PERSONAL DETAILS

Name	Tan Winie
Designation	Associate Professor
Department	School of Physics and Materials Technology
Faculty	Faculty of Applied Sciences
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ACADEMIC QUALIFICATION

(Qualification), (Institution), (Year Obtained)

PhD	University of Malaya, Malaysia	2007
BSc	University of Malaya, Malaysia	2003

PROFESSIONAL AFFILIATION/ MEMBERSHIP

(Role), (Organization), (Year)

1. Associate Fellow, Malaysian Scientific Association, 2011 – present
2. Council Member, Institute of Materials Malaysia, 2014 – 2018
3. Member, Malaysian Solid State Science and Technology, 2009 – present
4. Member, Malaysian Institute of Physics, 2017 - present

AREA OF EXPERTISE

Solid State Ionics (Ionic Conductors, Composites, Polymer Electrolytes, Electrodes, Batteries, Solar Cells, Supercapacitors)

RESEARCH & PROFESSIONAL EXPERIENCE

(Role), (Year), (Invitee)

1. Visiting Scientist, 9 – 15 July 2017, National Chiao Tung University, Taiwan
2. Visiting Scientist, 1 July – 31 August 2016, University of Malaya, Malaysia

RESEARCH COLLABORATION

(Researcher), (University)

1. National Chiao Tung University, Taiwan
2. Mahatma Gandhi University, India
3. University of Malaya, Malaysia
4. University Science Malaysia, Malaysia
5. University Putra Malaysia, Malaysia

INDUSTRY LINKAGE

(Role), (Event Title), (Industry/Institution), (Year)

1. Speaker, Masterclass "FTIR Application for Coatings Fingerprinting" (Institute of Materials Malaysia, Paint & Coating Industries, Oil & Gas Industries), 19 May 2016
2. Speaker, Lithium-Ion Battery Training and Workshop (Universiti Teknologi MARA & Samsung), 26-29 July 2016
3. Advisor, Institute Materials Malaysia Task Force on Coatings Fingerprinting (Paint & Coating Industries, Oil & Gas Industries), 2013 - 2016
4. Speaker, Lithium-Ion Battery Training and Workshop (Universiti Teknologi MARA & Samsung), 16-18 Mac 2015
5. Speaker, Lithium-Ion Battery Training and Workshop (Universiti Teknologi MARA & Samsung), 7-10 October 2014
6. Chairperson, Technical Forum on Specialty Polymers for High Temperature and High Pressure Applications in the Oil and Gas Industry (Polymer Industries, Oil & Gas Industries), 2013
7. Committee, Forum of Towards Fingerprinting of Polymeric Coatings I, II, III & IV (Universiti Teknologi MARA, Paint & Coating Industries, Oil & Gas Industries), 2013 - 2015
8. Rapporteur , Forum of Towards Fingerprinting of Polymeric Coatings II, III & IV (Universiti Teknologi MARA, Paint & Coating Industries, Oil & Gas Industries), 2013 - 2015

UNIVERSITY CONSULTATION PROJECT/ CONSULTANCY

(Role), (Project Title), (Organization), (Year)

1. Trainer, Certified Course Trainer for IMM's Coating Fingerprint Certification Scheme, Materials Technology Education Sdn. Bhd., 10 Feb 2016 – 10 Feb 2019
2. Technical Advisor, Materials Technology Education Sdn. Bhd., 1 Jun 2014 – 30 Jun 2016
3. Consultant, Birth Certificate of Polymeric Coatings on Steel Pipelines for Oil & Gas Industries, Norimax Sdn. Bhd., 1 Nov 2013 – 1 Oct 2016
4. Consultant, ICFMD2017, Centre for Ionics University of Malaya, 20 Ogos 2016 – 20 Dis 2017
5. Mentor, Dana Pembudayaan Penyelidikan (RAGS), Research Management Institute, Universiti Teknologi MARA Malaysia, 2013
6. Committee, National Physics Conference (PERFIK2009), Research Management Institute, Universiti Teknologi MARA Malaysia, 2009

AWARDS AND RECOGNITIONS
(Name of Award), (Name/ Date of Exhibition), (Awarding Institution), (Year Awarded)

1. Silver Medal, 30th International Invention, Innovation & Technology Exhibition (ITEX) 2018, 2-4 May 2019, Kuala Lumpur Convention Center, Kuala Lumpur, Malaysian Invention and Design Society, 2019.
2. Special Award, Malaysian Technology Expo 2019, 21-23 February 2019, Putra World Trade Centre, Kuala Lumpur, Chinese Innovation and Invention Society (Taiwan), 2019.
3. Gold Medal, Malaysian Technology Expo 2019, 21-23 February 2019, Putra World Trade Centre, Kuala Lumpur, Malaysian Association of Research Scientist (MARS), 2019.
4. Silver Medal, Malaysian Technology Expo 2019, 21-23 February 2019, Putra World Trade Centre, Kuala Lumpur, Malaysian Association of Research Scientist (MARS), 2019.
5. Gold Medal, 29th International Invention, Innovation & Technology Exhibition (ITEX) 2018, 10-12 May 2018, Kuala Lumpur Convention Center, Kuala Lumpur, Malaysian Invention and Design Society, 2018.
6. Bronze Medal, International Conference and Exhibitions on Inventions by Institutions of Higher Learning (PECIPTA 2017), 7-9 October 2017, Stadium TertutupKompleks Sukan Negeri Gong Badak, Kuala Nerus, Kuala Terengganu, Kementerian Pendidikan Tinggi, 2017.
7. Gold Medal, Invention, Innovation and Design Expo (IIDEX) 2017, 25 – 29 September 2017, Research Innovation Business Unit, Universiti Teknologi MARA Malaysia, 2017
8. Gold Medal, 28th International Invention, Innovation & Technology Exhibition (ITEX) 2017, 11-13 May 2017, Kuala Lumpur Convention Center, Kuala Lumpur, Malaysian Invention and Design Society, 2017.
9. Bronze Medal, Malaysian Technology Expo 2017, 16-18 February 2017, Putra World Trade Centre, Kuala Lumpur, Malaysian Association of Research Scientist (MARS), 2017.
10. Hadiah Utama, Kategori Institusi Pengajian Tinggi, Anugerah Inovasi Negeri Selangor Tahun 2016, 10 – 13 October 2016, Pejabat Setiausaha Kerajaan Negeri Selangor, 2016
11. Gold Medal, Invention, Innovation and Design Expo (IIDEX) 2016, 20 – 23 September 2016, Research Innovation Business Unit, Universiti Teknologi MARA Malaysia, 2016
12. Anugerah Akademik Fakulti Sains Gunaan 2015 bagi kategori Penerbitan Makalah/ Jurnal, Faculty of Applied Sciences, UiTM, 2016
13. Copyright "Expanded View of a Working Solar Cell" (FM2015001054), Intellectual Property Corporation of Malaysia, 2015
14. Copyright "Movement of Ions in a Lithium Rocking Chair" (CRAR00000692), Intellectual Property Corporation of Malaysia, 2015
15. Copyright "Charge Accumulation in an Electrochemical Device" (CRAR00000693), Intellectual Property Corporation of Malaysia, 2015
16. Copyright "Death of an IT Tycoon" (CRFM00000049), Intellectual Property Corporation of Malaysia, 2014
17. Copyright "Comic on Electrical Properties of Insulator, Semiconductor and Conductor" (CRLY00001166), Intellectual Property Corporation of Malaysia, 2014

18. Copyright "Relevant of Moore's Law in Future Technology Development" (CRFM00000048), Intellectual Property Corporation of Malaysia, 2014
19. VanGuard Researcher, Research Management Institute, Universiti Teknologi MARA Malaysia, 2014
20. Key Scientific Paper "Effect of the Surface Treatment of the TiO_2 Fillers on the Properties of Hexanoyl Chitosan-Polystyrene Blend-Based Composite Polymer Electrolytes" in Renewable Energy Global Innovations (ISSN 2291-2460), Canada, 2014
21. Silver Medal, Invention, Innovation and Design Expo (IIDEX) 2013, 15 – 17 March 2013, Research Innovation Business Unit, Universiti Teknologi MARA Malaysia, 2013
22. Best Innovation Award, Competition & Exhibition Research, Invention, Innovation & Design (RIID 2012), 7 – 8 November 2012, Universiti Teknologi MARA Malacca Malaysia, 2012
23. Gold Medal, Competition & Exhibition Research, Invention, Innovation & Design (RIID 2012), 7 – 8 November 2012, Universiti Teknologi MARA Malacca Malaysia, 2012
24. Active Publication in SCOPUS Award, Universiti Teknologi MARA Malaysia, 2009
25. Outstanding Service Award (Anugerah Perkhidmatan Cemerlang), Universiti Teknologi MARA Malaysia, 2008
26. ITEX Silver Medal, 18th International Invention, Innovation & Technology Exhibition (ITEX) 2007, 18 – 20 May 2007, Ministry of Science, Technology and Innovation (MOSTI) Malaysia and Malaysian Invention and Design Society, 2007
27. Second Innovation Prize, An Exhibition On Science & Technology (Expo S&T 2003), 7 – 9 August 2003, Ministry of Science, Technology and Environment (MOSTE) Malaysia, 2003
28. National Science Fellowship (NSF), Ministry of Science, Technology and Environment (MOSTE) Malaysia, 2003
29. Dean's List Award, Physics Department, Faculty of Science, University of Malaya Malaysia, (1999/2000, 2000/2001, 2001/2002, 2002/2003)

PUBLICATIONS

Total Citation: 549
h-index : 12
(Source: www.scopus.com)

Book Chapter

1. Noor Syuhada Zakuan, Woo Haw Jiunn and Tan Winie, Chapter 4: Energy in a Portable World. Book Title: Polymer Electrolytes: Characterization Techniques and Energy Applications. Editor: Tan Winie, Abdul K. Arof and Sabu Thomas. Publisher: Wiley-VCH Verlag GmbH & Co. KGaA (2020), pg. 93 – 112. ISBN: 9783527342006
2. Tan Winie and A.K. Arof, Chapter 8: Biopolymer Electrolytes for Energy Devices. Book title: Nanostructured Polymer Membranes: Applications Vol. 2. Editor: Visakh P.M. and Olga Nazarenko. Publisher: Wiley (2016), pg. 311-356. ISBN: 978-1-118-83178-6
3. Tan Winie and A.K. Arof, Chapter 12: Impedance Spectroscopy: Basic Concepts and Application for Electrical Evaluation of Polymer Electrolytes. Book title:

