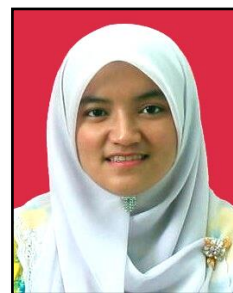


## RESUME

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#### ***Master of Science (Physics)***

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### Publications

#### **Chapters in Book:**

- [1] Cellulose Reinforced Biodegradable Polymer Composite Film for Packaging Applications. Book Chapter: Bionanocomposites for Packaging Applications. Springer pp: 49-69, 2018.
- [2] Editor for Nanoscience, Nanotechnology and Nanoengineering (Selected peer reviewed papers from International Conference on Nanoscience & Nanotechnology 2013 (Nano-SciTech 2013)), Trans Tech Publications Inc., Switzerland, 2014.
- [3] Aluminium Doped Zinc Oxide Nanorod Array Ultraviolet Photoconductive Sensors. Book Chapter: Renewable Energy and Sustainable Developments Scientific & Academic Publishing, USA. Chapter 9. pp: 313-356, 2014.
- [4] Hydrogenated Amorphous Carbon Films. Book Chapter: Carbon and Oxide Nanostructures Springer Verlag Publishers. Chapter 4. pp: 99-122, 2010.
- [5] Nanostructured Materials, Book Chapter Carbon and Oxide Nanostructures Springer Verlag Publishers. Chapter 3. pp: 65-98, 2010.
- [6] Diamond: Synthesis, Characterisation and Applications. Book Chapter: Carbon and Oxide Nanostructures Springer Verlag Publishers Chapter 9. pp: 227-252, 2010.

#### **Academic Journals:**

#### **First and Corresponding Author (Recent and Top publications):**

- [1] **A.B. Suriani et al.** (2019) "Titanium dioxide/agglomerated free reduced graphene oxide hybrid photoanode film for dye-sensitized solar cells photovoltaic performance improvement" **Nano-Structures & Nano-Objects**, Elsevier, vol. 18, pp 100314-1-100314-14 (**CiteScore 2018: 2.98**).
- [2] **A.B. Suriani et al.** (2019) "Improved DSSC photovoltaic performance using reduced graphene oxide-carbon nanotube/platinum assisted with customised triple tail surfactant as counter electrode and zinc oxide nanowire/titanium dioxide nanoparticle bilayer nanocomposite as photoanode" **Graphene Technology**, Springer, <https://doi.org/10.1007/s41127-019-00024-x>, pp 1-15

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- [6] **A.B. Suriani et al.** (2018) "Improving the Photovoltaic Performance of DSSCs Using a Combination of Mixed-phase TiO<sub>2</sub> Nanostructure Photoanode and Agglomerated Free Reduced Graphene Oxide Counter Electrode Assisted with Hyperbranched Surfactant." **Optik-International Journal for Light and Electron Optics, Elsevier**, vol. 139, pp 201-208 (**Impact Factor 2017: 1.191**).
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#### Co-Authored (Top publications):

- [23] T.Ardyania, A.Mohamed, **A.B. Suriani et al.** (2019) "Surfactants with aromatic headgroups for optimizing properties of graphene/ natural rubber latex composites (NRL): Surfactants with aromatic amine polar heads" **Journal of Colloid and Interface Science, Elsevier**, vol. 545, pp 184-194 (**Impact Factor 2017: 4.233**).
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- [69] N.A. Asli, M.S. Shamsudin, A.N. Falina, M.S. Azmina, **A.B. Suriani**, M. Rusop, S. Abdullah (2013) "Field electron emission properties of vertically aligned carbon nanotubes deposited on a nanostructured porous silicon template: The hidden role of the hydrocarbon/catalyst ratio." **Microelectronic Engineering, Elsevier**, vol. 108, pp. 86-92 (**Impact Factor 2015: 1.277**).
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- [75] M. Salina, M.H. Mamat, **A.B. Suriani**, R. Ahmad A. Anuar, Y.M. Siran, S.A.M. Rejab, A.J. Asis, S. Tahirruddin, S. Abdullah and M. Rusop, (2011) "Highly conductive vertically aligned carbon nanotubes grown on Mg<sub>0.3</sub>Zn<sub>0.7</sub>O thin film template using thermal chemical vapour deposition method." **Japanese Journal of Applied Physics, IOP Science**, vol. 50, pp. 06GE02-1-06GE02-5 (**Impact Factor 2015: 1.122**).
- [76] A.A. Azira, **A.B. Suriani** and M. Rusop, (2011) "Carbon Nanotubes Formation from Fe/Ni/Mg by Camphor Oil Decomposition," **Journal of the Ceramics Society of Japan**, vol. 119, pp. 125-128 (**Impact Factor 2015: 0.698**).
- [77] M.H. Mamat, Z. Khusaimi, M.Z. Musa, **A.B. Suriani**, A. Anuar, Y.M. Siran, S.A.M. Rejab, A.J. Asis, S. Tahirruddin, S. Abdullah and M. Rusop, (2011) "Controllable growth of vertically aligned aluminum doped zinc oxide nanorod arrays prepared using novel low temperature sonicated sol-gel immersion method at different precursor solution," **Japanese Journal of Applied Physics, IOP Science**, vol. 50, pp. 06GH04-1-06GH04-6 (**Impact Factor 2015: 1.122**).
- [78] A.A. Aziz, D.H.A.I. Hassim, **A.B. Suriani**, M.R. Mahmood, "Reinforcement of multiwalled carbon nanotubes/natural rubber nanocomposite prepared by latex technology (2012). **Journal of Science and Technology in the Tropics**, vol. 8, pp. 131-140.

