
43. Preparation and Characterization of Treated Waste Natural Rubber Latex/Polystyrene Blend,, Permaisuri Resort, Port Dickson, Malaysia., 20/12/2011- 22/12/2011, National
44. 'Effect of compatibilizer on morphology and morphology properties of waste natural rubber latex and polystyrene blends,, Permaisuri Resort, Port Dickson, Malaysia, 20/12/2011- 22/12/2011, National
45. EFFECT OF DIFFERENT MOLECULAR WEIGHT ON THERMAL BEHAVIOUR OF RADICAL SYNTHESIZED POLYDIALLYLDIMETHYLAMMONIUM CHLORIDE (POLYDADMAC)., PENANG, MALAYSIA, 3/10/2012- 5/10/2012, National

46. Characterization of Thermal properties of Waste Natural Rubber Latex/Polystyrene blend,, Vistana Hotel, Penang., 23/3/2012- 24/3/2012, National

ACADEMIC RECOGNITION AND LEADERSHIP

Member in Professional / Academic Associations

(Organisation),(Membership),(Year),(Level)

1. Regional Conference of Polymeric Materials 98, Committee Members(Conference/Seminar/Workshop) , 1998, National
2. Plastic Rubber Institute of Malaysia (PRIM), Members , 2002, National
3. National Symposium Of Polymeric Material, Penang 2008,, Chairman , 2008, National
4. Asian Workshop On Polymer Processing (Awpp 2009),,, Committee Members(Conference/Seminar/Workshop) , 2009, International
5. International Polymer Processing Society (PPS), Members , 2010, National
6. The 3rd Regional Conference Interdisciplinary On Natural Resources And Materi, Committee Members(Conference/Seminar/Workshop) , 2010, International
7. Eight International Conference On Composite Science And Technology 2011 (ICST/8, Committee Members(Conference/Seminar/Workshop) , 2011, International

Awards for Innovation

(Name of Award),(Awarding Institution),(Event),(Year),(Level)

1. Radio-Opaque Denture Base Material 'DENTAC' PAR, February 2000., USM 2004, , 2000, National
2. Radio-Opaque Denture Base Material 'DENTAC' PAR, MOSTI 2004, , Science & Technology Exhibition 2004 Putra World Trade Centre, Kuala Lumpur, 27 - 29 August 2004, 2004, National
3. Radio-Opaque Denture Base Material 'DENTAC' PAR, Geneva 2005, Salon International Invention 2005, Geneva, April 2005, 2005, International

Reviewing Articles in Academic Journals / Assessor of Working Papers / Reviewing Books

(Title of Journal),(Name of Journal),(Editor),(Year)

1. , Journal Of Industrial Technology, , 2002
2. melt elasticity phenomenon of multicomponent (Talc and calcium Carbonate) filled Polypropylene., Journal of Reinforced Plastic & Composites Vol. 25, No. 9 pp. 913-923, A. Ariffin, S.S. Jikan, M.S.F. Samsudin, Z.M. Ariff and Z.A.M Ishak, 2006
3. Malaysian Journal of Microscopy 2007, Malaysian Journal of Microscopy 2007, Prof.Dr Zainal Ariffin Ahmad,, 2007
4. PES-09-0022 Selective migration in polyethylene/rubbery particles blends during capillary flow., Polymer Engineering and Science,, Prof. Robert Weiss Editor, 2009
5. "Mechanical Properties of Short Random Oil Palm Fibre Reinforced Epoxy Composites", Sains Malaysiana,, , 2009
6. Hybrid composites: study on un-treated cellulose fibers/gf properties, 9th Symposium on Polymeric Materials 2009., , 2009
7. IP2303 - Studies of Silicon-Containing Bismaleimide Resins. Part II:Preparation and Characteristics of Reactive Blends of Silicon-Containing Bismaleimide and Epoxy., International Polymer Processing,, , 2009
8. Effects of Moisture Content on Tensile Properties of Kenaf Bast Fibre Reinforced Unsaturated Polyester Composites, 7. Polymers & Polymer Composites™,, M.R. ISHAK, Z. LEMAN, S.M. SAPUAN, E.S. ZAINUDIN, S. MISRI AND M.Y.M. ZUHRI, 2009
9. Effect Of Unsaturated Polyester Concentration On Rheological Characteristics Of Polypropylene-Unsaturated Polyester Reactive Blend, Malaysian Polymer Journal,, , 2009
10. Influence of short bamboo/glass fiber on the thermal, dynamic mechanical and rheological properties of polypropylene hybrid composites - E.J. Lavernia Editor, Materials Science & Engineering A, MSEA-D-09-00198 -, , 2009
11. The Effect Of Alkali Treatment On The Mechanical Properties Of Short Pineapple Leaf Fibre (Palf) Reinforced High Impact Polystyrene (Hips) Composites, 10. Journal of Food, Agriculture and Environment,, J. P. Siregar, S. M. Sapuan a*, M. Z. A. Rahman b, and H. M. D. K. Zaman, 2009
12. Studies Of Silicon-Containing Bismaleimide Resins. Part II: Preparation And Characteristics Of Reactive Blends Of Silicon-Containingbismaleimide And Epoxy. IP2303R1, 11. International Polymer Processing