Physical Chemistry of Macromolecules. Editor: Chan C.H., Chua C.H, Thomas S. Published by: Apple Academic Press (2014), pg. 333 – 363. ISBN: 9781926895642

International

1. Amisha Azmar, R.H.Y. Subban and Tan Winie, "Improved Long-Term Stability of Dye-sensitized Solar Cells Employing PMA/PVAc Based Gel Polymer Electrolyte" Optical Materials 96 (2019) 109349
2. N.A.Y. Razamin, F.H. Muhammad, R.H.Y. Subban and Tan Winie, "Stability Improvement by Incorporating Poly(ε-caprolactone) in Dimethylformamide-Potassium Iodide Liquid Electrolyte for Dye-sensitized Solar Cells" Journal of Solid State Electrochemistry 23(8) (2019) pg. 2411-2421
3. Tan Winie, Asheila Jamal, F.I. Saaid and T.-Y. Tseng, "Hexanoyl Chitosan/ ENR25 Blend Polymer Electrolyte System for Electrical Double Layer Capacitor" Polymers Advanced Technologies 30 (2019) pg. 726-735
4. F.H. Muhammad, R.H.Y. Subban and Tan Winie, "Solid Solutions of Hexanoyl Chitosan/Poly(vinyl chloride) Blends and NaI for All-Solid-State Dye-Sensitized Solar Cells", Ionics 25 (2019) pg. 3373 – 3386
5. N.A.Y. Razamin, R.H.Y. Subban and Tan Winie, "Effect of Solvent Donor Number and Temperature on the Conductivity of Liquid Electrolyte", Materials Today Proceedings 17 (2019) pg. 459 - 464
6. F.I. Saaid, T.-Y. Tseng and Tan Winie, "Effect of Ionic Liquid Concentration on the Photovoltaic Performance of Dye-Sensitized Solar Cell", Materials Today Proceedings 17 (2019) pg. 401 - 407
7. Tan Winie, Amisha Azmar and M.D. Rozana, "Ionic liquid Effect for Efficiency Improvement in Poly(methyl acrylate)/ Poly(vinyl acetate) Based Dye-Sensitized Solar Cells" High Performance Polymers 30(8) (2018) pg. 937-948
8. Amisha Azmar, M.D. Rozana and Tan Winie. "Characterization of PMA-TPAI and PVAc-TPAI Solid Polymer Electrolytes and Application in Dye-Sensitized Solar Cell" Journal of Applied Polymer Science 135 (2018) pg. 46835
9. C.-C. Yang, H.-Y. Lin, A. Kumar, B. Pattanayak, H.-Y. Tsai, Tan Winie and T.-Y. Tseng, "Flexible Solid-Like Electrolytes with Ultrahigh Conductivity and Their Applications in All-Solid-State Supercapacitors" RSC Advances 8 (2018) pg. 30239 - 30247
10. F.I. Saaid, T.-Y. Tseng and Tan Winie. "PVdF-HFP Quasi-Solid-State Electrolyte for Application in Dye-Sensitized Solar Cells" International Journal of Technology 6 (2018) pg. 1187 - 1195
11. F.H. Muhammad, R.H.Y. Subban and Tan Winie, "Miscibility Study of Hexanoyl Chitosan/ Poly(Vinyl Chloride) Blends by Dilute Solution Viscometry and FTIR", International Journal of Engineering & Technology 7(4.18) (2018) pg. 400 – 403
12. N.A.Y. Razamin, R.H.Y. Subban and Tan Winie, "Electrical Behaviour and Photovoltaic Performance of Poly(ε-caprolactone)-Based Quasi-Solid-State Polymer Electrolyte", International Journal of Engineering & Technology 7(4.18) (2018) pg. 404 – 408
13. Amisha Azmar and Tan Winie, "Development of PMA/PVAc-TPAII-BMII Solid Polymer Electrolytes for Application in Dye-Sensitized Solar Cell" E3S Web of Conferences 67 (2018) pg. 03032
14. F.H. Muhammad, R.H.Y. Subban and Tan Winie, "Charge Carrier Density and Mobility of Poly(vinyl chloride)-Based Polymer Electrolyte using Impedance Spectroscopy", Materials Today Proceedings 4 (2017) pg. 5130 - 5137

15. Amisha Azmar, Farish Saaid and Tan Winie, "Study on Miscibility of Poly(methyl acrylate) and Poly(vinyl acetate) by Viscometric, Thermal and Structural Analysis", Materials Today Proceedings 4 (2017) pg. 5100 – 5107
16. F.H. Muhammad, Asheila Jamal and Tan Winie, "Study on factors governing the conductivity performance of a polymer electrolyte", Ionics 23(11) (2017) pg. 3045-3056.
17. F.H. Muhammad, F.I. Saaid, N.A.Y. Razamin and Tan Winie, "Effect of Temperature on Conductivity Performance of PEO-NaI Based Polymer Electrolytes", Advanced Materials Research 1142 (2017) pg. 128-133
18. Amisha Azmar, N.A.Y. Razamin and Tan Winie, "The Influence of Temperature on Conductivity and Dielectric Properties of PMA/PVAc Blend with Addition of TPAI Salt", Materials Science Forum 889 (2017) pg. 201-206.
19. Suhaila Idayu Abdul Halim, Chan Chin Han and Tan Winie, "Thermal, Conductivity and Molecular Interaction Studies of Poly(ethylene oxide)/Poly(methyl acrylate) Solid Polymer Electrolytes, Macromolecule Symposia 371 (2017) pg. 114-124.
20. Asheila Jamal, F.H. Muhammad, A.M.M. Ali and Tan Winie, "Blends of Hexanoyl Chitosan/Epoxidized Natural Rubber Doped with EmImTFSI", Ionics 23 (2017) pg. 357-366.
21. F.Harun, C.H. Chan and Tan Winie, "Influence of Molar Mass on the Thermal Properties, Conductivity and Intermolecular Interaction of Poly(ethylene oxide) Solid Polymer Electrolytes", Polymer International 66 (6) (2017) pg. 830-838
22. Farish Saaid, Izzati Rodi and Tan Winie, "Effect of Temperature on the Transport Property of PVdF-HFP-MPII-PC/DME Gel Polymer Electrolytes", AIP Conference Proceedings 1877 (2017) 020006 (DOI: http://dx.doi.org/10.1063/1.4999856)
23. Nik A.S. Nik Zulkepeli, Tan Winie and R.H.Y. Subban, "Infrared Studies of PVC-Based Electrolytes Incorporated with Lithium Triflate and 1-butyl-3-methyl Imidazolium Trifluoromethanesulfonate as Ionics Liquid", AIP Conference Proceedings 1877 (2017) 060001 (DOI: http://dx.doi.org/10.1063/1.4999880)
24. Izzati Rodi, Farish Saaid and Tan Winie, "PEMA_LiCF3SO3 Polymer Electrolytes: Assessment of Conductivity and Transport Properties", AIP Conference Proceedings 1877 (2017) 060003 (DOI: http://dx.doi.org/10.1063/1.4999882)
25. F.H. Muhammad, Asheila Jamal and Tan Winie, "Dielectric and AC Conductivity Behaviour of Hexanoyl Chitosan-NaI Based Polymer Electrolytes", International Journal of Advanced and Applied Sciences 3(10) (2016) pg. 9-13
26. N.A.S. Nik Zulkepeli, Tan Winie and R.H.Y. Subban, "Characterisation of Polymer Electrolytes Based on High Molecular Weight PVC and $BMIMCF_3SO_3$", Key Engineering Materials 705 (2016) pg. 150-154
27. Tan Winie and N.S.M. Shahril, "Conductivity Enhancement by Controlled Percolation of Inorganic Salt in Multiphase Hexanoyl Chitosan/Polystyrene Polymer Blends", Frontiers of Materials Science 9(2) (2015), pg. 132-140
28. Asheila Jamal, C.H. Chan, F.H. Muhammad and Tan Winie, "Miscibility Study of Hexanoyl Chitosan in Blend with Epoxidized Natural Rubber by Viscometric Analysis" Proceedings of International Conference on Applied Sciences and Industrial Technology 2015, AIP Conference Proceedings 1674 (2015) 020034 (DOI: http://dx.doi.org/10.1063/1.4928852)
29. F. Harun, C.H. Chan, L.H. Sim, Tan Winie and N.F.A. Zainal, "Effect of Epoxidation Level on Thermal Properties and Ionic Conductivity of Epoxidized Natural Rubber Solid Polymer Nanocomposite Electrolytes" Proceedings of International Conference on Applied Sciences and Industrial Technology 2015, AIP Conference Proceedings 1674 (2015) 020032 (DOI: http://dx.doi.org/10.1063/1.4928850)