## Supervisions

### Main Supervisor

#### PhD -Completed

- [1] Doctoral Degree, Nor Dalila Abdul Rahman, Synthesis of Aligned Carbon Nanotubes from Waste Chicken Fat using Thermal Chemical Vapor Deposition Method for Field Emission Devices, 2012/2015, **Completed**. - **Bitara, Best Thesis, and Graduate on Time (GOT) Awards during Convocation Ceremony**.
- [2] Doctoral Degree, Nurhafizah Binti Md Disa, Synthesis Graphene Oxide using Electrochemical Exfoliation Method for Electrode Materials Application, 2013/2016, **Completed**. **Bitara Awards during Convocation Ceremony**.
- [3] Doctoral Degree, Muqoyyanah, The Fabrication of Graphene Oxide-Titanium Dioxide Hybrid Material for Solar Cell and Membrane Application. 2016/2019, **Passed Viva-voce with high excellence recommendation- International Student-Awaiting for Senate Approval**.

#### MSc-Completed

- [1] Masters Degree, Suhufa Alfarisa, Synthesis of Carbon Nanostructured Materials From Waste Engine Oil Using Thermal Chemical Vapor Deposition Method, 2013/2015, **Completed- International Student- GOT Award during Convocation Ceremony**.
- [2] Masters Degree, Rika Noor Safitri, Enhancement Of Field Electron Emission Properties Of Carbon Nanotubes/Zinc Oxide Nanocomposites Using Single And Multi-Step Methods, 2013/2015, **Completed- International Student- GOT Award during Convocation Ceremony**.
- [3] Masters Degree, Fatiatun, Synthesis and Characterization of Graphene/ZnO Nanocomposites and Their Potential Applications for Transparent Conductive Electrodes, 2016/2018, **Completed- International Student- GOT Award during Convocation Ceremony**.
- [4] Masters Degree, Nurfalina Binti Alias, Sintesis Nanotub Karbon daripada Minyak Masak Terpakai dan Sifat Pemancaran Elektron Medan, 2011/2015, **Completed**.
- [5] Masters Degree, Nur Azmina Binti Mohamed Safian, Optimization of Physical Properties of Carbon Nanotubes from Palm Oil Precursor using Thermal Chemical Vapor Deposition Method, 2011/2013, **Completed**.

#### PhD - Ongoing

- [1] Doctoral Degree, Khayri Zaid, Carbon Based Materials as Adsorbent in Water Pollution Management. 2016/2019, **Submitted- International Student**
- [2] Doctoral Degree, Al Masoodi Ali Abdul Ameer Mohammed, Fabrication of ZnO-Graphene Oxide Nanocomposites for Ultraviolet Light Fabrication of ZnO-Graphene Oxide Nanocomposites for Ultraviolet Light Sensor Application. 2017/2020, **Submitted- International Student**
- [3] Doctoral Degree, Norhafizah Jusoh, Development of Scaled-up Prototype of Oil-Based CNT Production (SUPER-CNT-PRO) System utilizing Domestic Vegetable Oil Sources as Carbon Feedstock, 2013/2016, Ongoing.

#### MSc-Ongoing

- [6] Master Degree, Nur Jannah Binti Idris, Facile Preparation of Zinc Oxide Nanostructures-Reduced Graphene Oxide Nanocomposites for Efficient Ultraviolet Sensing Properties, 2018/2020, **Ongoing**.
- [7] Master Degree, Rosmanisah Binti Mohamat, Fabrication of Hydrophilic, Agglomerated-Free PVdF/Graphene Oxide Hybrid Membranes for Water Treatment Application, 2018/2020, **Ongoing**.

### Co-Supervisor

#### PhD

- [1] Doctoral Degree (UiTM), Noor Asnida Binti Asli (UiTM), The Study of Growth Mechanism of Aligned Carbon Nanotubes on Porous Silicon Nanostructures, 2010/2012, **Completed**.

- [2] Doctoral Degree (UPSI), Siti Nur Akmar Mohd Yazid, Synthesis and Characterisation of Metal Oxide/ Graphene Nanocomposites for Glucose Sensor Applications, 2013/2016, **Completed**.
- [3] Doctoral Degree (UPSI), Tertya Ardyani, Graphene-Phylic Surfactants for Latex Technology, 2015/2018, **Passed Viva-voce - International Student-Awaiting for Senate Approval**
- [4] Doctoral Degree (UiTM), Marmeezee Mohd Yusoff, Synthesis and Characterization of Graphene-doped TiO<sub>2</sub> for Ultraviolet Photoconductive Sensor Application, 2015/2018, **Completed**.
- [5] Doctoral Degree (USM), Muhammad Izhar Kairi, Synthesis of Large Area Graphene using Chemical Vapor Deposition, 2015/2018, **Completed**.
- [6] Doctoral Degree (UiTM), Ahmad Syakirin Bin Ismail @ Rosdi, Humidity Sensing Performance of Aligned Assembly Arrays of Zinc Oxide Nano Compositd Layers via Low Temperature Immersion Method , 2016/2019, **Completed**.
- [7] Doctoral Degree (UPSI), Nur Amirah Binti Jamaluddin, Wastewater Treatment of Palm Oil Mill Effluent (POME) by Responsive Graphene with Magnetic Surfactants, 2017/2020, Ongoing.
- [8] Doctoral Degree (UTM), Nurul Jannah Ismail, Faculty of Chemical & Energy Engineering, 2018/2021, Ongoing.