(2010) ,, , 2010

13. Fabrication And Impact Properties Of Short Abaca (Musa Textile Nee) Fiber-Reinforced High Impact Polystyrene (HIPS) Composite, PJST6, Special Issue Pertanika Journal: Science And Technology (2010),, , 2010
14. Characterization Of Jospine Pineapple Leaf Fiber (PALF) And Palf-Reinforced Vinyl Ester Composite, JCM-10-0488., Journal Of Composite Materials (2010),, , 2010
15. The Tensile Properties Of Single Fiber From Different Part Of Sugar Palm Tree, WEC-CMTM82., WEC-CMTM (2010),, , 2010
16. Tensile And Impact Properties Of Sugarcane Bagasse/Poly(Vinyl Chloride) Composites., 15. International Conference Of Composite Science And Technology (ICCST/8) (2010),, , 2010
17. Damping evaluation of fiber reinforced glass fiber composite, 16. International Conference Of Composite Science And Technology (ICCST/8) (2010),, , 2010
18. Evaluation of the Effects of Thickness on Fracture Toughness of Carbon/Polyester Composite, 17. International Conference Of Composite Science And Technology (ICCST/8) (2010),, , 2010
19. Simulation of cracks in fiber reinforced composite plate., 18. International Conference Of Composite Science And Technology (ICCST/8) (2010),, , 2010
20. Mathematical Model to Characterization Short Carbon Fiber Reinforced Polypropylene Composite., Journal Of Petroleum And Gas Engineering (2010),, , 2010
21. The role of mixing conditions in floc growth, breakage and re-growth, Chemical Engineering Journal (2010), CEJ-D-11-00133,, , 2010
22. Thermal and Mechanical Properties of Brake Pad Produced from Palm Slag, The 1st International Malaysia-Ireland Joint Symposium on Engineering, Science and Business (IMiEJS 2011)", , 2011
23. The role of mixing conditions in floc growth, breakage and re-growth , Chemical Engineering Journal, Stephen Allen, 2011
24. Mathematical Model to Characterization Short Carbon Fiber Reinforced Polypropylene Composite, Journal of Petroleum and Gas Engineering , Emekagbor Richard, 2011
25. SHEAR-INDUCED FLOC STRUCTURE CHANGES FOR ENHANCED DEWATERING OF COAL PREPARATION PLANT TAILINGS, Chemical Engineering Journal, Stephen Allen, 2011
26. Kinetics of nitrate hydrogenation in water on alumina and niobia supported palladium - copper catalysts., Journal of Hazardous Materials (2011):, , 2011
27. Preparation and characterization of novel biopolymer derived from sugar palm tree., The 2012 International Conference on Agricultural, Food and Biological Engineering (ICAFBE 2012) :, , 2011
28. Tensile And Impact Properties Of Different Morphological Parts Of Sugar Palm Fibre Reinforced Unsaturated Polyester Composites., Polymer and Polymer Composites (2011):, , 2011
29. Preparation and characterization of novel biopolymer derived from sugar palm tree, ICAFBE 2012, National Tsing Hua University, Taiwan, 2012
30. Melt Extrudate swell behaviour of Polypropylene Composites filled Hollow Glass Beads, Journal of Polymer Engineering, Robert A Weiss and Allan J. Lesser, 2012
31. Mechanochemical Milling of Polypropylene/Ground Tire Rubber Blends in Solid-State: A CostEffective Approach for the Recycling of Tires, International Polymer Processing, Masahiro Ohshima, 2012
32. Influence of Talc Content on the Thermal and Mechanical Properties of TPU/PP Blends, Journal of Elastomers and Plastics, Heshmat A. Aglan, 2012
33. Synthesis and Cyclopolymerization of Diallylammoniomethanesulfonate, Polymer Engineering and Science Journal, Alan J. Lesser, 2012
34. Optimization of the curing of unsaturated polyester resin at 100Â°C: influence of the initiator" has been submitted to the Journal of Composite Materials, Journal of Composite Materials, Prof. S. M. Spearing, 2013