30. N.S.M. Hanif, N.S.M. Shahril, A. Azmar and Tan Winie, "Studies on the Effect of Acid Treated TiO_2 on the Electrical and Tensile Properties of Hexanoyl Chitosan-Polystyrene-$LiCF_3SO_3$ Composite Polymer Electrolytes" Proceedings of International Conference on Applied Sciences and Industrial Technology 2015, AIP Conference Proceedings 1674 (2015) 020028 (DOI: http://dx.doi.org/10.1063/1.4928846)
31. F.H. Muhammad, A. Azmar and Tan Winie, "Transport Properties of Hexanoyl Chitosan-$LiClO_4$-TiO_2 Composite Polymer Electrolyte" Proceedings of International Conference on Applied Sciences and Industrial Technology 2015, AIP Conference Proceedings 1674 (2015) 020029 (DOI: http://dx.doi.org/10.1063/1.4928847)
32. F.I. Saaid, C.H. Chan, M.C.H. Ong, Tan Winie and M.K. Harun, "Analyzing FTIR Spectra Using High Sensitivity Compare Function of FTIR Software for 2-Pack Epoxy Paints" Proceedings of International Conference on Applied Sciences and Industrial Technology 2015, AIP Conference Proceedings 1674 (2015) 020030 (DOI: http://dx.doi.org/10.1063/1.4928848)
33. Tan Winie, N.S.M. Shahril, C.H. Chan and A.K. Arof, "Selective Localization of $LiCF_3SO_3$ in the Blend of Hexanoyl Chitosan and Polystyrene", High Performance Polymers 26(6) (2014), pg. 666-671
34. Tan Winie, N.S.M. Hanif, C.H. Chan and A.K. Arof, "Effect of the Surface Treatment of the TiO_2 Fillers on the Properties of Hexanoyl Chitosan-Polystyrene Blend-Based Composite Polymer Electrolytes", Ionics 20(3) (2014), pg. 347 –352
35. C.H. Chan, H-W. Kammer, L.H. Sim, S.N.H. Yusoff, A. Hashifudin and Tan Winie, "Conductivity and Dielectric Relaxation of Li Salt in Poly(Ethylene Oxide) and Epoxidized Natural Rubber Polymer Electrolytes", Ionics 20(2) (2014), pg.189 –199
36. F.H. Muhammad, A.F.M. Fadzil and Tan Winie, "FTIR and Electrical Studies of Hexanoyl Chitosan-Based Nanocomposite Polymer Electrolytes", Advanced Materials Research 1043 (2014), pg. 36-39
37. Tan Winie, N.S.M. Shahril, N.S.M. Hanif, R.H.Y. Subban and C.H. Chan, "Effect of H_2SO_4 Treated TiO_2 Nano Fillers on the AC Conductivity of Hexanoyl Chitosan-Polystyrene-$LiCF_3SO_3$ Polymer Electrolytes", Advanced Materials Research 832 (2014), pg. 228 – 232.
38. N.H.A. Rosli, F.H. Muhammad, C.H. Chan and Tan Winie, "Effect of Filler Type on the Electrical Properties of Hexanoyl Chitosan-Based Polymer Electrolytes", Advanced Materials Research 832 (2014), pg. 224 – 227.
39. Tan Winie, Asheila Jamal, N.S.M. Hanif and N.S.M. Shahril, "Hexanoyl Chitosan-Polystyrene Blend Based Composite Polymer Electrolyte with Surface Treated TiO_2 Fillers", Key Engineering Materials 594-595 (2014), pg. 656 – 660.
40. F.H. Muhamamd, R.H.Y. Subban and Tan Winie, "Structural and Electrical Characterization of Hexanoyl Chitosan-$LiClO_4$-TiO_2-DMC Polymer Electrolytes, Key Engineering Materials 594-595 (2014), pg. 608 – 612.
41. Tan Winie, N.H.A. Rosli, M.R. Ahmad, R.H.Y. Subban and C.H. Chan, "TiO_2 dispersed hexanoyl chitosan-polystyrene-$LiCF_3SO_3$ composite electrolyte characterized for electrical and tensile properties", Polymer Research Journal 7(2) (2013) pg. 171 - 181.
42. Tan Winie, N.S.M. Hanif, N.H.A. Rosli and R.H.Y. Subban, "AC conductivity study of hexanoyl chitosan-$LiCF_3SO_3$-EC-Al_2O_3 nanocomposite polymer electrolytes", Advanced Materials Research 667 (2013) 93-98.
43. Tan Winie, C.H. Chan and R.H.Y. Subban, "Hexanoyl chitosan-$LiCF_3SO_3$-PC-EC gel polymer electrolyte for application in $LiCoO_2$/MCMB cell" Proceedings of

National Physics Conference 2012, AIP Conference Proceeding 1528 (2013) 272-276.

44. C.H. Chan, H.-W. Kammer, L.H. Sim and Tan Winie, "On the thermodynamics of solid solutions of polymer and salt", Polymer Engineering and Science 52(11) (2012) 2277-2284.
45. Tan Winie, F.H. Muhammad and N.H.A. Rosli, "Effect of anion size on the conductivity behaviour of hexanoyl chitosan-based polymer electrolytes", Advanced Materials Research 545 (2012) 317-320.
46. N.H.A. Rosli, C.H. Chan, R.H.Y. Subban and Tan Winie, "Studies on the Structure and Electrical Properties of Hexanoyl Chitosan/Polystyrene Based Polymer Electrolytes", Physics Procedia, 25 (2012) 215-220.
47. C.H. Chan, L.H. Sim, H.W. Kammer and W. Tan, "The influence of the amorphous polymer on conductivity, morphologies and thermal properties of polyether-based blends with addition of inorganic salt", Proceeding of 2nd ASEAN APCTP Workshop on Advanced Materials Science and Nanotechnology, AIP Conference Proceeding 1455 (2012), 197-207.
48. Tan Winie, C.H. Chan and R.H.Y. Subban, "AC Conductivity and Dielectric Properties of Hexanoyl Chitosan-$LiClO_4$-TiO_2 Composite Polymer Electrolytes", Advanced Materials Research 335-336 (2011) 873-880.
49. N.H.A.Rosli, F.H. Muhammad, R.H.Y. Subban and Tan Winie, "Structural and Electrical Studies of Hexanoyl Chitosan-Based Electrolyte System", Materials Research Innovations 15(2) (2011) 94-96.
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51. C.H. Chan, L.H. Sim, H.W. Kammer, Tan Winie and N.H. Nasir, "Ionic Transport and Glass Transition Temperature of Polyether Salt Complexes: Dependence on the Molecular Mass of Polymer", Materials Research Innovations 15(2) (2011) 14-17.
52. C.H. Chan, H.-W. Kammer, L.H. Sim and Tan Winie, "Morphologies and kinetics of isothermal crystallization for green polymer blends comprising PHBV and ENR: Influence of rubbery phase", International Journal of Pharmacy and Pharmaceutical Sciences 3(1) (2011), 10-15.
53. C.H. Chan, L.H. Sim, H.W. Kammer, W. Tan and Y.C. Ke, "Preferential Localization of Inorganic Salt in Multi Phases of Polymer Blends with Addition of Nanofiller", Proceeding of International Conference on Traditional and Renewable Energy, and Nanomaterial Technology (IC-Trent2011), Beijing, China (2011), 35.
54. S. Ramesh, Tan Winie and A.K. Arof, "Mechanical studies on poly(vinyl chloride)-poly(methyl methacrylate)-based polymer electrolytes", Journal of Materials Science 45 (2010) 1280-1283.
55. Tan Winie, S. Ramesh and A.K. Arof, "Studies on the Structure and Transport Properties of Hexanoyl Chitosan-Based Polymer Electrolytes", Physica B: Condensed Matter 404 (2009) 4308-4311.
56. F.H. Muhammad, R.H.Y. Subban, S.R. Majid, Tan Winie and A.K. Arof, "Characterisation of Al_2O_3-Doped Hexanoyl Chitosan-$LiCF_3SO_3$-EC Polymer Electrolytes", Materials Research Innovations 13(3) (2009) 181-183.
57. N.A. Johari, T.I.T. Kudin, A.M.M. Ali, Tan Winie and M.Z.A. Yahya, "Studies on Cellulose Acetate-Based Gel Polymer Electrolytes for Proton Batteries", Materials Research Innovations 13(3) (2009) 164-166.
58. N.A. Johari, T.I.T. Kudin, Tan Winie, A.M.M. Ali and M.Z.A. Yahya, "Effects of Double Solvents/Plasticizers on Proton Conducting Gel Polymer Electrolytes", Materials Research Innovations 13(3) (2009) 230-233.

59. S.Z. Abdullah, A. Abdullah, Tan Winie, A.M.M. Ali and R.H.Y. Subban, "Electrical Conductivity of Solvent Free PEO Based Polymer Electrolytes", Materials Research Innovations 13(3) (2009) 204-206.
60. A. Abdullah, S.Z. Abdullah, A.M.M. Ali, Tan Winie, M.Z.A. Yahya, and R.H.Y. Subban, "Electrical Properties of PEO-$LiCF_3SO_3$-SiO_2 Nanocomposite Polymer Electrolytes", Materials Research Innovations 13(3) (2009) 187-190.
61. N.A.A. Razak, A.H. Ahmad and Tan Winie "Effect of Amino Acid (L-Leucine) on the Conductivity of PVA/ Chitosan-$LiCF_3SO_3$", Proceedings of Nanoscience and Nanotechnology: International Conference on Nanoscience and Nanotechnology 2008, Shah Alam, Malaysia, AIP Conference Proceedings 1136 (2009) 21-25.
62. S.Z. Abdullah, A. Abdullah, Tan Winie, R.H.Y. Subban, "Conductivity Studies on Plasticized PEO-Lithium Triflate Electrolyte System", Proceedings of Nanoscience and Nanotechnology: International Conference on Nanoscience and Nanotechnology 2008, Shah Alam, Malaysia, AIP Conference Proceedings 1136 (2009) 56-60.
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65. A.M.M. Ali, R.H.Y. Subban, H. Bahron, Tan Winie, F. Latif, M.Z.A. Yahya. "Grafted Natural Rubber-Based Polymer Electrolytes: ATR-FTIR and Conductivity Studies", Ionics 14 (2008) 491-500.
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67. S. Ramesh, Tan Winie and A.K. Arof. "Investigation of mechanical properties of polyvinyl chloride-polyethylene oxide (PVC/PEO) based polymer electrolytes for lithium polymer cells", European Polymer Journal 43 (2007) 1963 - 1968.
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69. Tan Winie and A.K. Arof, "Transport properties of hexanoyl chitosan-based gel electrolyte", Ionics 12 (2006) 149-152.
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71. Tan Winie, S.R. Majid, A.S.A. Khiar and A.K. Arof, "Ionic conductivity of chitosan membrane and application for electrochemical devices", Polymers for Advanced Technologies 17 (2006) 523-527.
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2. F.H. Muhammad, N.R.A. Razak, R.H.Y.Subban, Tan Winie and A.K.Arof, "Conductivity and dielectric studies on filler-doped hexanoyl chitosan based polymer electrolytes", Solid State Science and Technology, 18(1) (2010) 44-52.
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PRESENTATIONS

(Title), (Event), (Date Presented)

Plenary Speaker

1. Tan Winie, "Biopolymer Electrolytes for Energy Devices", National Workshop on Functional Materials, 17 – 18 January 2017, University of Malaya, Malaysia.

Keynote Speaker

2. Tan Winie and F.H. Muhammad, "AC conduction mechanisms of hexanoyl chitosan-based polymer electrolytes", National Workshop on Functional Materials, 20 – 21 June 2009, University of Malaya, Malaysia.