## **MSc**

- [1] Masters Degree (UPSI), Amira Shakila Binti Razali, Electrical and Structural Properties of Carbon Nanotube Effect an a Novel Calixarene Thin Films for Metal Cation Sensing.Composites, 2012/2014, **Completed**.
- [2] Masters Degree (UiTM), Muhammad Salleh Shamsudin, Preparation and Characterization of Carbon Nanotubes from Camphor Oil and Its Utilization in PMMA/CNT Nanocomposite, 2010/2012, **Completed**.
- [3] Masters Degree (UPSI), Nur Shazana Atiqah Mohd Zamri, Properties of Cellulose Composite Made of CNT and Oil Palm Empty Brunch Cellulose, 2012/2014, Ongoing.
- [4] Masters Degree (UPSI), Nor Izzati binti Mohd Ali, Development of Kenaf Nanocellulose Graphene Paper for Electrical Conductive Paper, 2012/2014, Ongoing.
- [5] Masters Degree (UPSI), Mohd Shali Muda, Synthesis, Characterization, and Application of Chitosan Functionalized Graphene Oxide Nanocomposites for Pesticide Formulations 2014/2016, Ongoing.
- [6] Masters Degree (UiTM), Shatini Md Said, Sensitivity Enhancement of Humidity Sensor on GO/SnO<sub>2</sub>/ZnO Nanostructured Film Prepared using Thermal Chemical Vapor Deposition 20172019, Ongoing.
- [7] Masters Degree (UPM), Muhammad Amir Faiz Bin Mohd Shaifuddin, Metal Free Catalyst Carbon Nanotubes (CNTs) From Tea Waste Using CVD Method 2018/2020, Ongoing.

## **Awards**

- [1] **Silver Medal, Materials Technology Challenges, (MTC 2019)**, Malaysian Solid State Science and Technology Society (MASS) and Universiti Putra Malaysia, March 2019.
- [2] **Excellent Journal Publication Award**, UPSI, April 2019.
- [3] **Outstanding Scientist in Physics**, Venus International Foundation, India, Aug 2018.
- [4] **Silver Medal**, MTE 2018, Feb 2018.
- [5] **Silver Medal**, Pecipta 2017, Oct 2017.
- [6] **Runner-up Prize** at Malaysia Toray Science Foundation, **Science Education Award 2017**, Dec 2017.
- [7] **MASS 2016 Young Researcher Award in Solid State Science and Technology** by MASS, Nov 2016.
- [8] **Excellent Journal Publication Award**, UPSI, Jun 2016.
- [9] **Journal Article Publication Incentive**, UPSI, Jun 2016.
- [10] **Outstanding Contribution in Reviewing-** Materials Letters, Elsevier, July 2015.
- [11] **Outstanding Contribution in Reviewing-** Materials & Design, Elsevier, July 2015.
- [12] **L'Oreal-UNESCO National Fellowship 2013 for Young Women in Material Sciences Award.**
- [13] **Bronze Medal**, Pecipta 2015, December 2015.
- [14] **Silver and Bronze Medals**, 26<sup>th</sup> International Invention, Innovation Technology Exhibition (ITEX 2015), May 2015.
- [15] **Silver Medal**, BioInnovation 2014, November 2014.
- [16] **2 Silver Medals**, 25<sup>th</sup> ITEX 2014, May 2014.
- [17] **Promising Academician Award, UPSI**, May 2014.
- [18] **Best Poster Awards**, NANO-SciTech2014, Mac 2014.
- [19] **Gold Medal**, Pecipta 2013, November 2013.
- [20] **Excellent Service Award 2012**, UPSI, April 2013.
- [21] **Gold, Silver and Bronze Medals**, Malaysia Technology Expo 2013 (MTE 2013), February 2013.
- [22] **3 Best Poster Awards**, NANO-SciTech2013, Mac 2013.
- [23] **Article/Journal Publication Incentive Award**, UPSI, Staff Excellence Award Ceremony 2013.
- [24] **Gold Medal Incentive Award during 2013 National and International Research and Innovation Expo**, UPSI, Staff Excellence Award Ceremony 2013.
- [25] **Excellent Research Award**, UiTM, May 2012.
- [26] **The Best Award (cash worth RM1000) & 2 Gold Medals**, MTE 2012, February 2012.
- [27] **Best Poster Award**, Advanced Materials Conference (AMC 2012), December 2012.
- [28] **Malaysia Toray Science Foundation: Science Education Award 2013 and 2011** (Winner Prize- RM6k & RM2k).
- [29] **Gold Medal**, BioMalaysia 2011, **November 2011**.
- [30] **Silver Medal**, 39<sup>th</sup> Exhibition of Inventions Geneva, April 2011.
- [31] **Outstanding Paper Award**, ICAE 2011, Korea, November 2011.
- [32] **Best Poster Award**, INSC 2011, July 2011.
- [33] **Silver Medal**, 21<sup>st</sup> ITEX 2010, Mei 2010.
- [34] **Bronze Medal** at MTE 2010, Februari 2010.
- [35] **Diamond Award: Special Award for Women Inventor (cash worth RM3000 & certificate)**, 7<sup>th</sup> Invention, Innovation and Design (IID) UiTM, Januari 2010.
- [36] **Diamond Award: Invention (Category: Student) (cash worth RM3000 & certificate)**, 7<sup>th</sup> IID UiTM, January 2010.
- [37] **Silver Medal and Best Poster Award**, 3<sup>rd</sup> International Conference on Functional Material and Devices, ICFMD 2010, Jun 2010.
- [38] **Gold Medal**, IID Special Edition (IIDSE), UiTM, October 2010.
- [39] **Best Presenter Award**, Kolokium Kebangsaan Pasca Siswazah Sains dan Matematik 2010, UPSI, December 2010.
- [40] **Silver Medal and Best Booth Award**, IID Faculty of Applied Sciences, UiTM, October 2009.
- [41] **Best Poster Award**, NANO-SciTech2008, November 2008.