Assessor

(Activity),(Organisation),(Role),(From)-(Until),(Level)

1. 1st Advisory Committee of Plastic Processing Technology for KKTM Alor Gajah project, , 2006, -, , National
2. 2nd Advisory Committee of Plastic Processing Technology for KKTM Alor Gajah project on behalf of German Malaysian Institute, Bandung, Indonesia, , 2006, -, , International
3. 1st Advisory Committee of Plastic Processing Technology for KKTM Alor Gajah project on behalf of German Malaysian Institute, K.L., , 2006, -, , National
4. 2nd Advisory Committee of Plastic Processing Technology for KKTM Alor Gajah project on behalf of

- German Malaysian Institute, Bandung, Indonesia, , 2006, -, , International
5. QATAR NATIONAL RESEARCH FUND, DEVELOPMENT OF FLAME RETARDED NATURAL FIBRES FILLED RECYCLED POLYETHYLENE TEREPHTHALATE, , 2012, -, , International
 6. National Symposium on Polymeric Materials (NSPM 2012) on 3rd-5th October 2012, , 2012, -, , National
 7. Fabrication of halogen free polymeric material based on layered structures fillers for wire and cable applications, , 2012, -, , University
 8. Continuous in-situ generation of biopolymer in aerobic granules developed from palm oil mill wastewater - a dtep towards zero discharge, , 2012, -, , National
 9. Penilai skim geran penyelidikan trans disiplinari (TRGS), , 2014, -, , National
 10. Panel Penilai Kategori Tesis Terbaik, , 2014, -, , University
- Keynote Speaker

1. Effects of Kaolin Surface Treatment on The Properties of Polypropylene/Kaolin Composites., 2nd Regional Conference of The AUN/SEED-Net Interdisciplinary Research on Natural Resources Materials, (August 2009)Yogyakarta, Indonesia, , 2009, International

Academic Awards

(Name of Award),(Awarding Institution),(Year),(Level)

1. ANUGERAH SANGGAR SANJUNG, UNIVERSITI SAINS MALAYSIA, 2011, University

Assessor/Examiner

Internal Examiner

(Title),(Student),(University),(Duration)