Invited Speaker

1. Tan Winie, Amisha Azmar and M.D. Rozana, "Ionic Transport of Polymer-Salt Complexes: Dependence on Salt Content and Temperature", International Conference on Science and Engineering of Materials (ICSEM 2018), 6 – 8 January 2018, Greater Noida, India.
2. Tan Winie, "Chitosan for New Generation Energy Devices", Fifth International Meeting on Frontiers of Physics (IMFP 2017), 3 – 7 December 2017, Kuala Lumpur, Malaysia.
3. Tan Winie, "Chitosan and Its Derivatives for Electrochemical Devices", International Conference on Advanced Materials for Photonics, Sensing and Energy Applications (AMPSECA) 2017, 28 – 30 March 2017, Agadir, Morocco.
4. Tan Winie, "Chitosan and Its Derivatives for Energy Devices", 10^{th} Asian Meeting of Electroceramics, 4 – 7 December 2016, Taipei, Taiwan.
5. Tan Winie, F. Saaid and R.H.Y. Subban "Biopolymer Electrolytes for Batteries and Solar Cells", International Conference on the Advancement of Materials and Nanotechnology (ICAMN IV), 9 – 11 November 2016, Langkawi, Malaysia.
6. Tan Winie, "Charge Carrier Concentration and Mobility of Polymer Electrolytes Using Impedance and FTIR Spectroscopy", International Conference on Advances in Functional Materials (AFM 16), 8 – 11 August 2016, International Convention Centre Jeju Island, South Korea.

7. Tan Winie, “Impedance Spectroscopy: Basic Concepts & Applications”, Lithium-Ion Battery Training and Workshop, 26-29 July 2016, Institute of Science, Universiti Teknologi MARA, Shah Alam, Malaysia.
8. Tan Winie and Asheila Jamaluddin, “Preferential Localization of Inorganic Salt in Multi Phases Polymer System and Its Effect on the Conductivity Performance”, EMN Phuket 2015, 4 – 7 May 2015, Chulalongkorn University, Phuket, Thailand.
9. Tan Winie and Asheila Jamaluddin, “Preferential Localization of $LiCF_3SO_3$ in Multiphase Hexanoyl Chitosan/Epoxidized Natural Rubber Polymer System and Its Effect on the Conductivity Performance”, 5th International Conference on Functional Materials & Devices 2015 (ICFMD2015), 4 – 6 August 2015, Johor Bahru, Malaysia.
10. Tan Winie, “Impedance Spectroscopy: Basic Concepts & Applications”, Lithium-Ion Battery Training and Workshop, 16-18 Mac 2015, Institute of Science, Universiti Teknologi MARA, Shah Alam, Malaysia.
11. Tan Winie, “Impedance Spectroscopy: Basic Concepts”, Lithium-Ion Battery Training and Workshop, 7-10 October 2014, Institute of Science, Universiti Teknologi MARA, Shah Alam, Malaysia.
12. Tan Winie, N.S.M. Shariff, N.S.M. Hanif and C.H. Chan, “Conductivity Enhancement by Controlled Percolation of Inorganic Salt in Multiphase Hexanoyl Chitosan/Polystyrene Polymer Blends”, Energy, Materials and Nanotechnology Conference, 22 – 25 September 2014, University of Electronic Science and Technology of China, Chengdu, China.
13. Tan Winie, N.S.M. Shariff, N.S.M. Hanif and C.H. Chan, “Hexanoyl Chitosan/Polystyrene Blend Polymer Electrolytes: Conductivity by Correlated Barrier Hopping”, International Symposium on Advanced Polymeric Materials 2014, 14 – 15 May 2014, Putra World Trade Centre, Kuala Lumpur, Malaysia.
14. Tan Winie, Tony Berauh, C.H. Chan and A.K. Arof, “Novel Polymer Electrolyte Based on Blend of Hexanoyl Chitosan and Epoxidized Natural Rubber”, International Conference on Science and Engineering of Materials, 6 – 8 January 2014, Sharda University, Greater Noida, India.
15. Tan Winie, “Mentee Experience in RACE Programme”, University of Malaya Researchers’ Conference, 19 – 20 November 2013, University of Malaya, Malaysia.
16. C.H. Chan, L.H. Sim, H-W. Kammer and Tan Winie, “Enhancement of Ionic Conductivity by Self-Assemble Inorganic Salt in Multiphases Polymer Systems”, The 15th Asian Chemical Congress, 19 - 23 August 2013, Sentosa, Singapore.
17. Tan Winie, N.S.M. Hanif and C.H. Chan, “Electrical and Tensile Properties of Untreated and H_2SO_4-Treated TiO_2 Dispersed in Hexanoyl Chitosan-Polystyrene Blend Polymer Electrolytes”, 4th International Conference on Functional Materials and Devices, 8 – 11 April 2013, Penang, Malaysia.
18. C.H. Chan, H-W. Kammer, S.N.H. Yusoff, L.H. Sim and Tan Winie, “Solubility of Li Salt in Solid Polymer Electrolytes Based on Modified Natural Rubber”, Polychar 21 World Forum on Advanced Materials, 11 – 15 March 2013, Gwangju, South Korea.
19. R.H.Y. Subban, Tan Winie and N.S. Mohamed, “AC Impedance Spectroscopy for Characterisation of Polymer Electrolytes”, International Conference on Nanoscience and Nanotechnology (NANO-SCITECH 2013), 1 – 4 March 2013, Grand Bluewave Hotel, Shah Alam, Selangor, Malaysia.
20. Tan Winie, N.H.A. Rosli, R.H.Y. Subban and C.H. Chan, “TiO_2 dispersed hexanoyl chitosan-polystyrene-$LiCF_3SO_3$ composite electrolyte characterized for electrical and tensile properties”, International Symposium on Advanced Polymeric Materials 2012, 10 – 11 July 2012, Sunway Resort Spa, Subang Jaya, Malaysia.

21. L.H. Sim, C.H. Chan, H-W. Kammer and Tan Winie, "The Effect of Phase Behaviour on the Conductivity Property of Poly(ethylene oxide)/Polyacrylate Blend and Lithium Salt", International Symposium on Advanced Polymeric Materials 2012, 10 – 11 July 2012, Sunway Resort Spa, Subang Jaya, Malaysia.
22. C.H. Chan, L.H. Sim, H-W. Kammer, Tan Winie and Y.C. Ke, "Reduction of Percolation Threshold by Self-Assemble Inorganic Salt in Multiphases Polymer Systems", International Symposium on Advanced Polymeric Materials 2012, 10 – 11 July 2012, Sunway Resort Spa, Subang Jaya, Malaysia.
23. C.H. Chan, L.H. Sim, H-W. Kammer and Tan Winie, "Green Thermoplastic Elastomer Polymer Blends for Clean and Sustainable Energy", Half-Day Seminar on Green Processes and Green Materials, 24 Mac 2012, Royale Bintang Hotel, The Curve, Petaling Jaya, Malaysia.
24. C.H. Chan, L.H. Sim, H-W. Kammer, Tan Winie and Y.C. Ke, "Preferential Localization of Inorganic Salt in Multiphases of Polymer Blends with Addition of Nanofiller", International Conference on Traditional and Renewable Energy and Nanomaterial Technology, 20 – 23 October 2011, China Petroleum of University, Beijing, China.

Others

1. F.H. Muhammad, R.H.Y. Subban and Tan Winie, "Miscibility Study of Hexanoyl Chitosan/ Poly(Vinyl Chloride) Blends by Dilute Solution Viscometry and FTIR", IPN Conference 2018, 2 – 4 February 2018, Kuching, Malaysia.
2. Izzati Rodi and Tan Winie, "Electrical and Structural Studies of Polyethyl Methacrylate-Based Polymer Electrolytes", International Conference on of the Advancement of Materials and Nanotechnology (ICAMN IV), 9 – 11 November 2016, Langkawi, Malaysia.
3. N.A.S.N. Zulkepeli, Tan Winie and R.H.Y. Subban, "Infrared Studies of PVC-Based Electrolytes Incorporated with Lithium Triflate and 1-butyl-3-methyl Imidazolium Trifluoromethanesulfonate as Ionic Liquid", International Conference on of the Advancement of Materials and Nanotechnology (ICAMN IV), 9 – 11 November 2016, Langkawi, Malaysia.
4. Amisha Azmar, N.A.Y. Razamin and Tan Winie, "The Influence of Temperature on Conductivity and Dielectric Properties of PMA/PVAc Blend with Addition of TPAI Salt", 5th International Conference on Engineering and Innovative Materials, 10 – 12 September 2016, Shah Alam, Malaysia.
5. F.H. Muhammad and Tan Winie, "Effect of Temperature on Conductivity Performance of PEO-NaI Based Polymer Electrolytes", International Conference on Advanced Materials Research and Application (AMRA 2016), 13 – 14 August 2016, Guangxi, China.
6. F.H. Muhammad Asheila Jamal and Tan Winie, "Dielectric and AC Conductivity Behaviour of Hexanoyl Chitosan-NaI Based Polymer Electrolytes", 2nd IPC on Engineering, Science and Technology (IPCEST 2016), 24 – 25 May 2016, Bandung, Indonesia.
7. S.I.A. Halim, C.H. Chan and Tan Winie, "Effect of TiO2 on Thermal Properties, Conductivity and Molecular Interaction of Poly(ethylene oxide)/ Poly(methyl acrylate) Solid Polymer Electrolytes", International Symposium on Advanced Polymeric Materials (ISAPM2016), 16 – 18 May 2016, Kuala Lumpur, Malaysia.
8. F.H. Muhammad, Asheila Jamal and Tan Winie, "Characterization of Hexanoyl Chitosan/PVC Blends Electrolyte Doped with NaI", International Symposium on Materials & Assets Integrity (ISMAI2016), 16 – 18 May 2016, Kuala Lumpur, Malaysia.