## Patents/Utility Innovations

- [1] Title: Method of Preparing Graphene and Graphene Based Nanocomposites Via Electrochemical Exfoliation, Filing No.: IP2016000616
- [2] Title: Vertically Aligned Carbon Nanotubes, Filing No. : UI2010004930
- [3] Title: A Method For Producing Vertically Aligned Carbon Nanotubes From Palm Oil, Filing No. : UI2010004929

## Commercialization

**Patent Licensing (Filing No.: IP2016000616) - RM550K- UPSI AND UGENT TECH SDN. BHD.  
(Company No. MA651928-U)**

## MOU/MOA

Collaborative R&D Agreement between Mimos Semiconductor Sdn Bhd and Universiti Pendidikan Sultan Idris (CRADA)  
13 Oct 2017

## Research Project-Grants

### Principal Investigator (PI)

### International and Private Grants

- [1] **TWAS-COMSTECH Research Grant Award**, Amount: RM38k, Duration: February 2017-February 2019-**Completed**.
- [2] **Kurita Water and Environment Foundation, Japan**, Amount: RM10,915.10 (JPY300,000), Duration: October 2017-October 2019-**Completed**.
- [3] **Kurita Water and Environment Foundation, Japan**, Amount: RM10,915.10 (JPY300,000), Duration: October 2015-October 2016-**Completed**.
- [4] **L'Oréal-UNESCO National Fellowship 2013 for Young Women in Material Sciences**, Amount: RM20k, Duration: Jan 2014-Dec 2015 - **Completed**.
- [5] **Malaysia Toray Science Foundation (MTSF)**, Amount: RM20k Duration: Dec 2012- Dec 2014 - **Completed**.
- [6] **MTSF**, Amount: RM10k, Duration: Oct 2010- Oct 2011 - **Completed**.

### Ministry Grants - Completed

- [1] **Insentif Geran Sanjungan Penyelidikan Kementerian Pendidikan Malaysia**, Amount: RM1k, Duration: Jan 2015.
- [2] **Prototype Research Grant Scheme (PRGS)**, Amount: RM174k, Duration: Oct 2013-April 2016 - **Completed**.
- [3] **Skim Geran Penyelidikan dan Inovasi MARA**, Amount: RM35k, Duration: Mac 2015-Feb 2016 - **Completed**.
- [4] **Research Acculturation Collaborative Effort Grant (RACE)**, Amount: RM50k, Duration: Dec 2012-June 2014 - **Completed**.
- [5] **Fundamental Research Grant Scheme (FRGS)**, Amount: RM102,080, Duration: Nov 2015- April 2018 - **Completed**.
- [6] **FRGS**, Amount: RM82k Duration: Oct 2010-Feb 2014 - **Completed**.
- [7] **University Research Grant (GPU)**, Amount: RM9400, Duration: Jan 2012 to Jan 2013 - **Completed**.

### Ministry Grants- Ongoing

- [8] **Ministry of Science, Technology and Innovation (MOSTI) Science Fund**, Amount: 298750, Duration: Aug 2014-July 2017-**Final Report has been submitted, Awaiting for Completion Approval**.

## Investigator

### Completed

- [1] Kurita Water and Environment Foundation, Japan, Amount: RM10,915.10 (JPY300,000), Duration: October 2015-October 2016-**Completed**.
- [2] Skim Geran Penyelidikan dan Inovasi MARA, Amount: RM26k, Duration: Aug 2015-Jan 2017 – **Completed**.
- [3] FRGS, Amount: RM111,170 Duration: Dec 2014-Dec 2016 - **Completed**.
- [4] PRGS, Amount: RM150k, Duration: Jan 2012-April 2016 - **Completed**.
- [5] ERGS, Amount: RM150k Duration: June 2013-June 2016 - **Completed**.
- [6] FRGS, Amount: RM108k Duration: Ogos 2011- Mac 2014 – **Completed**
- [7] ANGKASA Grant, Kementerian Sains Teknologi Dan Inovasi, Amount: RM102,730, Duration: Aug 2012 to Aug 2015 - **Completed**.
- [8] RACE, Amount: RM48k, Duration: Dec 2012-Jan 2016 - **Completed**.
- [9] RAGS, Amount: RM72800 RM Duration: Jan 2013-Jan 2015 - **Completed**.
- [10] RAGS, Amount: RM65k RM Duration: Sept 2013-Sept 2015 - **Completed**.
- [11] FRGS, Amount: RM71,450 Duration: July 2011-June 2013 - **Completed**.
- [12] Islamic Educational, Scientific, and Cultural Organization (ISESCO) Amount: RM38831, Duration: Jan 2016-Jan 2018 – **Completed**



- [13] Kurita Water and Environment Foundation, Japan, Amount: RM11,893.00 (JPY300,000), Duration: October 2016-October 2017- Completed.
- [14] FRGS, Amount: RM143,600 Duration: Nov 2015-Nov 2018 - Completed.
- [15] FRGS, Amount: RM84,800 Duration: July 2014-Jan 2017 - Completed.
- [16] FRGS, Amount: RM93,200 Duration: Nov 2015-Oct 2017 – Completed.
- [17] RACE, Amount: RM49,900, Duration: Feb 2014-Feb 2017 - Completed.

