

CURRICULUM VITAE

PERSONAL DETAILS

Name : IKHWAN SYAFIQ BIN MOHD NOOR
Designation : Ts. Dr.
Date of Birth : 31 December 1988
Age : 35 years old
Gender : Male
Nationality : Malaysian
Marital Status : Single
Religion : Muslim
Race : Malay
Tel. No. : +603 9769 3138
E-mail Address : imnoor@upm.edu.my
imnoor88@gmail.com



Address : Physics Division, Centre for Foundations Studies in Sciences of Universiti Putra Malaysia, Universiti Putra Malaysia, 43400 Serdang, Selangor Darul Ehsan, MALAYSIA

Research ID : Scopus : 55170040900
Google Scholar : Ikhwan Syafiq Mohd Noor
Web of Science : R-8359-2019

h-index : [Web of Science](#) : 13 (Citation = 753) (until 4 February 2024)
[Scopus](#) : 13 (Citations = 873) (until 4 February 2024)
[Google Scholar](#) : 15 (Citations = 1073) (until 4 February 2024)

ACADEMIC QUALIFICATION

Ph.D., (2017), University of Malaya, Malaysia
B.Sc. (Physics), (2011), University of Malaya, Malaysia

AREAS OF EXPERTISE

Polymer Electrolytes, Solid State Ionic, Dielectric Spectroscopy, Energy Devices (Dye Sensitized Solar Cells, Perovskite Solar Cells, Batteries and Electrical Double Layer Capacitor)

TEACHING

Pre-Degree Level

Physics 1 (General Physics, Mechanics, Wave and Vibration, Optics)

Physics 2 (Thermal Physics, Electricity and Magnetism, Modern Physics, Nuclear Physics)

Academic Session	Semester	Course Title	No of Students	Total Credit Hours
2023/2024	2	Physics 2	35	200
2023/2024	2	Physics 2	40	200
2023/2024	1	Physics 1	37	200
2022/2023	2	Physics 2	25	200
2022/2023	2	Physics 2	24	200
2022/2023	1	Physics 1	26	100
2022/2023	1	Physics 1	28	100
2021/2022	2	Physics 2	37	200
2021/2022	2	Physics 2	37	200
2021/2022	1	Physics 1	43	200
2020/2021	2	Physics 2	38	200
2020/2021	2	Physics 2	37	200
2020/2021	1	Physics 1	40	200
2019/2020	2	Physics 2	45	200
2019/2020	2	Physics 2	43	200
2019/2020	1	Physics 1	43	200
2018/2019	2	Physics 2	49	200
2018/2019	2	Physics 2	48	200

2018/2019	1	Physics 1	48	200
2018/2019	1	Physics 1	48	200
2017/2018	2	Physics 2	47	200
2017/2018	2	Physics 2	48	200

SUPERVISION

Programme	On-Going		Complete	
	Main Supervisor	Co-Supervisor	Main Supervisor	Co-Supervisor
PhD	1	3	0	2
MSc	2	2	0	1
BSc	0	0	13	0
Total	3	5	13	4

Postgraduate Students

- Nurnilamsari Binti Shamshurim, Doctoral Degree (PhD), Study of the Structural, Thermal, and Electrical Characterization of Gellan Gum-Based Solid Polymer Electrolyte for Potential Application in Sodium-Ion Batteries, Universiti Putra Malaysia, Main-Supervisor, On-Going (9 October 2023 until present)
- Sulayman Muhammad Kabeer, Doctoral Degree (PhD), Synthesis and Characterization of Extended Cations Bismuth Flouride Perovskite for Photovoltaic Application, Universiti Putra Malaysia, Co-Supervisor, On-Going (21 March 2022 until present)
- Adezuka Yahaya, Doctoral Degree (PhD), Electrical and Optical Characterization of Copper Zinc Tin Selenide Quaternary Metal Chalcogenide Thin Films Via Thermal Evaporation for Photovoltaic Application, Universiti Putra Malaysia, Co-Supervisor, On-Going (18 October 2021 until present)
- Zaiful Edi Bin Mohd Rojudi, Master's degree (With Thesis), Preparation and Characterization of GG-LiBOB Based Electrolyte for Potential Li-Ion Battery Application, Universiti Putra Malaysia, Main-Supervisor, On-Going (2 September 2021 until present)
- Khairul Helmy bin Kamalul Arifin, Master's Degree (With Thesis), Preparation and Characterization of GG-LiTFSI Based Electrolyte for Potential Dual-Ion Battery Application, Universiti Putra Malaysia, Main-Supervisor, On-Going (2 August 2021 until present)
- Nurul Najihah binti Mazu, Master's Degree (With Thesis), Enhanced Electromagnetic Interference Shielding Performance of Polystyrene Polymer with Iron Selenide Filler for 5th Generation Communication System, Universiti Putra Malaysia, Co-Supervisor, On-Going (29 Mac 2021 until present)
- Siah Kai Xin, Master's Degree (With Thesis), Spray Coating of Graphene Composite on Glass Silica, Universiti Putra Malaysia, Co-Supervisor, On-Going (2020 until present)
- Puteri Najihah binti Megat Zakaria, Doctoral Degree (PhD), Dye Extracted from Sargassum Spinosum Seaweed as Natural Sensitizers for Dye-Sensitized Solar Cell, Universiti Teknologi MARA, Co-Supervisor, Completed (27 November 2019 until 23 January 2024)
- Hazirah binti Che Hassan, Doctoral Degree (PhD), High Conductivity Polymer Electrolyte for Thermeoelectrochemical Applications, Universiti Malaya, Co-Supervisor, On-Going (30 April 2018 until present)
- Anne Tham, Master's Degree (With Thesis), Development of Transparent Conducting Electrode Using Graphene on Flexible Substrate, Universiti Putra Malaysia, Co-Supervisor, Completed (19 December 2018 until 2024)
- Chai Kai Ling, Doctoral Degree (PhD), Synthesis and Characteristics of Polyurethane Acrylate Gel Polymer Electrolyte for Dye Sensitized Solar Cell Application, Universiti Putra Malaysia, Co-Supervisor, Completed (3 April 2017 until 28 February 2022)

Undergraduate Students (Final Year Student)

- Alia Wardina Binti Mashuri, Tapioca Starch-Lithium Trifluoromethanesulfonate Gel Polymer Electrolyte for Lithium-Ion Battery Applications, Main-Supervisor, Completed (13 March 2023 until 24 January 2024)
- Muhammad Amirul Ariff Bin Mohamad Adli, Impact of Lithium Iodide in Gellan Gum-Based Gel Polymer Electrolyte and its performance in Dye Sensitized Solar Cells, Main-Supervisor, Completed (13 March 2023 until 24 January 2024)