1. A Study Of Carbon Black Masterbatch In PVC Compound., , Universiti Sains Malaysia., -
2. Polystyrene Modified Natural Rubber From In-Situ Polymerization Of Styrene In Deproteinized Natural Rubber,, , -
3. A Study On Thermoplastic Composite Fiber Based On Lignocellulosic., , Universiti Sains Malaysia, -
4. Sago starch filled LLDPE: mechanical, water absorption and degradation properties,, , Universiti Sains Malaysia., -
5. 2001, Fracture and hygrothermal aging propertiy of polybutylene terphthalate toughened acrylate rubber reinforced glass fiber,, , Universiti Sains Malaysia., -
6. , A Study On The Effect Of Pro-Oxidant On The Mechanical And Degradation Properties Of Sago Starch Filled LLDPE,, , Universiti Sains Malaysia, -
7. Properties Of Recycled Powder Rubber Waste/Polypropylene Blends,, , Universiti Sains Malaysia., -
8. , The Synthesis Of Phenoxy Ethyl Vinyl Ether Grafted Polypropylene And Its Effect On The Compatibilisation Of Polypropylene/Polystyrene Blends,, , Universiti Sains Malaysia., -
9. Rheology And Processing Of Acrylonitrile 2-Butadiene 1 Styrene (ABS),,, , Universiti Sains Malaysia., -
10. , Blends of rice husk filled polystyrene/styrene butadiene rubber,, , Universiti Sains Malaysia., -
11. Investigation On The Properties Of Epoxy-Polyamide-Methyl Ethyl Ketone Laminate Systems, , , Universiti Sains Malaysia., -
12. , Blends Of Polystyrene Modified Rubber,, , Universiti Sains Malaysia., -
13. Lignocellulose Based Hybrid Laminate Composite: Physical, Mechanical And Flammability Properties Of Oil Palm Fiber/Glass Fiber Reinforced Epoxy Resin,, , Universiti Sains Malaysia., -
14. Toughening Of Epoxy Resin With Modified Liquid Natural Rubbers And Acrylonitrile-Butadiene Liquid Rubbers,, , Universiti Sains Malaysia., -
15. Morphological, Mechanical And Thermal Properties Of Amorphous Copolyester/Polyoxymethylene,, , Universiti Sains Malaysia, -
16. The Efect Of Kaolin As A Filler In Natural Rubber Compounds,, , Universiti Sains Malaysia., -
17. Melt Compounding Properties And Characterization Of Ethylene Vinyl Acetate/Organoclay Nanocomposites,, , Universiti Sains Malaysia., -
18. Metal Filled High Density Polyethylene Composites: Mechanical, Electrical And Thermal Properties,, , Universiti Sains Malaysia., -
19. Characterisation And Properties Of Bentonite Filled Polypropylene, , , Universiti Sains Malaysia., -