### **Ongoing**

- [1] FRGS, Amount: RM136,000 Duration: Jan 2019 to Dec 2020 -Ongoing.
- [2] GPU, Amount: RM20000, Duration: June 2018 to June 2019 – Ongoing.

### **Contribution to Society**

#### **International Journal Reviewer**

- [1] ACS Applied Materials & Interfaces – Impact Factor (IF):6.723 - 2 Contribution in Reviewing.
- [2] Chemical Engineering Journal-Elsevier-IF: 5.310 - 2 Contributions in Reviewing.
- [3] ACS Sustainable Chemistry & Engineering– Impact Factor (IF): 5.267- 1 Contribution in Reviewing.
- [4] Journal of Cleaner Production- IF:4.959-1 Contributions in Reviewing.
- [5] Journal of Hazardous Materials-IF: 4.836 -1 Contribution in Reviewing.
- [6] Materials and Design-IF:3.997- 7 Contributions in Reviewing.
- [7] Organic Electronics-IF:3.471- 1 Contributions in Reviewing.
- [8] Applied Surface Science-Elsevier-IF: 3.150 -2 Contribution in Reviewing.
- [9] Journal Alloy and Compound-Elsevier-IF:3.014- 9 Contributions in Reviewing.
- [10] Materials Letters-Elsevier- IF: 2.489-35 Contributions in Reviewing.
- [11] Materials Science in Semiconductor Processing –IF: 2.264 -1 Contribution in Reviewing.
- [12] Journal of Nanomaterials-Hindawi-IF: 1.758-1 Contribution in Reviewing.
- [13] Vacuum- IF:1.558 - 2 Contributions in Reviewing.
- [14] Desalination and Water Treatment-Taylor and Francis –IF: 1.272-1 Contribution in Reviewing.
- [15] Journal of Taibah University Medical Sciences, Elsevier –IF:0.530-1 Contribution in Reviewing.
- [16] Journal of Nanoparticle Research-Springer –IF:2.184-1 Contribution in Reviewing.
- [17] Materials Research Innovations, Taylor & Francis -IF: 0.830 -1 Contribution in Reviewing.
- [18] Journal of Materials Research –Cambridge University Press -2 Contributions in Reviewing.
- [19] Cogent Chemistry-Taylor and Francis-1 Contribution in Reviewing.
- [20] Cogent Environmental Science-Taylor and Francis-1 Contribution in Reviewing.
- [21] Journal of Engineering-Hindawi-1 Contribution in Reviewing.
- [22] Advancement in Scientific and Engineering Research-Scienceweb Publishing (2014) -1 Contribution in Reviewing.
- [23] Advances in Materials Physics and Chemistry-Scientific Research-1 Contribution in Reviewing.
- [24] Pertanika Journal of Science & Technology, Scopus-1 Contribution in Reviewing.
- [25] Jurnal Sains dan Matematik, FSM, UPSI -1 Contribution in Reviewing.
- [26] Reviewer of new book proposal titled *Thermal Transport in Carbon-Based Nanomaterials* from Gang Zhang (Institute of High Performance Computing, A\*STAR, Singapore) for Micro & Nano Technology Book Series, Elsevier (Remunerated USD100) - October 2015.
- [27] External Examiner, PhD Thesis, Bharathidasan University, India, 2017 (1 PhD Student).
- [28] External Examiner, PhD Thesis, Anna University Chennai, India, 2017 (2 PhD Students).
- [29] External Examiner, PhD Thesis, UiTM, Malaysia, 2018 (1 PhD Student).
- [30] External Examiner, PhD Thesis, UTM, Malaysia, 2017-2018 (2 PhD Students).
- [31] External Examiner, MEng Thesis, USM, 2016 (1 MSc Student).
- [32] External Examiner, MSc Thesis, UniMAP, 2017 (1 MSc Student).
- [33] External Examiner, MSc Thesis, UTM, 2015-2018 (6 MSc Students).
- [34] External Examiner, MEng Thesis, UTHM, 2015-2018 (3 MSc Student).
- [35] External Examiner, MSc Thesis, UPM, 2018 (1 MSc Student).
- [36] 2012 IEEE Symposium on Business, Engineering & Industrial Applications (ISBEIA 2012).
- [37] 2012 IEEE Colloquium on Humanities, Science and Engineering (CHUSER 2012).

#### **Keynote and Invited Speaker**

- [1] Keynote Speaker at UPIS 2018 and The 32nd National Seminar on Physics PSI Programme, Universitas Negeri Semarang, INDONESIA, 03-05 May 2018.
- [2] Keynote Speaker at International Conference on Engineering, Life Sciences and Social Science (ICEL3S 2018), Universiti Selangor (UNISEL), MALAYSIA, 09-10 Feb 2018.
- [3] Keynote Speaker at The 9<sup>th</sup> International Conference on Nanoscience and Nanotechnology 2018 (Nano-SciTech 2018), UiTM Malaysia, 26 Feb – 1 March 2018.
- [4] Keynote Speaker at International Conference on Engineering, Life Sciences and Social Science (ICEL3S 2018), UNISEL MALAYSIA, 9-10 Feb 2018.
- [5] Keynote Speaker at 13th National Seminar on Laboratory Technology (SKETMA 13), UPSI MALAYSIA, 21-23 Aug 2017.
- [6] Keynote Speaker at The 2<sup>nd</sup> Electronic and Green Materials International Conference 2016 (EGM 2016), Phuket, THAILAND, 1-2 May 2016.