14. Muhammad Syafi Haziq bin Mohd Fauzi, Polymer Electrolyte Based on Tapioca Starch for Dye Sensitized Solar Cells Application, Main-Supervisor, Completed (13 March 2023 until 24 January 2024)
15. Wan Muhammad Muizzuddin bin Wan Mazlan, BMII as Charge Supply in GG-Based Gel Polymer Electrolyte and its Performance in DSSC Application, Main-Supervisor, Completed (13 March 2023 until 24 January 2024)
16. Nurnilamsari Binti Shamshurim, Preparation and Characterization of GG-based polymer electrolyte for potential application in Sodium-ion batteries, Main-Supervisor, Completed (21 March 2022 until 12 February 2023)
17. Nur Nabila Huda Binti Kamaruzaman, Impact of Succinonitrile as a Plasticizer on the Charge Transport Properties in Polymer Electrolytes, Main-Supervisor, Completed (21 March 2022 until 12 February 2023)
18. Fatin Izzati Binti Zul Faqar, Preparation and characterization of gel polymer electrolyte for potential application in perovskite solar cells, Main-Supervisor, Completed (21 March 2022 until 12 February 2023)
19. Muhammad Aliff Bin Mohd Yusoff, Characterization of GG-TMAI-I₂ Gel Polymer Electrolytes for Dye Sensitized Solar Cell Applications, Main-Supervisor, Completed (21 March 2022 until 12 February 2023)
20. Nik Muhammad Azamuddin Bin Che Daud, Preparation and Characterization of GG-LiCF₃SO₃-DMSO Based Gel Polymer Electrolyte for Potential Lithium-Ion Batteries Application, Main-Supervisor, Completed (22 March 2021 until 20 February 2022)
21. Muhamad Izzat Bin Mohd Azmi, Studies of Ion Transport Properties in GG-TPAI Gel Polymer Electrolytes and Its Potential for Dye-Sensitized Solar Cells Application, Main-Supervisor, Completed (22 March 2021 until 20 February 2022)
22. Muhammad Akmal Hakeem Bin Mohd Irman, Development of GG-LiI Gel Polymer Electrolytes for Potential Dye-Sensitized Solar Cells Application, Main-Supervisor, Completed (22 March 2021 until 20 February 2022)
23. Nurul Athirah Binti Mohd Asri, Preparation and Characterization of GG-LiBOB-DMSO Gel Polymer Electrolytes for Potential Application in Lithium-Ion Battery, Main-Supervisor, Completed (10 February 2020 until 4 February 2021)
24. Nurulhuda Athirah Binti Sharkhan, Preparation and Electrical Characterization of Corn Starch Based Gel Polymer Electrolyte, Main-Supervisor, Completed (10 February 2020 until 4 February 2021)

DUTIES IN UNIVERSITI PUTRA MALAYSIA

1. **Course Coordinator** APS0504 (Physics 1), Semester 1, Session 2023/2024, Pusat Asasi Sains Universiti Putra Malaysia, UPM
2. **Chairman**, Pre-University Matriculation Innovation Competition 2023 (PIITRAM2023), Universiti Putra Malaysia, Selangor, Malaysia, 18 February 2023. (*National*).
3. **Evaluation Panel**, Programme Self Review Report (PSRR) for Database Audit Requirements, Pusat Asasi Sains Pertanian, Universiti Putra Malaysia 15 July 2022
4. **Main Committee**, Projek Infaq Kemanusiaan Kemanusiaan Di Bumi Kemboja, Centre of Foundation Studies for Agricultural Science, Universiti Putra Malaysia, 15 September 2021
5. **Technical Data**, Jawatankuasa Pemantau Penyakit Berjangkit Pusat Asasi Sains Pertanian, Universiti Putra Malaysia, 2 Ogos 2021 to 19 Jun 2022
6. **Academic Advisor**, Group 3, Session 2021/2022, Pusat Asasi Sains Pertanian, UPM, 2 August 2021 to 13 May 2022
7. **Facilitator**, ASPer Head Start 2021, Pusat Asasi Sains Pertanian, UPM, 4 August 2021
8. **Committee members**, Program Hari Terbuka Pusat Asasi Sains Pertanian (Secara Dalam Talian), Pusat Asasi Sains Pertanian, UPM, 16 June 2021
9. **Speaker Panel**, Program Hari Terbuka Pusat Asasi Sains Pertanian (Secara Dalam Talian), Pusat Asasi Sains Pertanian, UPM, 16 June 2021
10. **Committee Member**, Asper Physics Exhibition (APEX) 2020/2021, Pusat Asasi Sains Pertanian, UPM, 21 May 2021
11. **Curriculum Committee**, Centre of Foundation Studies for Agricultural Science, Universiti Putra Malaysia, 10 February 2021 to 9 February 2023
12. **Head**, Physics Division, Centre of Foundation Studies for Agricultural Science, Universiti Putra Malaysia, 2 January 2021 to 1 January 2023
13. **Unit Committee for Industrial and Community Networks (STEM)**, Physics Division, Pusat Asasi Sains Pertanian, UPM, 1 January 2020 to 31 December 2020

14. **Advisor**, Asper Physics Exhibition (APEX) 2020, Group 12, Session 2020/2021, Pusat Asasi Sains Pertanian, UPM, 3 August 2020 to 10 May 2021
15. **Facilitator**, ASPer Head Start 2020, Pusat Asasi Sains Pertanian, UPM, 28 July 2020
16. **Academic Advisor**, Group 12, Session 2020/2021, Pusat Asasi Sains Pertanian, UPM, 3 August 2020 to 10 May 2021
17. **Examiner** for Final Exam ASP0505 (Physics 2), Semester 2, Session 2018/2019, Pusat Asasi Sains Pertanian, UPM, 29 April 2019
18. **Academic Advisor**, Group 5, Session 2019/2020, Pusat Asasi Sains Pertanian, UPM, 17 June 2019 to 10 May 2020
19. **Committee Members** for ASPer UPM team, Kejohanan Sukan Inter-Asasi Peringkat Kebangsaan, UniSZa and UMT, 23 to 26 January 2019
20. **Head of Laboratory**, Semester 2, Session 2018/2019, Physics Division, Pusat Asasi Sains Pertanian, UPM
21. **Head Examiner** for Final Exam ASP0504 (Physics 1), Semester 1, Session 2018/2019, Pusat Asasi Sains Pertanian, UPM, 29 October 2018
22. **Facilitator**, Program Pintar Sains dan Matematik 2018, SMK Seoharto, Hulu Selangor, 17 Oktober 2018
23. **Committee Members**, Program Pintar Sains dan Matematik 2018, SMK Seoharto, Hulu Selangor, 17 Oktober 2018
24. **Facilitator**, ASPer Head Start, Session 2018/2019, Pusat Asasi Sains Pertanian, UPM, 4 June 2018
25. **Head Facilitator**, Program Putra Perkasa, Session 2018/2019, Pusat Asasi Sains Pertanian, UPM, 1 to 4 June 2018
26. **Academic Advisor**, Group 12, Session 2018/2019, Pusat Asasi Sains Pertanian, UPM
27. **Course Coordinator** APS0504 (Physics 1), Semester 1, Session 2018/2019, Pusat Asasi Sains Pertanian, UPM
28. **Assessor** for Final Exam Questions and Answer Scheme ASP0505 (Physics 2), Semester 2, Session 2017/2018, Pusat Asasi Sains Pertanian, UPM
29. **Liaison Officer**, Asper Sport Carnival, Pusat Asasi Sains Pertanian, UPM, 24 & 25 March 2018
30. **Moderator**, Asasi Education Fair 2018, Pusat Kebudayaan Kesenian Sultan Salahuddin Abdul Aziz Shah UPM, 7 March 2018
31. **Preserving Committee Members**, Pusat Asasi Sains Pertanian UPM, 11 October 2017 to 10 October 2019
32. **Committee Members** for Occupational Safety and Health, Pusat Asasi Sains Pertanian UPM, 11 October 2017 to 10 October 2019