20. Characterization And Properties Of Epoxidised Natural Rubber (ENR-50)/Ethylene Vinyl Acetate (EVA) Blends., Zurina Bt. Mohamad, , -
21. Primary Studies on the properties of PMMA Bone cement And Bioactive glass Ceramic Filled PMMA Bone Cements Composites., Lok Chai Ling,, , -
22. Thermoplastic Elastomer Composite Based On Palm Ash Filled Ethylene Vinyl Acetate / Natural Rubber EVA/NR Blend., NorNadirah Bt. Najib, , -
23. Preparation, Characterizatio and Properties Of Polypropylene/Waste Tire Dust (PP/WTD) Blends., Mohamad Bin Awang, , -
24. Curing Characteristics, Mechanical Properties And Morphology Of Organoclay Filled Natural Rubber Nanocomposites., Cao Xuan Viet,, , -
25. Assessment of Various Fillers For Epoxy Substrate Material., Erfan Suryani Bt. Abdul Rashid, , -
26. Preparation and Characterization of Nanosilica/Polypropylene composites, Ong Hui lin, , -
27. Multiwalled-Carbon Nanotube and Feldspar Reinforced Polypropylene Composites: Mechanical, Thermal and Morphological Properties., Mohamed Nainar Mohamed Ansari, , -
28. Studies on The Properties of Single and Hybrid Mineral Fillers Filled Polypropylene Composites., Nurdina Bt. Abdul Kadir, , -
29. Preparation, Characterization and Properties of organoclay filled natural rubber nanocomposites, Raja Nazrul Hakim Bin Raja Nazri, , -
30. Studies On The Effects Of Coupling Agents On The Properties Of Poly(Methyl Methacrylate)/Hydroxyapatite Composites., Tham Wei Ling, , -
31. Preparation And Properties Of Low Density Polyethylene (LDPE)/ Thermoplastic Sago Starch (TPSS) Blends And Low Density Polyethylene (LDPE)/ Thermoplastic Sago Starch (TPS, Rohani Abdul Majid, , -
32. "Synthesis And Characterization Of Chemically Modified Chitosan Powder Using Various Monomers", Ku Marsila Ku Ishak, , -
33. FABRICATION OF BIOACTIVE GLASS-CERAMIC (GC) AND THE EFFECT OF GC FILLED POLY(METHYL METHACRYLATE) BONE CEMENT COMPOSITES, HAMIZAH ABDUL SAMAD, USM, -
34. A Study On The Effect Of \pm -Cordierite Ceramic Powder As A Filler In Denture Base Poly(Methyl Methacrylate, Hoida K Salem Shawi, USM, -
35. Studies On The Effects Of Coupling Agents On The Properties Of Poly(Methyl Methacrylate)/Hydroxyapatite Composites, Tham Wei Ling, USM, -
36. OPTIMIZATION AND CHARACTERIZATION OF BIODEGRADABLE POLY(L-LACTIC ACID)(PLLA) BLENDS, VILAY VANNALADSAYSY, USM, -
37. A Direct Borohydride Fuel Cell Employing A Sago Gel Polymer Electrolyte", Aliyah Jamaludin, , -
38. "Synthesis and Study Structure Properties Relationships (SPR)s Polyimide containing Silicone Segment For Optoelectronic Application", Muhammad Bisyrul Hafi Bin Othman, , -
39. "A Study On The Effect Of \pm -Cordierite Ceramic Powder As A Filler In Denture Base Poly(Methyl Methacrylate)", Hoaida K. Salem Shawi, , -
40. "Physical, Mechanical And Environmental Properties Of Denture Base Pol (Methyl Methacrylate) Filled With Hydroxyapatite", Jamal Moammar Mohamed Aldabib, , -
41. "The Effect Of Soil Burial And Agar Block Test On The Properties Of Recycled High Density Polyethylene (Rhdpe) Filled Wood Flour Composites", Norhazariah Samsir, , -
42. KENAF HYBRID BIO-COMPOSITES: PREPARATION, CHARACTERIZATION AND PROPERTIES, Abdul Malek Yaacob, UNIVERSITI SAINS MALAYSIA, -
43. Preparation, Characterization and Properties of Muscovite Nanocomposite, Mohd Fadli Ahmad Rasyid, Universiti Sains Malaysia, -
44. Synthesis of Silver Nanoparticle and Properties of Silver-Filled Epoxy Composites for Electronic Application, Suriati Ghazali, USM, -
45. MECHANICAL, THERMAL, DEGRADATION AND MORPHOLOGICAL BEHAVIOURS OF ORGANO-MONTMORILLONITE FILLED (BUTYLENE SUCCINATE) NANOCOMPOSITES, PHUA YI JING, UNIVERSITI SAINS MALAYSIA, -
46. Fabrication And Properties Of Epoxy Thin Film Nanocomposites, Voo Tin Vui, Universiti Sains Malaysia, -
47. Mechanical and Thermal Properties of Thermally Conductive Fillers Filled Polypropylene Composites, Nurulizzati Mohd Shukri, Universiti Sains Malaysia, -
48. Properties of Nano Particles Filled Silicon Rubber Composites, Kong Siew Mui, Universiti Sains Malaysia, -
49. Characterization and Properties of Recycled High Density Polyethylene/Natural Rubber/Kenaf Core