9. F.I. Saaid and Tan Winie, "Structural and Electrical Properties of a Quasi-Solid State PVDF-HFP Polymer Electrolyte", International Symposium on Materials & Assets Integrity (ISMAI2016), 16 – 18 May 2016, Kuala Lumpur, Malaysia.
10. F. Harun, C.H. Chan, Tan Winie and Q. Guo, "Molar Mass Dependence on Thermal Properties, Conductivity and Molecular Interaction of Poly(ethylene oxide)/ Lithium Perchlorate Solid Polymer Electrolytes", International Symposium on Materials & Assets Integrity (ISMAI2016), 16 – 18 May 2016, Kuala Lumpur, Malaysia.
11. Azmar Amisha and Tan Winie, "PMA/PVAc Blend Based Polymer Electrolyte Incorporated with Tetrapropyl Ammonium Iodide (TPAI) and Their Conductivity Performances", International Symposium on Materials & Assets Integrity (ISMAI2016), 16 – 18 May 2016, Kuala Lumpur, Malaysia.
12. Asheila Jamal, F.H. Muhammad and Tan Winie, "Blends of Hexanoyl Chitosan/ENR Doped with EMIMTFSI", International Symposium on Materials & Assets Integrity (ISMAI2016), 16 – 18 May 2016, Kuala Lumpur, Malaysia.
13. Asheila Jamal, F.H. Muhammad and Tan Winie, "Impedance and FTIR Studies of Polymer Electrolytes Based on Hexanoyl Chitosan and Epoxidized Natural Rubber", 5th International Conference on Functional Materials & Devices 2015 (ICFMD2015), 4 – 6 August 2015, Johor Bahru, Malaysia.
14. F.H. Muhammad, Asheila Jamal and Tan Winie, "Electrical Studies of Acylated Chitosan with Different Molecular Weight Based Polymer Electrolytes", 5th International Conference on Functional Materials & Devices 2015 (ICFMD2015), 4 – 6 August 2015, Johor Bahru, Malaysia.
15. N.S.M. Shahril, Asheila Jamal and Tan Winie, "Conductivity and Dielectric Studies of Hexanoyl Chitosan/Polystyrene Doped with $LiCF_3SO_3$", International Symposium on Advanced Polymeric Materials 2014, 14 – 15 May 2014, Putra World Trade Centre, Kuala Lumpur, Malaysia.
16. C.H. Chan, H-W. Kammer, L.H. Sim and Tan Winie "Glass Transition Temperature and Dielectric Behavior in Variation with Salt Content of Miscible and Immiscible Poly(Ethylene Oxide)-Based Polymer Electrolytes", Polychar 22 World Forum on Advanced Materials, 8 – 11 April 2014, Stellenbosch, South Afica.
17. Asheila Jamal, C.H. Chan, A.K. Arof and Tan Winie, "Miscibility Study of Hexanoyl Chitosan in Blend with Epoxidized Natural Rubber by Viscometric Analysis", International Conference on Science and Engineering of Materials, 6 – 8 January 2014, Sharda University, Greater Noida, India.
18. Tan Winie, Asheila Jamal, N.S.M. Hanif and N.S.M. Shahril, "Hexanoyl Chitosan-Polystyrene Blend Based Composite Polymer Electrolyte with Surface Treated TiO_2 Fillers", 2nd International Conference on Advanced Material Engineering & Technology (ICAMET 2013), 28 – 29 November 2013, Bandung, Indonesia.
19. F.H. Muhamamd, R.H.Y. Subban and Tan Winie, "Structural and Electrical Characterization of Hexanoyl Chitosan-$LiClO_4$-TiO_2-DMC Polymer Electrolytes", 2nd International Conference on Advanced Material Engineering & Technology (ICAMET 2013), 28 – 29 November 2013, Bandung, Indonesia.
20. C.H. Chan, H-W. Kammer, S.N.H. Mohd Yusoff, L.H. Sim and Tan Winie, "AC Impedance Spectroscopy and Thermal Properties of Solid Polymer Electrolytes Based on Modified Natural Rubber", 44th World Chemistry Congress, 11 – 16 August 2013, Istanbul, Turkey.
21. C.H. Chan, H-W. Kammer, S.N.H. Mohd Yusoff, L.H. Sim and Tan Winie, "Solubility of Inorganic Salt in Solid Polymer Electrolytes Based on Poly(ethylene oxide) and Modified Natural Rubber", 4th International Conference on Functional Materials and Devices, 8 – 11 April 2013, Penang, Malaysia.

22. F.H. Muhammad, R.H.Y. Subban and Tan Winie, "FTIR Studies on Hexanoyl Chitosan-Based Nanocomposite Polymer Electrolytes", 4th International Conference on Functional Materials and Devices, 8 – 11 April 2013, Penang, Malaysia.
23. N.S.M. Hanif, N.S.M. Shahril, C.H. Chan, R.H.Y. Subban and Tan Winie, "Studies on Modified TiO_2 on the Dielectric and Tensile Properties of Hexanoyl Chitosan-Polystyrene-$LiCF_3SO_3$ Composite Polymer Electrolytes", 4th International Conference on Functional Materials and Devices, 8 – 11 April 2013, Penang, Malaysia.
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25. L. Ismail, S. Ramesh, Tan Winie and A.K. Arof, "$LiNiVO_4$ by Sol-Gel Synthesis and Polymer Precursor Method", 4th International Conference on Functional Materials and Devices, 8 – 11 April 2013, Penang, Malaysia.
26. Tan Winie, N.S.M. Hanif and C.H. Chan, "Polymer Electrolytes Based on Blend of Hexanoyl Chitosan and Polystyrene", Polychar 21 World Forum on Advanced Materials, 11 – 15 March 2013, Gwangju, South Korea.
27. N.S.M. Shahril, N.S.M. Hanif, F.H. Muhammad, C.H. Chan and Tan Winie, "AC Conductivity of Hexanoyl Chitosan-Polystyrene-$LiCF_3SO_3$ Polymer Electrolytes Added with TiO_2 Nanofillers", International Conference on Nanoscience and Nanotechnology (NANO-SCITECH 2013), 1 – 4 March 2013, Grand Bluewave Hotel, Shah Alam, Selangor, Malaysia.
28. Tan Winie, C.H. Chan and R.H.Y. Subban, "Hexanoyl Chitosan-$LiCF_3SO_3$-PC-EC Gel Polymer Electrolyte for Application in $LiCoO_2$/MCMB Cell", National Physics Conference 2012 (PERFIK 2012), 19 – 21 November 2012, Colmar Tropicale, Bukit Tinggi, Pahang, Malaysia.
29. C.H. Chan, S.N.H.M. Yusoff, L.H. Sim, H-W. Kammer and Tan Winie, "Percolation Behaviour of Lithium Percholate in Solid Solutions of Modified Natural Rubber", Cambodian Malaysia Chemical Conference (CMCC) 2012, 19 – 21 October 2012, Angkor Century Resort & Spa, Siem Reap, Cambodia.
30. N.S.M. Hanif and Tan Winie, "Characterization of Hexanoyl Chitosan-Polystyrene-Based Composite Polymer Electrolytes and Application in $LiCoO_2$/MCMB Cells", 16th International Meeting on Lithium Batteries, 17 -22 June 2012, Jeju, Korea.
31. N.S.M. Shahril, N.H.A. Rosli and Tan Winie, "Preparation and Characterization of Hexanoyl Chitosan-Polystyrene:$LiCF_3SO_3$:TiO_2 Polymer Electrolyte for Lithium Ion Cells", 16th International Meeting on Lithium Batteries, 17 -22 June 2012, Jeju, Korea.
32. N.H.A. Rosli, C.H. Chan, R.H.Y. Subban and Tan Winie, "Studies on the Structural and Electrical Properties of Hexanoyl Chitosan/Polystyrene-Based Polymer Electrolytes", International Conference on Solid State Devices and Materials Science 2012 (SSDMS 2012), 1 – 2 April 2012, Macao, Hong Kong.
33. N.H.A. Rosli, F.H. Muhamamd, C.H. Chan and Tan Winie, "Effect of Filler Type on the Electrical Properties of Hexanoyl Chitosan-Based Polymer Electrolytes", International Conference on Nanoscience and Nanotechnology (NANO-SCITECH 2011), 2 – 3 March 2011, Intekma Resort & Convention Centre, Shah Alam, Selangor, Malaysia.
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35. Tan Winie and F.H. Muhammad, "AC Conductivity and Dielectric Properties of Hexanoyl Chitosan-$LiClO_4$-TiO_2 Composite Polymer Electrolytes", 3rd International Conference on Functional Material and Devices 2010, 14 – 17 June 2010, Kuala Terengganu, Terengganu, Malaysia.
36. F.H. Muhammad, N.H.A. Rosli, R.H.Y. Subban and Tan Winie, "Structural and Electrical Studies of Hexanoyl Chitosan-Based Electrolyte System", 3rd International Conference on Functional Material and Devices 2010, 14 – 17 June 2010, Kuala Terengganu, Terengganu, Malaysia.
37. L. Ismail, S. Ramesh, Tan Winie and A.K. Arof, "Mn-Doped $LiNiVO_4$ Cathode Material Prepared by Sol-Gel Method", 3rd International Conference on Functional Material and Devices 2010, 14 – 17 June 2010, Kuala Terengganu, Terengganu, Malaysia.
38. F.H. Muhammad, R.H.Y. Subban and Tan Winie, "Structural and Electrical Properties of Hexanoyl Chitosan-$LiClO_4$-TiO_2-DMC Electrolyte System". National Workshop on Functional Materials, 20 – 21 June 2009, University of Malaya, Malaysia.
39. S.Z. Abdullah, A. Abdullah, Tan Winie and R.H.Y. Subban, "Conductivity and FTIR Characterization of Plasticized PEO-$LiCF_3SO_3$ Electrolytes". National Workshop on Functional Materials, 20 – 21 June 2009, University of Malaya, Malaysia.
40. A. Abdullah, S.Z. Abdullah, Tan Winie, M.Z.A. Yahya and R.H.Y. Subban, "PEO-$LiCF_3SO_3$-SiO_2 Nanocomposite Polymer Electrolyte and Electrochemical Cell Performances". National Workshop on Functional Materials, 20 – 21 June 2009, University of Malaya, Malaysia.
41. N.R.A. Razak and Tan Winie, "Conductivity and Dielectric Properties of $LiClO_4$-Doped Chitosan Polymer Films". National Workshop on Functional Materials, 20 – 21 June 2009, University of Malaya, Malaysia.
42. Leena Ismail, S. Ramesh, Tan Winie and A.K. Arof, "Mixed-Doped Lithium Nickel Vanadate as Cathode Material by Wet Chemistry and Polymer Precursor Method". National Workshop on Functional Materials, 20 – 21 June 2009, University of Malaya, Malaysia.
43. F.H. Muhammad, R.H.Y. Subban, S.R. Majid, Tan Winie and A.K. Arof, "Electrical Behaviour and FTIR Studies on Nanocomposite Based Polymer Electrolytes", International Conference on Nanoscience and Nanotechnology (NANO-SCITECH 2008), 18 – 21 November 2008, Universiti Teknologi MARA, Shah Alam, Selangor, Malaysia.
44. N.A.A. Razak, Tan Winie and A.H. Ahmad, "Effect of Amino Acid (L-Leucine) on the Conductivity of PVA/Chitosan-$LiCF_3SO_3$", International Conference on Nanoscience and Nanotechnology (NANO-SCITECH 2008), 18 – 21 November 2008, Universiti Teknologi MARA, Shah Alam, Selangor, Malaysia.
45. S.Z Abdullah, A. Abdullah, Tan Winie and R.H.Y. Subban, "Electrical Conductivity of Solvent-Free PEO-Based Polymer Electrolytes", International Conference on Nanoscience and Nanotechnology (NANO-SCITECH 2008), 18 – 21 November 2008, Universiti Teknologi MARA, Shah Alam, Selangor, Malaysia.
46. F.H. Muhammad, R.H.Y. Subban, Tan Winie and A.K. Arof, "Characterization of Al_2O_3-Doped Hexanoyl Chitosan-$LiCF_3SO_3$-EC Polymer Electrolytes", 2nd International Conference on Functional Materials and Devices 2008, 16 – 19 June 2008, Kuala Lumpur, Malaysia.
47. S.Z. Abdullah, A. Abdullah, Tan Winie and R.H.Y. Subban, "Studies on Transport Properties of Solvent-Free PEO-Based Polymer Electrolytes", 2nd International Conference on Functional Materials and Devices 2008, 16 – 19 June 2008, Kuala Lumpur, Malaysia.