INVOLVEMENT OF STUDENT ACTIVITIES IN UNIVERSITI PUTRA MALAYSIA

1. **Jury**, Pertandingan Nyanyian Tema Kemerdekaan, Minggu Sambutan Kemerdekaan Pusat Asasi Sains Pertanian, Pusat Asasi Sains Pertanian, UPM, 21 to 30 August 2019
2. **Jury**, Pertandingan Deklamasi Sajak, Minggu Sambutan Hari Kemerdekaan Malaysia ke 61, Pusat Asasi Sains Pertanian, UPM, 27 to 30 August 2018

LIST OF RESEARCH GRANTS

No.	TITLE	SOURCE	TOTAL FUNDING (RM)	DURATION
1.	Polymer Electrolyte Based on Tapioca Starch for Dye Sensitized Solar Cells Application	Geran Putra Inisiatif (UPM) (Principal Investigator) [2023/9766000-10203]	6,000.00	1 December 2023-30 November 2025 (24 months)
2.	Investigation of Ion Transport Properties in Gellan Gum-Based Biopolymer Electrolytes for Lithium Polymer Batteries	Geran Putra Inisiatif Siswazah (UPM) (Principal Investigator) [2022/9716900-10203]	32,000.00	1 July 2022-30 June 2024 (24 months)
3.	Novel Polymer Electrolyte based Polyurethane Acrylate for Low Cost Perovskite Solar Cells Applications	International Polyurethane Technology Foundation (Principal Investigator) [2021/6380078-10203]	37,327.00 (1,000,000 JP Yen)	1 April 2021-30 June 2022 (15 months)

4.	Inisiatif Pemerkasaan Penerbitan Jurnal Tahun 2020	Research Management Centre (RMC) UPM (Principal Investigator) [2021/9065003-10203]	4,211.91	24 March 2021 – 23 March 2022 (12 months)
5.	Investigation of the Ion Diffusion and Kinetic Properties of Gellan Gum-Based Biopolymer Electrolytes for Lithium Polymer Batteries	FRGS (Principal Investigator) [FRGS/1/2020/STG05/UPM/02/1]	109,520.00	1 November 2020 – 30 April 2023 (30 months)
6.	3D Printed Emergency Devices	USIM-PPPI (Co-researcher) [USIM-PPPI/COVID-19_0120/FST/051000/10320]	20,000.00	13 April 2020 – 12 October 2020 (6 months)
7.	Graphene Nano Thermal Interface (TIM) using Thermal Reflow Deposition for Semiconductor/Opto-Electronic Applications	FRGS (Co-researcher) [FRGS/1/2019/STG07/UPM/02/9]	105,200.00	1 September 2019 – 31 May 2022 (33 months)
8.	Ionic Transport Mechanism in Plasticized Poly(acrylamide-co-acrylic Acid)/Potassium Iodide/Palygorskite Electrolytes	FRGS (Co-researcher) [FRGS/1/2019/STG07/UPM/02/3]	93,000.00	1 September 2019 – 31 August 2023 (48 months)
9.	Light Absorbance and Adhesion Properties of Sensitizer Extracted from Sargassum spinosum Seaweed	FRGS (Co-researcher) [FRGS/1/2018/STG07/UPM/02/12]	56,700.00	1 January 2019 – 30 September 2021 (33 months)
10.	Study of Gellan Gum Biopolymer Electrolytes for Third Generation Solar Cells Application	Geran Putra Inisiatif Putra Muda (UPM) (Principal Investigator) [GP-IPM/2018/9648000]	55,000.00	2 April 2018 – 31 July 2020 (27 months)

EVALUATION ACTIVITIES

Journal Reviewer

Journal (Publisher)	Number of Invitation
Optical and Quantum Electronics (Springer Nature)	82
Optical Materials (Elsevier)	35
Solar Energy (Elsevier)	6
Materialstoday: Proceeding (Elsevier)	7
High Performance Polymers (SAGE Pub)	4
Journal of Polymer Research (Springer)	5
Ionics (Springer)	7
Journal of Physics and Chemistry of Solids	2
Energy Storage (Wiley)	4
Journal of Food Processing and Preservation (Wiley)	1
Malaysian Journal of Microscopy (Universiti Putra Malaysia)	1
Computational and Structural Biotechnology Journal (Elsevier)	1
Polymer Engineering & Science (Wiley)	1
Molecular Crystals and Liquid Crystals (Taylor & Francis)	1
Malaysian Journal of Analytic Sciences (Universiti Kebangsaan Malaysia)	1
ACS Omega (American Chemical Society)	1
Journal of Spectroscopy (Hindawi)	1
Journal of Physical Chemistry (American Chemical Society)	1

Master Thesis Evaluator

1. Marziyeh Alinejad, Natural Sensitizers for Solar Cell Based on Gel Polymer Electrolytes Containing Iodide/Triiodide Redox Couple, Physics Department, Faculty of Science, University of Malaya, Malaysia, 3 Jun 2022.