- [7] Invited Speaker at International Conference on Nano for Energy and Water (NEW)-2017 and Indo-French Workshop on Water Networking, University of Petroleum and Energy Studies (UPES), Dehradun, INDIA, 22-24 Feb 2017.
- [8] Invited Speaker at 8th International Conference on Nanoscience and Nanotechnology (Nano-Scitech 2017), Institute of Business Excellence, UiTM Shah Alam, MALAYSIA, 24 – 27 February 2017
- [9] Invited Speaker at International Conference on Recent Advances in Material and Chemical Sciences (ICRAMCS-2015), Gandhigram Rural Institute, Gandhigram, Tamil Nadu, INDIA, 14-15 December 2015.
- [10] Invited Speaker at National Congress on Membrane Technology 2016 (NATCOM 2016), Johor, MALAYSIA, 24-25 August 2016.
- [11] Invited Speaker at 3<sup>rd</sup> Malaysia Graphene and Carbon Nanotubes Workshop on 19-20 Oct 2015, UTM, Kuala Lumpur, MALAYSIA.
- [12] Invited Speaker for International Conference on Nanoelectronic Technology Devices and Materials 2015 (IC-NET 2015), Shah Alam, Malaysia, 27 February-3 March 2015.
- [13] Invited Speaker for Graduate-on-Time (GOT) Workshop Targeting Postgraduate Students, Institute of Graduate Studies, UPSI, 2015.
- [14] Invited Speaker for GOT Workshop Targeting Postgraduate Students, Institute of Graduate Studies, UPSI, 2014.
- [15] Invited Speaker for the PL-Raman Workshop on the 27 - 28 November 2013 at Universiti Teknologi MARA (UiTM), Shah Alam, jointly organised together with ALV Technologies Sdn Bhd and University of Malaya (UM).
- [16] Invitation to deliver a motivational talk in conjunction with the "Kem Naungan Wahyu 2016" under Pusat Pengajian Ilmu Wahyu, Persatuan Huffaz, Melaka, 27 November 2016.
- [17] Invitation to deliver a motivational talk in conjunction with the "Kem Naungan Wahyu 2015" under Pusat Pengajian Ilmu Wahyu, Persatuan Huffaz, Melaka, 21-22 November 2015.
- [18] Invitation to deliver a motivational talk and share success stories/ experience in conjunction with school holiday programme (MAY 2015) organised by Pusat Pengajian Ilmu Wahyu, Persatuan Huffaz, Melaka, 30-31 May 2015.
- [19] Invitation to deliver a motivational talk and share success stories/ experience in conjunction with school holiday programme (MAY 2014) organised by Pusat Pengajian Ilmu Wahyu, Persatuan Huffaz, Melaka, 31 May 2014.
- [20] Invitation to deliver a motivational talk in conjunction with school holiday programme (November 2014) organised by Pusat Pengajian Ilmu Wahyu, Persatuan Huffaz, Melaka, 22-23 Nov 2014.
- [21] Invitation to deliver a motivational talk in conjunction with the "Kem Naungan Wahyu 2013" under Pusat Pengajian Wahyu, Persatuan Huffaz, Melaka.
- [22] Invitation to present the latest research activities in conjunction with the Institute of Science (IOS), UiTM colloquium series 2012.
- [23] Invitation to deliver a motivational talk in conjunction with the "Kem Naungan Wahyu 2012" under Pusat Pengajian Wahyu, Persatuan Huffaz, Melaka.
- [24] Invitations to deliver talks on the meeting of Deputy Vice Chancellor and postgraduate (MSc, PhD) Students.