48. N.A. Johari, T.I.T. Kudin, A.M.M. Ali, Tan Winie and M.Z.A. Yahya, "Development of Cellulose-Based Electrolytes for Proton Batteries", 2nd International Conference on Functional Materials and Devices 2008, 16 – 19 June 2008, Kuala Lumpur, Malaysia.
49. N.A. Johari, T.I.T. Kudin, A.M.M. Ali, Tan Winie and M.Z.A. Yahya, "Impedance Behavior of Cellulose Acetate-Based Polymer Electrolytes", 2nd International Conference on Functional Materials and Devices 2008, 16 – 19 June 2008, Kuala Lumpur, Malaysia.
50. L. Ismail, S. Ramesh, Tan Winie and A.K. Arof, "Characterizations of $LiNiVO_4$ and $LiNi_xMn_{1-x}VO_4$ ($0 \leq x \leq 1$) Prepared by the Sol-Gel Method", 2nd International Conference on Functional Materials and Devices 2008, 16 – 19 June 2008, Kuala Lumpur, Malaysia.
51. N.A.A. Razak, Tan Winie and A.H. Ahmad, "The Additive Effect of Zwitterion, L-Leucine on Electrical Conductivity of PVA/Chitosan-$LiCF_3SO_3$", 2nd International Conference on Functional Materials and Devices 2008, 16 – 19 June 2008, Kuala Lumpur, Malaysia.
52. F.H. Muhammad, Tan Winie, "The Effect of Anion Size on the Electrical Behaviour of Hexanoyl Chitosan-Based Polymer Electrolytes", Regional Conference on Solid State Science and Technology 2008 (RCSSST 2008), 30 November – 2 December 2008, Tiara Beach Resort, Port Dickson, Negeri Sembilan, Malaysia.
53. S.Z Abdullah, A. Abdullah, Tan Winie and R.H.Y. Subban, "Studies on Transport Properties of Solvent-Free PEO-Based Polymer Electrolytes", 23rd Regional Conference on Solid State Science and Technology, 27 – 29 November 2007, Hyatt Regency Hotel, Johor Bahru, Malaysia.
54. Tan Winie and A.H. Ahmad, "Ionic Conductivities Studies on Polyamino Acid as Solid Polymer Electrolytes for Secondary Battery", Conference on Scientific and Social Research (CSSR) 2006 & 2007, 3 – 5 July 2007, Sunway Lagoon Resort Hotel, Petaling Jaya, Malaysia.
55. S.R. Majid, A.S.A. Khiar, Tan Winie, M.A. Hashim, M.F. Hassan and A.K. Arof, "Enhancement on the Conductivity and Dielectric of Chitosan Acetate Films by Addition of H_3PO_4", Asian Physics Symposium 2005, 7 - 8 December 2005, Bandung, Indonesia.
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57. M.F. Hassan, N.H. Idris, S.R. Majid, A.S.A. Khiar, Tan Winie and A.K. Arof, "Effect of Ethylene Sulphite on the Conductivity and Morphology of PEO-KOH Films", International Conference on Functional Material and Devices 2005, 6 – 8 June 2005, PNB Darby Park, Kuala Lumpur, Malaysia.
58. S.R. Majid, N.H. Idris, M.F. Hassan, Tan Winie, A.S.A. Khiar and A.K. Arof, "Transport Studies on Filler Doped Chitosan Based Polymer Electrolyte", International Conference on Functional Material and Devices 2005, 6 – 8 June 2005, PNB Darby Park, Kuala Lumpur, Malaysia.
59. Tan Winie and A.K. Arof, "Hexanoyl Chitosan-Based Gel Electrolyte for Lithium-Ion Cell", 15th International Symposium on Fine Chemistry and Functional Polymers and 1st International Symposium on Novel Materials and Synthesis, 17 – 20 October 2005, Fudan University, China.
60. Tan Winie and A.K. Arof, "Ionic conductivity studies of $LiCF_3SO_3$ doped hexanoyl chitosan-based polymer electrolytes", National Symposium on Batteries, 6 – 7 September 2005, AMREC, Sirim Berhad, Malaysia.

RESEARCH GRANTS
(Project Title), (Role), (Source), (Amount), (Duration)

1. Light Absorbance and Adhesion Properties of Sensitizer Extracted from Sargassum spinosum Seaweed, **Principal Investigator**, Fundamental Research Grant Scheme (FRGS) (FRGS/1/2018/STG 07/UiTM/02/12), Ministry of Education, Malaysia, RM56,700, 2019-2020
2. High Performance Supercapacitors Based on Co_3O_4 Electrodes, **Principal Investigator**, Bestari Perdana ((600-IRMI/PERDANA 5/3 BESTARI (040/2018), Universiti Teknologi MARA, Malaysia, RM35,000, 1 Jan 2018- 31 Dis 2019
3. Investigation on PCL/PEMA Blend Polymer Electrolytes Incorporated with Inorganic Salt, **Principal Investigator**, Geran Inisiatif Penyeliaan (GIP) ((600-IRMI/MyRA 5/3 GIP (038/2017), Universiti Teknologi MARA, Malaysia, RM20,000, 1 Jul 2017- 30 Jun 2018
4. Supercapacitor Based on Graphene Electrode and Solid State Polymer Electrolyte, **Co-investigator**, LESTARI ((600-IRMI/MyRA 5/3 LESTARI (044/2017), Universiti Teknologi MARA, Malaysia, RM20,000, 1 Jul 2017-30 Jun 2019
5. Effect of Molecular Weight on the Conductivity Performance of Polymer Electrolyte System, **Co-investigator**, Research Entity Initiative (REI) ((600-IRMI/DANA 5/3 REI (2/2017), Universiti Teknologi MARA, Malaysia, RM20,000, 1 Mei 2017-30 Apr 2019
6. Conductivity Performance of PVDF-HFP Gel-Like Polymer Electrolyte, **Principal Investigator**, Geran Inisiatif Penyeliaan (GIP) ((600-IRMI/GIP 5/3 (0064/2016), Universiti Teknologi MARA, Malaysia, RM25,000, 1 Sep 2016-31 Ogos 2017
7. Interfacial Adhesion of Incompatible Hexanoyl Chitosan/Epoxidised Natural Rubber Blends with Addition of Inorganic Salt, **Principal Investigator**, Fundamental Research Grant Scheme (FRGS) (600-RMI/FRGS 5/3 (7/2014), Ministry of Higher Education, Malaysia, RM111,400, 2014-2017
8. Roles of TiO_2 Treated with H_2SO_4 in Hexanoyl Chitosan-Based Polymer Electrolytes, **Principal Investigator**, **Research Acculturation Collaborative Effort (RACE)** (600-RMI/RACE 16/6/2(4/2012)), Ministry of Higher Education, Malaysia, RM 50,000, 2012-2014.
9. Synthesis and Application of Conducting Polymers Research Group, Co-Investigator, **Research Initiative Group Tier 5**, (600-RMI/DANA 5/3/REI (20/2015)), UiTM, RM32,000, 2015-2018.
10. Quality Control Certificate of Polymeric Coating on Steel Pipeline as Benchmark for Paint Industry, Project Member, **Knowledge Transfer Programme (KTP)** (438020140001), Ministry of Education, Malaysia, RM126,997, 2014 – 2016.
11. Synthesis and Characterization of Nano-Size Metal Oxides for Application in Energy Devices, Co-Investigator, **High Impact Research Grant Allocation (HIRGA)** (J-21002-73852), University of Malaya, Malaysia, RM200,000, 2013-2015.
12. Morphology-Mechanical Relaxation of Compatible Poly(ethylene oxide)/Poly(butadiene-G-Acrylate) with Addition of Inorganic Salt, Co-Investigator, **Fundamental Research Grant Scheme (FRGS)** (600-RMI/FRGS 5/3 (67/2013), Ministry of Higher Education, Malaysia, RM108,300, 2013-2016
13. Ionic Conductivity Analyses of Newly Synthesized Acid-Doped Liquid Polymer Electrolyte Base on Poly(Methyl Methacrylate), Co-Investigator, **Fundamental Research Grant Scheme (FRGS)** (600-RMI/FRGS 5/3 (69/2013), Ministry of Higher Education, Malaysia, RM74,000, 2013-2015
14. Electrical Conductivity and Optical Properties of Quasi Solid State Porphyrins-Polymer Complexes, Co-Investigator, **Fundamental Research Grant Scheme**

(FRGS) (FRGS/2/2013/SG06/UM/02/3), Ministry of Higher Education, Malaysia, RM71,000, 2013-2015