Evaluator for Master to PhD Conversion

1. Muhammad Zulhadi Iskandar Bin Radzi, Characterization of Manganese-Based Spinel as Cathode Material for Lithium-Ion Batteries, Institute for Advanced Studies (IAS), University of Malaya, 4 December 2020
2. Muhammad Hazwan Bin Ahmad, Cellulose Derivatives-Based Polymer Electrolyte from Oil Palm Agrowaste for Application in Electrochemical Devices, Centre for Foundation Studies in Science, University of Malaya, 26 August 2020

Final Year Project Assessment

1. Thesis, Mohd. Naim Abshar Bin Mat Asri (200682), Photoluminescence of Lead (II) Sulphide, PbS Quantum Dots, QDs & Lead (II) Sulphide / Manganese (II) Telluride PbS/MnTe Type I Core Shell Quantum Dots, CSQDs, Physics Department, Faculty of Science, Universiti Putra Malaysia, 14 February 2023.
2. Thesis, Nur Ainah Fatin binti Maidin (202988), Effect of Erbium on Physical and Optical Properties on Zinc Borosilicate Glass, Physics Department, Faculty of Science, Universiti Putra Malaysia, 14 February 2023.
3. Thesis, Wang Yuxin (204900), Effect of Tin Oxide Thickness on The Structural and Optical Properties of Inverted Organic Solar Cell, Physics Department, Faculty of Science, Universiti Putra Malaysia, 14 February 2023.
4. Thesis, Shazrul Nizam Bin Mohd Safuan (200907), Pt/C-G Electrocatalyst Deposition on Gas Diffusion Layer Using Spraying Method for Direct Methanol Fuel Cell Application, Physics Department, Faculty of Science, Universiti Putra Malaysia, 14 February 2023.
5. Thesis, Wan Mohamad Shafiq Bin Wan Salleh, Q-Switch Fiber Laser by Using Metro Gain 12 as a Gain Medium, Physics Department, Faculty of Science, Universiti Putra Malaysia, 2021
6. Thesis, See Zhi Bin, Comparison between Graphene and Graphene Oxide Saturable Absorber for Passively Q-Switched Erbium Doped Fiber Laser, Physics Department, Faculty of Science, Universiti Putra Malaysia, 2021
3. Viva Voce, Shah Muhammad Hilmi Bin Abdul Kareem, Theoretical Studies on Metrogain-5 Erbium Doped Fiber for Amplification Purposes, Physics Department, Faculty of Science, Universiti Putra Malaysia, 5 February 2021
4. Viva Voce, Aqilah Binti Mohd Nasir, Mode-Locked Fiber Laser by Using Nonlinear Polarization Rotation Technique, Physics Department, Faculty of Science, Universiti Putra Malaysia, 5 February 2021
5. Viva Voce, Wan Mohamad Shafiq Bin Wan Salleh, Q-Switch Fiber Laser by Using Metro Gain 12 as a Gain Medium, Physics Department, Faculty of Science, Universiti Putra Malaysia, 5 February 2021
6. Viva Voce, See Zhi Bin, Comparison between Graphene and Graphene Oxide Saturable Absorber for Passively Q-Switched Erbium Doped Fiber Laser, Physics Department, Faculty of Science, Universiti Putra Malaysia, 5 February 2021
7. Thesis, Nurul Nabila bintyi Ramdzan Ali, Design and Development of a Polygraph System using Biopotential Signal, Physics Department, Faculty of Science, Universiti Putra Malaysia, 2019
8. Thesis, Leonardo Nico Anak Fernandos Douglas, Synthesis and Characterization of Zinc Oxide Nanorod for Inverted Organics Solar Cell, Physics Department, Faculty of Science, Universiti Putra Malaysia, 2019
9. Viva Voce, Chen Hongxu, The Physical and Structural Properties of Wollastonite Base on Glass Ceramics Derived from CaO-B₂O₃-SLS Glass, Physics Department, Faculty of Science, Universiti Putra Malaysia, 9 December 2019
10. Viva Voce, Aida Farzana binti Bakri, Facile Synthesis of Mesoporous TiO₂/SnO Heterostructure and its Application in Supercapacitor, Physics Department, Faculty of Science, Universiti Putra Malaysia, 9 December 2019
11. Viva Voce, Siti Afiqah binti Husin, Improved Power Conversion Efficiency of Inverted Hybrid Photovoltaic Via Incorporating V₂O_x into Active Layer, Physics Department, Faculty of Science, Universiti Putra Malaysia, 9 December 2019

12. Viva Voce, Nurul Liyana Shahira binti Elfian, Synthesis and Characterization of Nickel Doped Manganese Dioxide Nanowires as Electrode Material in Supercapacitor, Physics Department, Faculty of Science, Universiti Putra Malaysia, 9 December 2019

PUBLICATIONS

Year	Book	Book Chapter	Journal/Proceeding						
			Q1	Q2	Q3	Q4	Scopus	Non-citation index	Proceeding
2024	-	-	1	-	1	-	-	-	-
2023	2	1	-	3	3	4	3	-	-
2022	1	1	6	7	2	-	3	1	-
2021	-	-	1	3	1	-	-	1	-
2020	-	1	2	-	1	-	-	-	-
2019	1	-	-	1	-	-	-	3	-
2018	-	-	-	-	1	1	-	-	-
2017	-	-	2	1	-	1	-	-	4
2016	-	1	-	-	1	-	1	-	-
2015	-	-	-	-	-	-	-	-	-
2014	-	-	2	-	1	-	-	-	-
2013	-	-	1	-	-	-	1	-	-
2012	-	-	1	-	-	-	-	-	-
Total	4	4	15	16	12	6	7	5	4

BOOK PUBLISHED

1. **Ikhwan Syafiq Mohd Noor**, Ya'akob Mansor, Sharudin Omar Baki, Emma Ziezie Mohd Tarmizi, Siti Suzilliana Putri Mohamed Isa, Umair Abdul Halim, Nor Azah Abdul Aziz, Aina Suhaiza Mohamad Nazir, Noor Wahidah Zainol Jamil, Nor Syazana Shamsuddin, Nur Ain Asyiqin Anas, (2023). Physics 1: Mechanics, Waves, and Optics, (pp. 1–154), Pustaka Prinsip Sdn Bhd, ISBN 978-983-053-709-2
2. **Ikhwan Syafiq Mohd Noor**, Ya'akob Mansor, Sharudin Omar Baki, Emma Ziezie Mohd Tarmizi, Siti Suzilliana Putri Mohamed Isa, Umair Abdul Halim, Nor Azah Abdul Aziz, Aina Suhaiza Mohamad Nazir, Noor Wahidah Zainol Jamil, Nor Syazana Shamsuddin, Nur Ain Asyiqin Anas, (2023). Physics Laboratory Manual ASP0504 Session 2023/2024, (pp. 1–29), Pustaka Prinsip Sdn Bhd, ISBN 978-983-053-710-8
3. Eko Nursulistiyo, Muhammad Fadhlullah bin Abd. Shukur, **Ikhwan Syafiq Mohd Noor**, Pujianti Bejahida Donuata, (2022). Development of Physics Laboratory, (pp. 1–45), Penerbit K-Media, ISBN 978-623-17402-0-5
4. A.K. Arof, **I.M. Noor**, M.A. Careem, (2019). Introductory Impedance Spectroscopy, (pp. 1–109), UM Press, ISBN 978-967-12067-2-0