- Powder Biocomposites, Cao Xuan Viet, Universiti Sains Malaysia, -
50. EFFECT OF POLY(LACTIC ACID) ON THE POLY(METHYL METHACRYLATE)/ HYDROXYAPATITE DENTURE BASE COMPOSITES, Ng Kelvin, Universiti Sains Malaysia, -
 51. Development Of Biodegradable Composite Based On Polyvinyl Alcohol (Pvoh)/Corn Starch (Cs), Nur Azleen Azhari, , -
 52. EFFECTS OF A ACCELERATED WEATHERING ON THE PROPERTIES OF POLYLACTIC ACID TOUGHENED WITH IMPACT MODIFIER, KOUTH PHOMMACHANH, UNIVERSITI SAINS MALAYSIA, -
 53. MODELING AND CHARACTERIZATION ON MECHANICAL RESPONSE OF POLYETHYLENE FOAMS, Zunaida Zakaria, USM, -
 54. Static/Dynamic Mechanical Properties and Strain Rate Sensitivity of Thermoplastic Based Polymer Matrix Composites Using Split Hopkinson Pressure Bar Apparatus (SHPBA), MOhd Firdaus Omar, USM, -
 55. Studies on the Properties of Hybrid Mineral Fillers Filled Polypropylene Composite, Sheril Rizal Vincent, USM, -
 56. Development and Characterization of Epoxy Syntactic Foam Filled with Epoxy Hollow Spheres, Siti Salmi Samsudin, USM, -
 57. THE PREPARATION AND PROPERTIES OF POLYPROPYLENE/ WASTE TYRE DUST (WTD)/ SHORT GLASS FIBRE (PP/WTD/SGF) COMPOSITES., ZURIATI ZAINAL, USM, -
 58. SYNTHESIS AND PROPERTIES OF CARBAZOLE SUBSTITUTED POLYDIMETHYLSILOXANE FOR LED ENCAPSULATION, Norhuda Hidayah Nordin, , -
 59. Mechanical And Tribological Properties UHMWPE Composites For Implant Application, Chang Boon Peng, Universiti Sains Malaysia, -
 60. Preparation and Properties of Polyvinyl Alcohol/Soya Bean Biodegradable Film, Fairuz Mazlia, Universiti Sains Malaysia, -
 61. The Effect of Hybridization On Natural Weathering Exposure And Hygrothermal Aging On The Properties Of Pultruded Kenaf Fiber Reinforced Unsaturated Polyester Composite, Muhammad Razak, , -

External Examiner

(Title),(Student),(University),(Duration)

1. Experimental And Finite Element Analysis Of Pressure Carrying Capacity For Reinforced Composite Materials Tube,, Abdalla F. Hamed, Universiti Putra Malaysia., -
2. The Effect Of Binders On Tensile Strength And Compression Of Eurycoma Longifolia Jack Extract., Aziana Azlin Bt Abdul Hamid, Universiti Putra Malaysia, -
3. Finite Element Analyse Of Human Knee And Effect Of Different Biomaterials On Its Biomechanical Performance., Marjan Bahrami Nasab, Universiti Putra Malaysia., -
4. Characterization, Swelling Behaviour And Field Evaluation Of Oil Palm Empty Fruit Bunch Based Superabsorbent Polymer Composites., Shafinaz Bt Jamaludin, Universiti Teknologi Malaysia, -
5. Development of Material Selection System For Composite Materials Using Expert System & Analytical Hierachy Process,, Mohd Fairuz Abd Manab, Universiti Putra Malaysia, -
6. DESIGN AND FABRICATION OF A SMALL BOAT USING WOOVEN GLASS-SUGAR PALM FIBRE REINFORCED UNSATURATED POLYESTER COMPOSITE, SAIRIZAL MISRI, UNIVERSITI PUTRA MALAYSIA, -
7. ACCELERATED WEATHERING OF KENAF-HIGH DENSITY POLYETHYLENE (HDPE) COMPOSITE FOR OUTDOOR APPLICATION, UMAR ABDUL HANNAN, UNIVERSITI PUTRA MALAYSIA, 20/3/2012- 28/4/2012
8. SYNTHESIS AND CHARACTERIZATION OF BIODEGRADABLE POLYACRYLIC ACID BASED HYDROGEL FOR AGRICULTURAL APPLICATION, WAHAM ASHAIER LAFTAH, UNIVERSITI TEKNOLOGI MALAYSIA, -
9. ECO-FRIENDLY EXTRACTION, CHARACTERIZATION AND MODIFICATION OF MICROCRYSTALLINE CELLULOSE FROM OIL PALM EMPTY FRUIT BUNCHES, , UNIVERSITI TEKNOLOGI PETRONAS, -
10. MECHANICAL, THERMAL AND FLAMMABILITY PROPERTIES OF DATE PALM FIBRE FILLED RECYCLED HIGH DENSITY POLYETHYLENE/LOW DENSITY POLYETHYLENE/POLYPROPYLENE BLENDS., Khadija Morad Shaikh Zadeh, Universiti Teknologi Malaysia, -