15. Conduction Mechanism of Stretchable Poly(ether-graft-rubber) with Self Assemble Lithium Salt in Ether-Graft, Co-Investigator, **Dana Pembudayaan Penyelidikan (RAGS)** (600-RMI/RAGS 5/3 (145/2014)), UiTM, RM80,000, 2014-2016
16. Conductivity Performance of Hexanoyl Chitosan-Polystyrene Blend Polymer Electrolytes, Co-Investigator, **Dana Pembudayaan Penyelidikan (RAGS)** (600-RMI/RAGS 5/3 (41/2013)), UiTM, RM80,000, 2013-2015
17. On Controlled Distribution of Inorganic Salt and Nanoparticles of Polyether/Polyacrylate Blend Composite Electrolyte, Co-Investigator, **Dana Pembudayaan Penyelidikan (RAGS)** (600-RMI/RAGS 5/3 (14/2012)), UiTM, RM80,000, 2012-2014
18. Fabrication of Microbial Polyester Scaffolds-Correlation of Solution Rheology with Electrospun Fibre Formation, Co-Investigator, **Dana Kecemerlangan (RIF)** (600-RMI/DANA 5/3/RIF (636/2012), UiTM, RM32,000, 2012-2014
19. Mechanical Studies of Hexanoyl Chitosan-Polystyrene Blend Polymer Electrolytes, Co-Investigator, **Dana Kecemerlangan (RIF)** (600-RMI/DANA 5/3/RIF (782/2012), UiTM, RM32,000, 2012-2014
20. Effects of HNO_3 Treatment of TiO_2 Nanoparticles on the Conductivity Behaviour of Hexanoyl Chitosan-Based Polymer Electrolytes, **Principal Investigator**, **Dana Kecemerlangan** (600-RMI/ST/DANA 5/3/Dst(421/2011)), UiTM, RM10,000, 2011-2013
21. Investigation on the Conduction Mechanism in Hexanoyl Chitosan-Based Composite Polymer Electrolytes, **Principal Investigator**, **Dana Kecemerlangan** (600-RMI/ST/DANA 5/3/Dst(420/2011)), UiTM, RM8,000, 2011-2013
22. Thermodynamic Control of the Dispersion of Lithium Salt in Immiscible Thermoplastic Elastomer Blends, Co-Investigator, **Dana Kecemerlangan** (600-RMI/ST/DANA 5/3/Dst(226/2011)), UiTM, RM10,000, 2011-2013
23. Selective Localization of Inorganic Salt in Immiscible Thermoplastic Elastomer Blends, Co-Investigator, **Fundamental Research Grant Scheme (FRGS)** (600-RMI/ST/FRGS 5/3/Fst(193/2010), Ministry of Higher Education, Malaysia, RM61,000, 2010-2012
24. Studies on Conduction Mechanism in Hexanoyl Chitosan-Based Polymer Electrolytes, **Principal Investigator**, **Fundamental Research Grant Scheme (FRGS)** (600-RMI/ST/FRGS 5/3/Fst(13/2009), Ministry of Higher Education, Malaysia, RM45,000, 2009-2011
25. Preparation and Characterization of Modified Chitosan for Electrochemical Devices, **Principal Investigator**, **Dana Kecemerlangan** (600-IRDC/ST/DANA 5/3/Dst(92/2008), UiTM, RM20,000, 2008-2009
26. Studies of the Natural Organic/ Inorganic Pigments on Silicon-Based Binder for High Temperature Application, Co-Investigator, **EScience** (03-01-01-SF0163), Ministry of Science, Technology and Innovation, RM227,800, 2007-2009
27. Ionic Conductivity in Filler-Doped Modified Chitosan-Based Electrolyte, Co-Investigator, **EScience** (03-01-03-SF0289), Ministry of Science, Technology and Innovation, RM78,000, 2007-2009
28. Cathode Materials for Lithium Ion Batteries, Co-Investigator, **EScience** (03-01-03-SF0128), Ministry of Science, Technology and Innovation, RM147,996, 2006-2008
29. Development of Proton Batteries Based on Cellulose Polymer Electrolytes, Co-Investigator, **EScience** (03-01-01-SF0022), Ministry of Science, Technology and Innovation, RM94,994, 2006-2008
30. Studies on Transport Properties in Polymer Based Solid Electrolytes, Co-Investigator, **Fundamental Research Grant Scheme (FRGS)** (600-

IRDC/ST/FRGS 5/3/1147), Ministry of Higher Education, Malaysia, RM100,000, 2007-2009

SUPERVISION

(Name of Degree), (Name of Candidate), (Title of Thesis), (Status)

1. Doctorate Degree **(PhD)**, Nur Asheila Nadirah Bt. Jamaluddin (2012487948), Novel Hexanoyl Chitosan-ENR25 Blend Polymer Electrolyte for Application in Lithium Ion Battery, **Completed**.
2. Doctorate Degree **(PhD)**, Fatin Bt. Harun (2012291062), Distribution of Lithium Salt in PEO-ENR Blend with Nanoparticle, **Completed**.
3. Doctorate Degree **(PhD)**, Fadiatul Hasinah Muhammad (2014689828), Preparation and Characterization of Acylated Chitosan with Different Molecular Weights for Dye-Sensitized Solar Cell application, On-going.
4. Doctorate Degree **(PhD)**, Cintil Jose Chirayil (U.O. No. 4055/AII/2012/Academic), Preparation and Characterization of Unsaturated Polyester Nanocomposites Using Nanocellulose, Obtained from Isora A Natural Fiber - as Reinforcement, On-going.
5. Doctorate Degree **(PhD)**, Wan Amisha Adhwa Bt. Wan Azmar (2014696922), PMA-Based Polymer Electrolyte for Application in Dye-Sensitized Solar Cell, On-going.
6. Doctorate Degree **(PhD)**, Nurul Alisa Yasmin Bt. Mohammad Razamin (2015627528), PBA-Based and Silica-Based Quasi Solid Electrolyte for Dye Sensitized Solar Cell, On-going
7. Doctorate Degree **(PhD)**, Farish Irfal B. Saaid (2015360409), A Quasi-Solid State PVDF-HFP Polymer Electrolyte with MPII Ionic Liquid for DSSC, On-going.
8. Doctorate Degree **(PhD)**, Suhaila Idayu Bt. Abdul Halim (2014664306), Dielectric and Mechanical Relaxation of Li Salt in Poly(ethylene oxide) and Poly(methyl Acrylate) Solid Polymer Electrolyte, On-going.
9. **Master** Degree, Nur Syuhada Bt. Mohd Shahril (2010318451), Preparation and Characterization of Acylated Chitosan-Polystyrene Blend Polymer Electrolyte, On-going.
10. **Master** Degree, Nor Izzati Bt. Mohamad Rodi (2014805734), Preparation and Characterization of Phthaloyl Chitosan-Blend Based Polymer Electrolytes, On-going.
11. **Master** Degree, Nik Aisyah Suraya Bt. Nik Zulkepeh (2014687734), Preparation and Characterization of PVC-$LiCF_3SO_3$-$BmImCF_3SO_3$ Polymer Electrolyte, **Completed**.
12. **Master** Degree, Nur Shazlinda Muhammad Hanif (2010916427), Hexanoyl Chitosan-Polystyrene Composite Electrolytes with Surface Modified TiO_2 Filler, **Completed**.
13. **Master** Degree, Maziidah Hamidi (2009556763), Preparation and Characterization of Lithium-Based Glass Ceramic Conducting Materials, **Completed**.
14. **Master** Degree, Nurul Hazwani Bt. Aminuddin Rosli (2009287104), Preparation and Characterization of Modified Chitosan, **Completed**.
15. **Master** Degree, Fadiatul Hasinah Muhammad (2007254326), Preparation and Characterization of Filler-Doped Modified Chitosan-Based Polymer Electrolyte, **Completed**.
16. **Master** Degree, Noor' Aisyah Johari (2006137745), Characterization of Cellulose-Based Polymer Electrolyte for Electrochemical Cell, **Completed**.
17. **Master** Degree, Noraisah Abd Razak (2006137729), Lithium Ion Conduction in PVA/Chitosan with L-Leucine Additive as Solid Polymer Electrolyte, **Completed**.

18. **Master** Degree, Siti Zaubidah Abdullah (2006144329), Studies on Transport Properties in PEO-Polymer Blend, **Completed**.

TEACHING ACTIVITIES

(Level), (Subject)

1. **Resource Person** of Electronic and Semiconductor Materials (MST557), 2011 – present
2. **Resource Person** of Device Physics I (PHY594), 2014 – 2016
3. **Resource Person** of Computational Physics (PHY588), 2011 - 2015
4. **First Degree (Lecture)**: Electronic and Semiconductor Materials (MST557), Computational Physics (PHY588), Electronic and Related Materials (MST551), Semiconductor Technology (MST642), Electricity and Magnetism I (PHY580), Electricity and Magnetism II (PHY581), Device Physics II (PHY594).
5. **First Degree (Laboratory)**: Electronic and Semiconductor Materials (MST557), Electronics & Instrumentation Lab (PHY584), Advanced Physics Lab 2 (PHY692), Electronic and Related Materials (MST551), Electrical Properties (PST452).

SUFO (Year), (Average Score for Semester II;I)

2015: 93; 91	2013: 92; 88	2011: 93
2014: 96; 93	2012: 90; 90	

EDITORIAL ACTIVITIES

(Title), (Role), (Year), (Publisher)

1. Polymer Electrolytes. Vol. 1: Characterization Techniques & Vol. 2: Energy Applications, Editor, 2016 – 2017, Wiley-VCH, Germany
2. Special proceedings of the International Symposium on Materials and Assets Integrity (ISMAI 2016) "Advancements and Innovations in Materials and Asset Integrity Analysis and Management" during 10th International Materials Technology Conference & Exhibition (IMTCE 2016), Kuala Lumpur, Malaysia, 16–18 May 2016, Ionics 23, **Guest Editor**, 2017, Springer-Verlag Berlin Heidelberg, Germany (ISSN Print: 0947-7047; ISSN Electronic: 1862-0760)
3. International Symposium on Materials and Asset Integrity (ISMAI2016), Materials Today Proceedings Vol. 4, **Guest Editor**, 2017, Elsevier, United Kingdom (ISSN: 2214-7853)
4. International Journal of Electroactive Materials (IJEM), Editorial Board, 2013-2015
5. International Journal of Institute of Materials Malaysia (IJIMM), Editorial Board, 2014-2016
6. Physics and Materials Symposium, International Conference on Applied Sciences and Industrial Technology (ICASIT2015), AIP Conference Proceedings 1674, **Chief Editor**, 2015, Melville, New York (ISBN: 9780735413214; ISSN: 0094243X)
7. Science Letters, **Editorial Board**, Vol 7(2) 2013 (ISSN: 1675-7785)
8. Progress of Physics Research in Malaysia, AIP Conference Proceedings 1250, **Co-Editor**, 2010, Melville, New York (ISBN: 9780735407978; ISSN: 0094243X)
9. Materials Research Innovations 13(3), **Guest Editor**, 2009, Maney Publishing, United States of America (ISSN: 14328917)

10. National Physics Conference (PERFIK2009) Abstract Book, **Chief Editor**, 2009, Malaysia.
11. International Conference on Functional Materials and Devices (ICFMD2008) Abstract Book, **Editor**, 2008, Malaysia.