BOOK CHAPTER PUBLISHED

1. **Ikhwan Syafiq Mohd Noor** (2023). Geometrical Optics. In Ikhwan Syafiq Mohd Noor et al., (Eds.), Physics 1: Mechanics, Waves, and Optics (pp. 127–140). ISBN:9780323857888
2. **Ikhwan Syafiq Mohd Noor** and Megat Muhammad Ikhsan Megat Hasnan, (2023). Application of graphene in energy storage devices. In Sanjay J. Dhoble, Amol Nande, N. Thejo Kalyani, Ashish Tiwari, Abdul Kariem Arof (Eds.), Functional Materials from Carbon, Inorganic, and Organic Sources: Methods and Advances (pp. 135–156). Elsevier. doi: [10.1016/B978-0-323-85788-8.00019-7](https://doi.org/10.1016/B978-0-323-85788-8.00019-7) ISBN:9780323857888
3. M.A. Careem, **I.S.M. Noor**, A.K. Arof, (2020). Impedance Spectroscopy in Polymer Electrolyte Characterization. In T. Winie, A.K. Arof, S. Thomas (Eds.), Polymer Electrolytes (pp. 23–64). John Wiley & Sons. doi:[10.1002/9783527805457.ch2](https://doi.org/10.1002/9783527805457.ch2) ISBN:9783527805457
4. M.H. Buraidah, S.N.F. Yusuf, **I.M. Noor**, A.K. Arof, (2016). Optical Properties of Semiconductor Nanoparticles in Photoelectrochemical Cells. In T. Chen and Y. Liu (Eds.), Semiconductor Nanocrystals and Metal Nanoparticles: Physical Properties and Device Applications (pp. 283–306). CRC Press. doi: [10.1201/9781315374628](https://doi.org/10.1201/9781315374628) ISBN:9781315374628

JOURNAL PUBLICATIONS AND PROCEEDINGS

1. Anne Tham, Kai Xin Siah, **Ikhwan Mohd Noor**, Ifwat Ghazali, Sin Tee Tan, Nizam Tamchek, Fabrication and structural modification of graphene oxide-tetraethyl orthosilicate solution via

- liquid-phase pulsed laser ablation, *Journal of Laser Applications*, 36 (2024) 012023. doi: [10.2351/7.0001227](https://doi.org/10.2351/7.0001227) (*ISI/SCOPUS Cited Publication*) (IF=2.1, Q3)
2. Vipin Cyriac, Ismayil, Y.N. Sudhakar, Kuldeep Mishra, Z.E. Rojudi, M.S. Murari, **I.M. Noor**, Effect of dopant on ion-dynamics of sodium ion-based flexible polyblend electrolyte for electrochemical device application, *Materials Research Bulletin*, 169 (2024) 112498. doi: [10.1016/j.materresbull.2023.112498](https://doi.org/10.1016/j.materresbull.2023.112498) (*ISI/SCOPUS Cited Publication*) (IF=5.4, Q1)
 3. Supriya K. Shetty, Ismayil, **Ikhwan Syafiq Mohd Noor**, Sudhakar Narahari Yethadka, Pradeep Nayak, Deciphering the Effect of Microstructural Modification in Sodium Alginate-Based Solid Polymer Electrolyte by Unlike Anions, *ACS Omega*, 8 (46) (2023) 43632–43643. doi: [10.1021/acsomega.3c05094](https://doi.org/10.1021/acsomega.3c05094) (*ISI/SCOPUS Cited Publication*) (IF=4.132, Q2)
 4. N.A. Shamsuri, Z.E. Rojudi, V.T. Vicxeant, **I.M. Noor**, M.F.Z. Kadir, M.F. Shukur, Plasticized lithium iodide-doped polyacrylonitrile-methylcellulose blend electrolytes for supercapacitor application, *Ionics*, 29 (2023) 4243–4252. doi: [10.1007/s11581-023-05122-8](https://doi.org/10.1007/s11581-023-05122-8) (*ISI/SCOPUS Cited Publication*) (IF=2.8, Q3)
 5. K.H. Arifin, Z. Osman, N. Tamchek, M.I.M. Ghazali, **I.M. Noor**, Impact of ionic liquid on structural, thermal and transport properties in gellan gum–lithium triflate solid polymer electrolyte, *Synthetic Metals*, 297 (2023), 117406. doi: [10.1016/j.synthmet.2023.117406](https://doi.org/10.1016/j.synthmet.2023.117406) (*ISI/SCOPUS Cited Publication*) (IF=4.4, Q2)
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60. Mimi Hayati Abdul Rahaman, Mayeen Uddin Khandaker, Ziaul Raza Khan, Mohd Zieauddin Kufian, **Ikhwan Syafiq Mohd Noor**, Abdul Kariem Arof, Effect of gamma irradiation on poly(vinylidene difluoride)–lithium bis(oxalato)borate electrolyte, *Physical Chemistry Chemical Physics*, 16 (2014) 11527–11537. doi:[10.1039/C4CP01233J](https://doi.org/10.1039/C4CP01233J) (*ISI/SCOPUS Cited Publication*) (IF=3.829, Q1)
61. A.K. Arof, S. Amirudin, S.Z. Yusof, **I.M. Noor**, A method based on impedance spectroscopy to determine transport properties of polymer electrolytes, *Physical Chemistry Chemical Physics*, 16 (2014) 1856–1867. doi:[10.1039/C4CP01233J](https://doi.org/10.1039/C4CP01233J) (*ISI/SCOPUS Cited Publication*) (IF=3.829, Q1)
62. M.F. Aziz, **I.M. Noor**, B. Sahraoui, A.K. Arof, Dye-sensitized solar cells with PVA–KI–EC– PC gel electrolytes, *Optical and Quantum Electronics*, 46 (2014) 133–141. doi:[10.1039/C3CP53830C](https://doi.org/10.1039/C3CP53830C) (*ISI/SCOPUS Cited Publication*) (IF=0.987, Q3)
63. **I.S. Noor**, S.R. Majid, A.K. Arof, Poly(vinyl alcohol)–LiBOB complexes for lithium–air cells, *Electrochimica Acta*, 102 (2013) 149–160. doi:[10.1016/j.electacta.2013.04.010](https://doi.org/10.1016/j.electacta.2013.04.010) (*ISI/SCOPUS Cited Publication*) (IF=3.777, Q1)
64. M.F. Aziz, **I.M. Noor**, M.H. Buraidah, M.A. Careem, A.K. Arof, PVA-based gel polymer electrolytes doped with (CH₃)₄Ni/KI for application in dye-sensitized solar cells, 15th International Conference on Transparent Optical Networks (ICTON), (2013) 1–4. doi:[10.1109/ICTON.2013.6602906](https://doi.org/10.1109/ICTON.2013.6602906) (*SCOPUS Cited Publication*)
65. **I.S.M. Noor**, S.R. Majid, A.K. Arof, D. Djurado, S. Claro Neto, A. Pawlicka, Characteristics of Gellan Gum–LiCF₃SO₃ Polymer Electrolytes, *Solid State Ionics*, 225 (2012) 649–653. doi:[10.1016/j.ssi.2012.03.019](https://doi.org/10.1016/j.ssi.2012.03.019) (*ISI/SCOPUS Cited Publication*) (IF=2.646, Q1)