#### **Appointments/Committee**

- [1] Deputy Vice Chancellor (Research and Innovation), UPSI, 1 Feb 2019-1 Feb 2022.
- [2] Appointed as UPSI's Senate Member, 9 Jan 2019 - 8 Jan 2022.
- [3] Appointed as Preliminary Jury Panel for the L'Oréal-UNESCO For Women in Science Award 2018 by L'Oréal Malaysia, 6 June - 25 Oct 2018.
- [4] Appointed as Chairman for Workshop on Appraiser Preparation for Standard of Secondary School Curriculum Textbooks, Central Zone 2018, organised by Textbook Division of Ministry of Education Malaysia 24-26 Jan 2018.
- [5] Appointed As Member of The Evaluation Committee on Fundamental Research Funding of Higher Education Ministry, 10 Jan 2018.
- [6] Appointed as Deputy Chairman for selection panel of BEST JOURNAL AWARD CATEGORY during MAPIM-KPT AWARD 2017 organised by MAPIM (MALAYSIA SCHOLARLY PUBLISHING COUNCIL) and Ministry of Higher Education on 13 DEC 2017 - 30 APR 2018.
- [7] Appointed as Steering Committee for MALAYSIA SCHOLARLY PUBLISHING COUNCIL session of 2018/2019.
- [8] Appointed as Committee Member of Research, Publication, Consultation, Commercialization and Innovation Committee (MJ3PIU), UPSI, July 2018 onwards.
- [9] Appointed as Task Force member for UI Greenmetric World University Ranking, Universiti Pendidikan Sultan Idris, Sept 2018 - Sept 2020.
- [10] Appointed as Chief Panel for UPSI Academic Excellence Award 2017, Universiti Pendidikan Sultan Idris, 16 October 2018.
- [11] Appointed as Committee Member for 6th International Postgraduate Conference on Science and Mathematics 2018 (IPCSM 2018) & International Conference on Education, Mathematics and Science 2018 (ICEMS 2018) 30 -31 October 2018.
- [12] Appointed as Advisory Committee for 2nd International Symposium on Advanced Materials and Nanotechnology 2018, UPM, MALAYSIA, 15-16 Aug 2018.
- [13] Appointed as Speaker for International Research Grant Workshop and Publication Talk, FSM UPSI, 17 April 2018
- [14] Appointed as Nanotechnology Panel for Workshop on Development of National Nanotechnology Laboratory by NATIONAL NANOTECHNOLOGY CENTRE, MOSTI on 26-28 NOV 2017.
- [15] Appointed as Preliminary Jury Panel for the L'Oréal-UNESCO For Women in Science Award 2017 by L'Oréal Malaysia, 6 June - 24 Oct 2017.
- [16] Appointed as Unpaid Consultant for Universiti Pendidikan Sultan Idris's Lecturers for International Postgraduate Conference on Science and Mathematics 2017 (IPCSM 2017) & International Conference on Science, Technology, Engineering and Mathematics 2017 (ICSTEM2017) by Educational Planning and Research Division, Ministry of Education Malaysia 1 April -30 October 2017.
- [17] Director of UPSI PRESS, UPSI, 15 Aug 2017 - 1 Jan 2019.
- [18] Editorial Board for Cogent Physics, Taylor & Francis Group, Oxfordshire, UK, 15 March 2017 until present.
- [19] Chief Editor of EDUCATUM Journal of Science, Mathematics and Technology, UPSI, Feb 2016-Feb 2018.
- [20] Editorial Board for Composite Materials Science Publishing Group (SciencePG) 3 December 2016 until present.
- [21] Editorial Board Members for International Journal of Electrical & Electronic Systems Research (IEESR) (ISSN:1985-5389), 1 February 2017 until present.
- [22] Appointment as Nanotechnology Panel for Workshop on Development of National Nanotechnology Laboratory by NATIONAL NANOTECHNOLOGY CENTRE, MOSTI on 26-28 NOV 2017.
- [23] Appointment as Preliminary Jury Panel for the L'Oréal-UNESCO for Women in Science Award 2017 by L'Oréal Malaysia, 6 June - 24 Oct 2017.
- [24] Appointed as Deputy Chairman for selection panel of Best Journal Award Category during MAPIM-KPT Award 2017 organised by MAPIM (Malaysia Scholarly Publishing Council) and Ministry of Higher Education on 13 DEC 2017 - 30 APR 2018
- [25] Appointed as SECRETARIAT for UPSI's Journal Article Writing & Publishing Workshop, 16 NOV 2017
- [26] Appointed as Technical Manager in the Committee Member for ISO Certification of FESEM Laboratory, Faculty Science & Mathematics, UPSI, 04 Oct 2017 - 04 Oct 2019.
- [27] Appointed as Expert Panel for the Revisions of Degree Program - Bachelor Degree in Education (Physics) with Honours- 1 Oct 2017 - 30 Sept 2018.
- [28] Head of Department of Physics, Faculty of Science & Mathematics (FSM), UPSI, May 2013-May 2015.
- [29] Research Fellow-Nanotechnology Research Centre, FSM, UPSI.
- [30] Research Fellow-NANO-SciTech Centre, Institute of Science, UiTM.
- [31] Invited speaker for Sharing Session Program "Tips to Get International and Industrial Grants : Toray and Kurita", at Faculty of Electrical Engineering UiTM Shah Alam, 5 Apr 2017.
- [32] Invited to give Consultation and Professional Advice for Fundamental Research Grant Scheme Application, Faculty of Engineering and Life Sciences, UNISEL, 18 Jan 2017.
- [33] Invitation as Speaker for FRGS Grant Workshop 2017 at Fakulti Seni Komputeran dan Industri Kreatif, UPSI, 19 Jan 2017.
- [34] Invitation as Speaker for Sharing Sessions for International Research Grant Application, Faculty of Science and Mathematics, UPSI, 22 Feb 2017.