EVALUATION ACTIVITIES

(Evaluation Activity), (Level)

Reviewer

1. Materials Chemistry and Physics, Article In Journal (International)
2. Polymer Engineering and Science, Article In Journal (International)
3. Journal of Applied Polymer Science, Article In Journal (International)
4. Ionics, Article In Journal (International)
5. International Journal of Electroactive Materials, Article In Journal (International)
6. Journal of Materials Research Innovations (MRI), Article In Journal (International)
7. Polymer Research Journal, Article In Journal (International)
8. Materials Today Proceedings, Conference Paper (International)
9. International Conference on Functional Materials and Devices (ICFMD2015), Conference Paper (International)
10. International Conference on Engineering and Innovative Materials (ICEIM2014), Conference Paper (International)
11. International Symposium on Advanced Polymeric Materials (ISAPM 2014), Conference Paper (International)
12. International Conference on Functional Materials and Devices (ICFMD2013), Conference Paper (International)
13. International Symposium on Advanced Polymeric Materials (ISAPM 2012), Conference Paper (International)
14. 2nd International Conference on Advances in Materials and Manufacturing Processes (ICAMMP2011), Conference Paper (International)
15. 2011 International Conference on Advanced Design and Manufacturing Engineering (ADME2011), Conference Paper (International)
16. International Conference on Functional Materials and Devices (ICFMD2010), Conference Paper (International)
17. Journal of Sustainability Science and Management (National)
18. Malaysian Journal of Chemistry (National)
19. Sains Malaysiana, Article In Journal (National)
20. Science Letters, Article In Journal (National)
21. International Journal of Institute of Materials Malaysia (IJIMM), Article in Journal (International)
22. National Physics Conference (PERFIK2009), Conference Proceedings (National)

Panel of Evaluation

1. External Evaluator, YUTP-FRG Project, University Technology Petronas
2. Research Acculturation Collaborative Effort (RACE) Grant, Universiti Teknologi MARA
3. Fundamental Research Grant Scheme (FRGS), Universiti Teknologi MARA
4. Dana Pembudayaan Penyelidikan (RAGS), Universiti Teknologi MARA
5. Dana Kecemerlangan, Universiti Teknologi MARA
6. Teknikal Peralatan Bil. 1/2007 (Tender UiTM/PER/T/114/07), Invited Panel,

COMMITTEE OF CONFERENCES & WORKSHOPS
(Role), (Event), (Date), (Organizer)

1. **Co-Chairperson**, 6th International Conference on Functional Materials and Devices 2017 (ICFMD2017), 15 – 19 August 2017, Melaka, Malaysia by University of Malaya
2. **Advisory Board**, 5th International Conference on Functional Materials and Devices 2015 (ICFMD2015), 4 – 6 August 2015, Johor Bahru, Malaysia by University of Malaya.
3. **Chairperson**, Physics & Materials Symposium, International Conference on Applied Sciences and Industrial Technology 2015 (ICASIT2015), 24 -26 February 2015, Grand Lexis Port Dickson, Negeri Sembilan, Malaysia by Faculty of Applied Sciences, UiTM.
4. **Technical Committee,** 4th International Conference on Engineering and Innovative Materials (ICEIM 2015), IACT China Office, Chengdu, Sichuan, China.
5. **Chairperson**, Technical Visit, 9th International Materials Technology Conference and Exhibition (IMTCE 2014), 13 – 16 May 2014, Putra World Trade Centre, Kuala Lumpur, Malaysia by Institute of Materials Malaysia.
6. **Chairperson**, Program Visit to Faculty of Applied Sciences II, 16 May 2014, Faculty of Applied Sciences, Universiti Teknologi MARA, Shah Alam, Malaysia.
7. **Technical Committee,** 3rd International Conference on Engineering and Innovative Materials (ICEIM 2014), IACT China Office, Chengdu, Sichuan, China.
8. **Committee member**, Forum of Towards Fingerprinting of Polymeric Coatings II, 11 October 2013, Tanjung Puteri Golf Resort, Pasir Gudang, Johor, Malaysia by Institute of Materials Malaysia
9. **Committee member**, 2nd International Materials Symposium cum 4th Regional Materials Technology Conference & Exhibition, 12 September 2013, Eastwood Valley Golf & Country Club, Miri, Sarawak, Malaysia by Institute of Materials Malaysia.
10. **Chairperson**, Technical Forum on Specialty Polymers for High Temperature and High Pressure Applications in the Oil and Gas Industry, 14 June 2013, Lobby Lounge of Malaysia Petroleum Club (MPC), Petronas Twin Towers, KLCC, Kuala Lumpur, Malaysia by Institute of Materials Malaysia.
11. **Committee member**, Forum of Towards Fingerprinting of Polymeric Coatings, 22 March 2013, Dewan Presiden, Kelab Golf Negara Subang, Kelana Jaya, Selangor, Malaysia by Institute of Materials Malaysia
12. **Treasurer**, Workshop on Macromolecules III, 13 – 15 December 2011, Faculty of Applied Sciences, Universiti Teknologi MARA, Shah Alam, Malaysia.
13. **Vice-Chairperson**, Bengkel Latihan Peralatan "SOLARTRON 1260A Impedance Spectroscopy", 21 November 2011, Ionic, Colour and Coating Laboratory, Faculty of Applied Sciences, Universiti Teknologi MARA, Shah Alam, Malaysia.
14. **Chairperson**, Bengkel Demonstrasi dan Latihan Peralatan "Fourier Transform Infrared Spectroscopy", 9 – 11 November 2011, Faculty of Applied Sciences, Universiti Teknologi MARA, Shah Alam, Malaysia.
15. **Treasurer**, Workshop on Macromolecules II, 14 – 16 December 2010, Faculty of Applied Sciences, Universiti Teknologi MARA, Shah Alam, Malaysia.
16. **Committee member**, National Physics Conference (PERFIK2009), 7 – 9 December 2009, Avillion Legacy Hotel, Malacca, Malaysia by Institute Physics

Malaysia and Universiti Teknologi MARA Malaysia.

17. **Treasurer**, Workshop on Macromolecules I, 14 – 16 December 2009, Faculty of Applied Sciences, Universiti Teknologi MARA, Shah Alam, Malaysia.
18. **Secretary**, 2nd International Conference on Functional Materials and Devices (ICFMD2008), 16 – 19 June 2008, Kuala Lumpur, Malaysia by Universiti Teknologi MARA, University of Malaya and Institute Materials Malaysia.
19. **Treasurer**, Workshop on Macromolecules towards Industrial Applications, 25 – 26 February 2008, Faculty of Applied Sciences, Universiti Teknologi MARA, Shah Alam, Malaysia.
20. **Chairperson**, Bengkel Latihan Peralatan Hidraulik, Pneumatic dan OP-AMP, 23 – 25 June 2008, Faculty of Applied Sciences, Universiti Teknologi MARA, Shah Alam, Malaysia.
21. **Chairperson**, Bengkel Simulasi MATLAB dan SIMULINK, 22 June 2007, Faculty of Applied Sciences, Universiti Teknologi MARA, Shah Alam, Malaysia.
22. **Committee member**, Science & Technology Exhibition 2007, 1 – 2 August 2007, Dewan Sri Budiman and Annex Hall by Faculty of Applied Sciences, Universiti Teknologi MARA, Malaysia.

EDUCATIONAL ACTIVITIES

(Role), (Activity)

1. Judge, National Workshop on Functional Materials (NWFM 2017), 17 – 18 January, 2017, University of Malaya, Kuala Lumpur, Malaysia
2. Session Chairperson, 10th Asian Meeting on Electroceramics (AMEC-2016), 4 -7 December, 2016, Taipei, Taiwan
3. Judge, Pertandingan Reka Cipta & Inovasi, Hari Alam Sekitar Negara Peringkat Negeri Selangor, 22 October, 2016, Ara Damansara, Malaysia
4. Poster Judge, International Conference on the Advancement of Materials and Nanotechnology (ICAMN IV), 9 -11 November, 2016, Langkawi, Malaysia
5. Session Chairperson, International Conference on Advances in Functional Materials, 8 - 11 August, 2016, International Convention Center (ICC) Jeju Island, South Korea.
6. Session Chairperson, International Conference on Applied Sciences and Industrial Technology 2015 (ICASIT2015), 24 -26 February 2015, Grand Lexis Port Dickson, Negeri Sembilan, Malaysia
7. Academic advisor for BSc (Hons) Physics Industry (AS231)
8. Demonstrator, 4th Karnival Kimia Malaysia (K2M 2013), 7 – 8 September 2013, Pusat Sains Negara, Bukit Kiara, Kuala Lumpur, Malaysia

EXAMINATION ACTIVITIES

(Role), (Candidate), (Year), (University)

1. Board of External Examiners (Pemeriksa Luar Berkumpulan) University Science Malaysia, Penang, Malaysia, 2012 – present
2. External Examiner
3. Internal Examiner

SERVICE TO FACULTY AND UNIVERSITY
(Role), (Activity)

1. Examination Auditor, Faculty of Applied Sciences, Universiti Teknologi MARA, Malaysia
2. Chairperson, Research Committee, Faculty of Applied Sciences, Universiti Teknologi MARA, Malaysia
3. Committee, Transformasi Komuniti FSG, Faculty of Applied Sciences, Universiti Teknologi MARA, Malaysia
4. Committee, Corporate Communication Unit, Faculty of Applied Sciences, Universiti Teknologi MARA, Malaysia
5. Chairperson, for curriculum preparation of new program: BSc (Hons) Physics Industry (Photonics Technology)
6. Committee, for curriculum content revision, School of Physics and Materials Science, Faculty of Applied Sciences, Universiti Teknologi MARA, Malaysia
7. Committee, Prosidur Kualiti FSG, Faculty of Applied Sciences, Universiti Teknologi MARA, Malaysia
8. Panel member of assessor of defense of research proposal for PhD and Master for Universiti Teknologi MARA, Malaysia
9. Panel member of assessor of Pre-Viva for PhD and Master for Universiti Teknologi MARA, Malaysia
10. Panel member of assessor of first degree final year project for Universiti Teknologi MARA, Malaysia
11. Committee, Karnival Keusahawanan Fakulti Sains Gunaan 2013, 4 – 6 June 2013 by Faculty of Applied Sciences and MASMED, Universiti Teknologi MARA, Malaysia
12. Facilitator, Bengkel Penulisan Jurnal Pelajar PhD FSG, 19 January 2012, Faculty of Applied Sciences, Universiti Teknologi MARA, Malaysia
13. Facilitator, Seminar & Bengkel Penyediaan Kertas Soalan Peperiksaan bagi Pensyarah Baru Pusat Pengajian Fizik dan Bahan, 4 – 5 June 2009, Faculty of Applied Sciences, Universiti Teknologi MARA, Malaysia