CONFERENCES/ SEMINAR/WORKSHOP PRESENTED

1. **Invited Speaker**, 2nd International Conference on Energy & Environmental Materials (INCEEM-2023) (Online Platform), Sharda University, Greater Noida, India, 6 to 9 December 2022. (*International*)
2. **Invited Speaker**, National Workshop on Theory and Practical Application of Impedance Spectroscopy, Physics Department, Faculty of Science, Universiti Malaya, Kuala Lumpur, Malaysia, 29 to 30 November 2023. (*National*)
3. **Invited Speaker**, Modern Problems and Solutions of the Fields of Nanophysics and Photoenergy in Development of Information Technologies and Economic Networks, Namangan Institute of Engineering and Technology, Uzbekistan, 25 and 26 October 2023. (*International*)
4. **Invited Speaker**, Universiti Putra Malaysia – Osaka University Joint Colloquium 2023 (POC 2023), Universiti Putra Malaysia, Selangor, Malaysia, 4 October 2023. (*International*)
5. **Invited Speaker**, Workshop on Theory and Practical Application of FTIR Spectroscopy in Polymer Electrolytes, Physics Department, Faculty of Science, Universiti Malaya, Kuala Lumpur, Malaysia, 26 to 27 July 2023. (*National*)
6. **Resource Person**, Faculty Development Program on Polymer Electrolytes and Characterization Techniques, Department of Physics, IPS Academy, Jhabua (M.P.), India, 26 June to 5 July 2023. (*International*)
7. **Oral Speaker**, New Frontiers of Natural Science: 1st International Selçuk Meeting (NFNS 2022), Selçuk University, Konya, Turkey, 17 to 19 October 2022. (*International*)
8. **Invited Speaker**, 1st International Conference on Organic Electronics (ICOE2022), Greater Noida, India, 24 to 26 August 2022. (*International*)
9. **Invited Speaker**, 7th International Conference on Functional Materials and Devices, 2022 (ICFMD–2022) (Online Platform), Universiti Malaya, Malaysia, 23 to 25 August 2022. (*International*)
10. **Guest Speaker**, Forum Entitled Malaysia Towards Technological Innovation, ABBE Group (M) Sdn. Bhd., Negeri Sembilan, Malaysia, 23 July 2022 (*National*)
11. **Invited Speaker**, International Conference on Advanced Functional Materials for Optics, Lasers and Photovoltaics Applications (AFMOLPhA'2022), Kenitra, Morocco, 14 to 16 June 2022. (*International*)
12. **Invited Speaker**, Experience with Industrial and International Grants Application (Online Platform), Universiti Putra Malaysia, Selangor, Malaysia, 3 June 2022. (*University*)
13. **Invited Speaker**, Recent Advances in Functional Materials (RAFM–2022) (Online Platform), Delhi, India, 14 to 16 March 2022. (*International*)

14. **Speaker**, Bengkel Asas Excel, Google Drive dan Google Form (Online Platform), Centre of Foundation Studies for Agricultural Science, Universiti Putra Malaysia, Selangor, Malaysia, 30 July 2021. (*Faculty*)
15. **Invited Speaker**, 4th International Conference on Science & Engineering of Materials (ICSEM2021) (Online Platform), Greater Noida, India, 19 to 22 July 2021. (*International*)
16. **Oral presenter**, 3rd Virtual Symposium on Multidisciplinary Science 2021 (V-SMS2021) (Online Platform), Universiti Putra Malaysia, Selangor, Malaysia, 7 July 2021. (*International*)
17. **Oral presenter**, 2nd Symposium on Multidisciplinary Science 2020 (V-SMS2020), Universiti Putra Malaysia, Selangor, Malaysia, 12 August 2020. (*International*)
18. **Oral presenter**, Symposium on Multidisciplinary Science 2019 (SMS2019), Bangi Resort Hotel, Bangi, Selangor, Malaysia, 31 July 2019. (*International*)
19. **Invited Speaker**, 3rd International Conference on Science & Engineering of Materials 2019 (ICSEM 2019), Greater Noida, India, 19 to 21 July 2019. (*International*)
20. **Oral presenter**, 15th International Conference on Frontiers of Polymers and Advanced Materials (ICFPAM 2019), Penang, Malaysia, 17 to 21 June 2019. (*International*)
21. **Invited Speaker**, Sri Lanka–Malaysia–Sweden Research Cooperation Workshop on the Development of Low Cost, High Efficiency Solar Cells Sensitized by Dye/Quantum Dots and Perovskites, Gothenburg, Sweden, 29 October to 1 November 2018. (*International*)
22. **Invited Speaker**, Workshop on Impedance Spectroscopy: Theory, Applications and Laboratory Instruction, Physics Department, Faculty of Science, University of Malaya, Kuala Lumpur, Malaysia, 7 to 8 November 2018. (*National*)
23. **Oral presenter**, 6th International Conference on Functional Materials and Devices (ICFMD 2017), Malacca, Malaysia, 15 to 18 August 2017. (*International*)
24. **Invited speaker**, National Workshop on Functional Materials 2017 (NWFM2017), Physics Department, Faculty of Science, University of Malaya, Kuala Lumpur, Malaysia, 17 to 18 January 2017. (*National*)
25. **Invited speaker**, International Symposium New Tendencies of Developing Fundamental and Applied Physics: Problems, Achievements, Prospectives, Tashkent, Uzbekistan, 10 and 11 November 2016. (*International*)
26. **Poster presentation**, 14th International Conference on Frontiers of Polymers and Advanced Materials (ICFPAM 2016), Daejeon, South Korea, 31 October to 4 November 2016. (*International*)
27. **Poster presentation**, International Conference on Functional Materials (ICFM 2016), Tirunelveli, Tamilnadu, India, 7 to 10 September 2016. (*International*)
28. **Poster presentation**, 5th International Conference on Functional Materials and Devices (ICFMD 2015), Johor Bahru, Malaysia, 4 to 6 August 2015. (*International*)
29. **Poster presentation**, 13th International Conference on Frontiers of Polymers and Advanced Materials (ICFPAM 2015), Marrakesh, Morocco, 30 March to 2 April 2015. (*International*)
30. **Poster presentation**, XIV International Symposium on Polymer Electrolyte 2014 (ISPE14), Geelong, Australia, 24 to 29 August 2014. (*International*)
31. **Presenter**, Workshop on Impedance Spectroscopy, Department of Physics, University of Malaya, Kuala Lumpur, Malaysia, 8 to 10 April 2014. (*National*)
32. **Invited Speaker**, Workshop on XRD and Its Application, Materials Research Center, Coimbatore, India, 18 to 19 January 2014. (*International*)
33. **Poster presentation**, International Conference on Science & Engineering of Materials (ICSEM 2014), Greater Noida, India, 6 to 8 January 2014. (*International*)
34. **Poster presentation**, 12th International Conference on Frontiers of Polymers and Advanced Materials (ICFPAM 2013), Auckland, New Zealand, 8 to 13 December 2013. (*International*)
35. **Poster presentation**, 15th International Conference on Transparent Optical Networks (ICTON 2013), Cartagena, Spain, 23 to 27 June 2013. (*International*)
36. **Poster presentation**, 4th International Conference on Functional Materials and Devices (ICFMD 2013), Penang, Malaysia, 8 to 11 April 2013. (*International*)
37. **Poster presentation**, 13th International Conference on Advanced Materials for Photonics, Sensing and Energy Conversion Energy Applications, El Jadida, Morocco, 5 to 7 December 2012. (*International*)