External Assessor

(Title),(Student),(University),(Duration)

1. Promotion Exercise external assessor, Dr. Md. Mukhlesur Rahman, International Islamic University, -

Others

CONSULTANCY

Consultation Without Monetary Rewards (with appointment letter / consultation report)

(Title Of Project),(Sponsor),(Value),(Main Researchers),(Duration)

1. Advisory Committee of Plastic Processing Technology for KKTU Alor Gajah project on behalf of German Malaysian Institute, K.L., , RM0.00, , -

Contract Research

(Title Of Project),(Sponsor),(Value),(Main Researchers),(Duration)

1. Water soluble Project Consultant. 2008 - 2009, Global Network Technology Sdn.Bhd., RM84,000.00, , 1/12/2008- 1/12/2009

Commercialization of Research Product (per product)

(Title Of Project),(Sponsor),(Value),(Main Researchers),(Duration)

1. Consultant For Production of A Polyurethane Foam Pilot Plant,, ECOVET BINA SDN. BHD, RM48,000.00, , 1/12/2009- 2/12/2011

Consultancy With Monetary Reward (University / School / Personal)

(Title Of Project),(Sponsor),(Value),(Main Researchers),(Duration)

1. , ACME Chemicals Sdn. Bhd., RM0.00, Azlan Ariffin, 1/7/2014- 30/6/2015

SERVICE TO THE UNIVERSITY AND COMMUNITY

(Position),(Duration)

1. Member ,Committee Masjid As Soghir,2003
2. CHAIRMAN FOR ORAL SESSION ,NATIONAL SYMPOSIUM OF POLYMERIC MATERIALS (NSPM 2012),3/12/2012- 3/12/2012
3. COMMITTEE FOR SCIENTIFIC PAPER ,NATIONAL SYMPOSIUM OF POLYMERIC MATERIALS (NSPM 2012),3/10/2012- 5/10/2012
4. Group Coordinator / Lecturer Laboratory Employee / Time Table Representative ,Industrial Training for polymer technology department (1999-2002),1/12/1999- 2/12/2002
5. Group Coordinator / Lecturer Laboratory Employee / Time Table Representative ,, Comittee Of Occupational Safety And Health, School of Materials and Minerals resources Engineering,2004
6. University Committee ,Impact, Wear And Friction Assessment Of Zno/UHMWPE Composite For Implat Application.,2004
7. University Committee , ,2012
8. Chairman of School Committee ,Comittee of Chemicals Approval, School of Materials and Minerals resources Engineering, 2004,2004
9. Chairman of School Committee ,quotation committee,2014
10. Chairman of the Review Group ,Mechanical,Thermal, Degradation and Morphological Behaviours of Organomontmorillonite Filled Poly Bu,2004
11. Programme Chairperson ,Polymer Engineering Programme Chairman,2012
12. Committee ,Comittee Of Information Technology, School Of Industrial Technology,1/12/2000- 2/12/2002
13. Committee ,Comittee Of Standard And Procedures, School Of Industrial Technology,3/12/2001- 2/12/2002
14. Committee ,Comittee Of Strategic Planning , School of Materials and Minerals resources Engineering, 2004,2004
15. Others ,VIVA Chairman,2014
16. PENGERUSI RANCANGAN , PUSAT PENGAJIAN KEJURUTERAAN BAHAN DAN SUMBER MINERAL, 26/3/2007- 25/3/2009
17. PENGERUSI RANCANGAN , PUSAT PENGAJIAN KEJURUTERAAN BAHAN DAN SUMBER MINERAL, 26/3/2009- 31/12/2009