- [35] Director- Community Service Program "A Day as a Junior Scientist" with Sekolah Rendah Integrasi Teras Islam, Slim River, Perak, 7 Sept. 2016, UPSI.
- [36] MOHE Grant Assessor Programme, AKEPT, MOHE, 19-20 Sept. 2016.
- [37] Panel Interviewer for University Lecturer (DS52) - 14 Aug 2014.
- [38] Panel Interviewer for Pure Science Scholarship Programme (MYBRAINSC) 2016 Sponsorship of Ministry of Education Malaysia - 25-28 July 2016.
- [39] Invited Facilitator for Workshop on National Graphene Development Plan organised by National Nanotechnology Directorate (NND), MOSTI – Melaka-17-19 June 2014.
- [40] Represented UPSI during Workshop on National Nanocellulose Roadmap and Action Plan Development in conjunction with National Nano Programme 2016, NND, MOSTI -12 October 2016.
- [41] Represented UPSI in Nanocellulose Research Planning Workshop – Preparing Roadmap and Action Plan Development Phase by NND, MOSTI -24 November 2016
- [42] Invitation as Expert Consultant for Poster Presentation Judging Scheme in The International Conference on Life Sciences Revolution 2016 (ICLSR 2016)-Shah Alam- 29-30 November 2016.
- [43] Invited as Panel Judge during 2<sup>nd</sup> National Festival on Science, Technology & Innovation – Faculty of Applied Sciences UiTM, 14 Nov 2016.
- [44] Appointed as Judge for oral presentation session during National Congress on Membrane Technology Conference 2016 (NATCOM 2016) Johor, 24-25 August 2016.
- [45] Appointed as Advisory Committee for Master of Technology (Material Science) Program, Faculty of Science, Universiti Malaya, 16 June 2015.
- [46] Invited as participant for Workshop on Best Practice For Grant Assessor – Series 3, Ministry Of Higher Education, as preparation for the appointment as Grant Assessor Panel, AKEPT Bandar Enstek, Negeri Sembilan, 19-20 Sept 2016.
- [47] Scientific Committees- National Congress on Membrane Technology 2016 (NATCOM 2016) Johor, 24-25 August 2016.
- [48] Participant- 4<sup>th</sup> Malaysia 2D Materials and Carbon Nanotube Workshop (2DMC2016)-17-18 October 2016.
- [49] Participant- Seminar on Chemicals & Nanomaterials Management in Collaboration with OECD EHS & WPMN, 28-29 September 2016.
- [50] Participant- Workshop on Regulation and Safety of Nanotechnology, 5-6 October 2015.
- [51] Participant- Carbon Nanomaterials and Environmental Workshop, 10 October 2016.
- [52] Appointed as Committee Member for Pondok Pengajian Ilmu Wahyu, Merlimau, Melaka- 2 April 2015-2 April 2017.
- [53] Appointed as Committee Member for Pondok Pengajian Ilmu Wahyu, Merlimau Melaka- 1 April 2014- 1 April 2015.
- [54] Participated and demonstrated Science Project during Malaysia Toray Science Foundation Science Education Fair-Pusat Sains Negara, Kuala Lumpur- 30 Nov-1<sup>st</sup> Dec 2013.
- [55] Appointed as External Panel for Unisel's Academic Staff Promotion (Assoc. Prof.) -26 Sept. 2014.
- [56] Appointed as Committee Member for FSM's International Guest Lecture-3 Sept 2015.
- [57] Appointed as Committee Member for STEM Encouragement Program during the Profesor Turun Padang Carnival-14 Feb 2014.
- [58] Appointed as Assessor for Kursus Pensijilan PdP for New lecturer-22 Sept 2014.
- [59] Appointed as Expert Panel for New Degree Program - Bachelor Degree in Applied Physics with Education-12 July. 2016
- [60] Appointed as Expert Panel for New Degree Program - Bachelor Degree in Applied Physics with Education-12 Apr. 2016.
- [61] Appointed as Expert Panel for New Degree Program - Bachelor Degree in Applied Physics with Education-3 Oct. 2014.
- [62] Appointed as Consultant for International Postgraduate Conference on Science and Educatum (IPCSM'14)-1 June 2014.
- [63] Appointed as Consultant for Perak Expo Young Scientist 2014 (PEYS 2014)-8 Oct 2014.
- [64] Appointed as Secretariat for Workshop on Teaching Aid Material preparation -20 Apr 2015.
- [65] Judge for Perak Expo Young Scientist 2014 (PEYS 2014)-8 Oct 2014.
- [66] Member- Research, Publication, Consultation and Commercialization Committee, FSM, 1 June 2016-31 May 2017.
- [67] Head- Research and Publication Management Committee, Physics Dept, FSM, UPSI -2012-until now.
- [68] Member-Curriculum Committee, Physics Dept, FSM, UPSI -2012-until now.
- [69] Member-Occupational Safety and Health Committee, Physics Dept, FSM, UPSI -2012-until now.
- [70] Member- Technical Committee: Procurement, Budget and Expenditure, Physics Dept, FSM, UPSI -2012-until now.
- [71] Chairperson - IC-NET 2015, Shah Alam, Malaysia.
- [72] Technical Committee of IC-NET 2015, Shah Alam, Malaysia.
- [73] Technical Committee of NANOSciTech2014 conference.
- [74] Chairperson - NANOSciTech2014, Shah Alam, Malaysia.
- [75] Judge for *Ekspo Penyelidikan dan Inovasi Dalam Pendidikan Antarabangsa*, UPSI, 2013.
- [76] UPSI and Faculty Internal Assessor for GPU, FRGS, MTSF Science & Technology Research Grant, 2013-2016.
- [77] Member of *Jawatankuasa Inovasi dan Pengkomersialan Universiti*, UPSI 2014.
- [78] Chairperson-APMAS2013, Antalya, Turkey
- [79] Chairperson - ISBEIA 2012, Bandung, Indonesia.
- [80] Chairperson - NANOSciTech2013, Shah Alam, Malaysia.
- [81] Technical Committee of NANOSciTech2013 conference.
- [82] Technical Committee of International Postgraduate Conference on Science and Mathematics 2013, UPSI.
- [83] Member - Institute Physics Malaysia.
- [84] Member – IEEE (Membership No.: 92333473)
- [85] Member - Institute of Physics (IOP) ((Membership No.: 80049257)
- [86] Member-The Malaysian Solid State Science and Technology Society MASS (Membership No.: 366)
- [87] Member-Malaysian Membrane Society.
- [88] Member- Asian Nanoscience and Nanotechnology Association.
- [89] Member- Analytical Science Association Malaysia.