SEMINAR/WORKSHOP/EXHIBITION ATTENDED AND ORGANIZED

1. **Participant**, MyMOF 2023 Webinar: The Chemistry and Applications of Reticular Materials, Universiti Putra Malaysia, Selangor, Malaysia, 25 October 2023. (*International*)
2. **Participant**, Physics E-Learning 2023 (Online Platform), Cengage Learning Asia, 14 August 2021. (*International*)

3. **Participant**, WebAssign Training 2023 (Online Platform), Cengage Learning Asia, 1 August 2021. (*International*)
4. **Chairman**, Pre–University Matriculation Innovation Competition 2023 (PIITRAM2023), Universiti Putra Malaysia, Selangor, Malaysia, 18 February 2023. (*National*).
5. **Participant**, Physics Lab Workshop by Phywe Germany, Universiti Putra Malaysia, Selangor, Malaysia, 15 June 2022. (*International*)
6. **Participant**, Experience with Industrial and International Grants Application (Online Platform), Universiti Putra Malaysia, Selangor, Malaysia, 3 June 2022. (*University*)
7. **Participant**, Mahabbah Buku@ASPer (Online Platform), Centre of Foundation Studies for Agricultural Science, Universiti Putra Malaysia, Selangor, Malaysia, 26 November 2021. (*University*)
8. **Participant**, Workshop on Electrode Deposition Techniques for Energy Storage and Renewable Energy (Online Platform), University of Malaya, Kuala Lumpur, Malaysia, 23 August 2021. (*International*)
9. **Participant**, Skills Development Programme Advanced Analytical Training (Failure Analysis, Dual Beam, TEM & FTIR) (Online Platform), MIMOS Semiconductor (M) Sdn Bhd, Malaysia, 2 March 2021 & 18 August 2021. (*National*)
10. **Participant**, Webinar on Physics E–Learning 2021 (Online Platform), Cengage Learning Asia, 16 August 2021. (*International*)
11. **Participant**, Bengkel Asas Excel, Google Drive dan Google Form (Online Platform), Centre of Foundation Studies for Agricultural Science, Universiti Putra Malaysia, Selangor, Malaysia, 30 July 2021. (*Faculty*)
12. **Participant**, Webassign: Virtual Lab for Instructors (Online Platform), Cengage Learning Asia, 30 July 2021. (*International*)
13. **Participant**, International Conference on Energy & Environmental Materials (INCEEM–2021) (Online Platform), Greater Noida, India, 29 to 31 July 2021. (*International*)
14. **Participant**, 4th International Conference on Science & Engineering of Materials (ICSEM2021) (Online Platform), Greater Noida, India, 19 to 22 July 2021. (*International*)
15. **Participant**, 3rd Virtual Symposium on Multidisciplinary Science 2021 (VSMS2021) (Online Platform), Universiti Putra Malaysia, Selangor, Malaysia, 7 July 2021. (*International*)
16. **Scientific Committee**, 3rd Virtual Symposium on Multidisciplinary Science 2021 (VSMS2021) (Online Platform), Universiti Putra Malaysia, Selangor, Malaysia, 7 July 2021. (*International*)
17. **Participant**, International & Putra Grant Applications: Top Tips and Tricks (Online Platform), Centre of Foundation Studies for Agricultural Science, Universiti Putra Malaysia, Selangor, Malaysia, 24 June 2021. (*Faculty*)
18. **Committee Member**, Asper Physics Exhibition (APEX) 2020/2021 (Via online), Universiti Putra Malaysia, Selangor, Malaysia, 21 May 2021. (*Faculty*)
19. **Participant**, Write & Publish Workshop (Via online), Universiti Putra Malaysia, Selangor, Malaysia, 26 March 2021. (*National*)
20. **Participant**, PicTL 2020 Academic Discourse, Innovation for Future Education (Via online), Universiti Putra Malaysia, Selangor, Malaysia, 27 October 2020. (*National*)
21. **Session Chair**, 2nd Symposium on Multidisciplinary Science 2020 (V–SMS2020) (Online Platform), Universiti Putra Malaysia, Selangor, Malaysia, 12 August 2020. (*International*)
22. **Head of Scientific and Proceedings Publication Committee**, 2nd Symposium on Multidisciplinary Science 2020 (V–SMS2020) (Online Platform), Universiti Putra Malaysia, Selangor, Malaysia, 12 August 2020. (*International*)
23. **Participant**, 2020 OSA Advanced Photonics Congress (Online Platform), 13 to 16 July 2020. (*International*)
24. **Participant**, National Conference on Environment & Energy Materials (NCEEM–2020) (Online Platform), Sharda University, Greater Noida, India, 27 to 28 June 2020. (*International*)
25. **Participant**, Innovation Competition and Exhibition 2020, Centre of Foundation Studies, Universiti Teknologi Mara, Cawangan Selangor Kampus Dengkil, Selangor, Malaysia, 6 to 8 March 2020. (*National*)
26. **Chairman & Facilitator**, Program Bright Spark 2020, SMK Rantau Panjang, Bestari Jaya, Selangor, Malaysia, 4 March 2020. (*National*)
27. **Participant**, International Academic Conference in Education, Language and Psychology 2020 (IACELP2020), Langkawi, Kedah, Malaysia, 22 to 23 February 2020. (*International*)
28. **Facilitator**, Global I–Lead STEM Camp, GISC 2019, Universiti Putra Malaysia, Serdang, Selangor, Malaysia, 15 to 20 December 2019. (*National*)

29. **Participate**, Convention of The Mind World Philosophy Day 2019, World Philosophy Forum Malaysian National Branch & Gual Periok Foundation, Kuala Lumpur, Malaysia, 20 November 2019. (*International*)
30. **Participate**, Bengkel Demostrasi 3D Modeling & Printing dan Data Logging, Pusat Asasi Sains Pertanian, Universiti Putra Malaysia, Serdang, Selangor, Malaysia, 23 October 2019. (*Department*)
31. **Participate**, National Colloquium on Islamic Understanding “Islam and Disruptive Technologies”, Institut Kefahaman Islam Malaysia (IKIM), Kuala Lumpur, Malaysia, 22 October 2019. (*National*)
32. **Facilitator**, Program Pintar Sains dan Matematik 2019, SMK Taman Bunga Raya (1), Bukit Beruntung, Selangor, Malaysia, 21 October 2019. (*National*)
33. **Participate**, Workshop and Industry Engagement for “National Nanoelectronics Workshop 2019 – Towards Industry 4WRD”, Malaysian Global Innovation & Creativity Centre (MaGIC), Cyberjaya, Selangor, Malaysia, 9 October 2019. (*National*)
34. **Facilitator**, Program Bright Spark 2019, SMK Rantau Panjang, Klang, Selangor, Malaysia, 11 September 2019. (*National*)
35. **Committee member (Scientific)**, Symposium on Multidisciplinary Science 2019 (SMS2019), Bandar Baru Bangi, Selangor, Malaysia, 31 July 2019. (*National*)
36. **Facilitator**, Program Jalinan dan Jaringan Bersama Unit Fizik Pusat Asasi Sains Pertanian UPM dan SMTKL, Pusat Asasi Sains Pertanian, Universiti Putra Malaysia, Serdang, Selangor, Malaysia, 26 June 2019. (*National*)
37. **Participant**, WebAssign Blended Learning Workshop, Centre of Foundation Studies for Agricultural Science, Universiti Putra Malaysia, Selangor, Malaysia, 14 June 2019. (*Faculty*)
38. **Committee member**, UV Curable Polymer and Its Applications Workshop 2019, Institute of Tropical Forestry and Forest Products, Universiti Putra Malaysia, Serdang, Selangor, Malaysia, 25 to 26 April 2019. (*National*)
39. **Facilitator**, Sri Ayesha STEM Carnival 2019, Sri Ayesha Islamic School, Bangi, Selangor, Malaysia, 12 April 2019. (*National*)
40. **Chairman**, ASPer Physics Exhibition (APEX) 2018/2019, Centre of Foundation Studies for Agricultural Science, Universiti Putra Malaysia, Selangor, Malaysia, 22 February 2019. (*Faculty*)
41. **Facilitator**, Program Pintar Sains dan Matematik 2018, SMK Kampong Soeharto, Hulu Selangor, Selangor, Malaysia, 17 October 2018. (*National*)
42. **Participant**, Bengkel Mengolah Nota Kuliah Kepada Buku Teks/Rujukan, RHR Hotel UNITEN, Selangor, Malaysia, 2 to 3 July 2018. (*University*)
43. **Participant**, Kursus Asas Pengajaran (KAP) Kumpulan Pengurusan dan Profesional (Akademik) Siri 1/2018, Dewan Kolej Canselor, Universiti Putra Malaysia, Selangor, Malaysia, 24 January to 1 February 2018. (*University*)
44. **Participant**, Program Transformasi Minda (PTM) Kumpulan Pengurusan dan Profesional (Akademik) Siri 1/2018, Dewan Kolej Canselor, Universiti Putra Malaysia, Selangor, Malaysia, 15 to 23 January 2018. (*University*)
45. **Facilitator**, Global I-Lead STEM Camp 1Malaysia, Universiti Putra Malaysia, Serdang, Selangor, Malaysia, 17 to 22 December 2017. (*National*)
46. **Participant**, 6th International Innovation, Invention and Design Competition 2017, Casuarina@Meru, Ipoh, Perak, Malaysia, 8 November 2017. (*International*)
47. **Participant**, Photonic Sensor Training, MIMOS Berhad, Kuala Lumpur, Malaysia, 5 October 2017. (*National*)
48. **Participant**, The International Invention, Innovation & Design Competition IIID Johor 2017, Amansari Residence Resort, Johor, Malaysia, 9 March 2017. (*International*)
49. **Committee member**, National Workshop on Functional Materials 2017 (NWFM2017), Physics Department, Faculty of Science, University of Malaya, Kuala Lumpur, Malaysia, 17 to 18 January 2017. (*National*)
50. **Committee member and facilitator**, Workshop on Impedance Spectroscopy Theory, Applications and Laboratory Instruction, Physics Department, Faculty of Science, University of Malaya, Kuala Lumpur, Malaysia, 12 to 14 April 2016. (*National*)
51. **Committee member**, 5th International Conference on Functional Materials and Devices (ICFMD 2015), Johor Bahru, Malaysia, 4 to 6 August 2015. (*International*)
52. **Presenter**, Annual Physics Colloquium 2015, Physics Department, Faculty of Science, University of Malaya, Kuala Lumpur, Malaysia, 10 to 11 June 2015. (*National*)
53. **Participant**, Workshop on Interfacing with Hardware from Scilab and Arduino, Organized by TRITY Technologies, 9 September 2014. (*National*)

54. **Committee member**, Workshop on X-Ray Diffraction (XRD), Theory and Applications, Department of Physics, University of Malaya, Kuala Lumpur, Malaysia, 18 to 20 June 2014. (*National*)
55. **Committee member**, Workshop on Impedance Spectroscopy, Department of Physics, University of Malaya, Kuala Lumpur, Malaysia, 8 to 10 April 2014. (*National*)
56. **Participant**, Workshop on Sensors, Arduino and Labview, Physics Department, Faculty of Science, Universiti Putra Malaysia, Kuala Lumpur, Malaysia, 20 to 23 January 2014. (*National*)
57. **Committee member**, 2nd International Conference on Solar Asia 2013, University of Malaya, Kuala Lumpur, Malaysia, 22 to 24 August 2013. (*International*)
58. **Committee member**, Workshop on Dye-sensitized Solar Cells, University of Malaya, Kuala Lumpur, Malaysia, 20 & 21 August 2013. (*National*)
59. **Committee member**, 4th International Conference on Functional Materials and Devices (ICFMD) 2013, Penang, Malaysia, 8 to 11 April 2013. (*International*)
60. **Presenter**, Annual Physics Colloquium 2012, Physics Department, Faculty of Science, University of Malaya, Kuala Lumpur, Malaysia, 28 to 29 May 2012. (*Department*)
61. **Committee member**, Workshop on FTIR Spectroscopy: Application in Polymer Electrolytes, Department of Physics, University of Malaya, Kuala Lumpur, Malaysia, 17 to 19 January 2012. (*National*)
62. **Presenter**, Annual Physics Colloquium 2011, Physics Department, Faculty of Science, University of Malaya, Kuala Lumpur, Malaysia, 18 to 19 April 2011. (*Department*)

AWARDS IN ACADEMIC FIELD/PROFESSION/RESEARCH

1. **Excellent Service Certificate for year 2022**, Universiti Putra Malaysia, 2023. (*University*)
2. **Silver Medal**, International Putra InnoCreative Carnival in Teaching and Learning 2023 (i-PicTL2023), Universiti Putra Malaysia, Selangor, Malaysia, 14 to 16 November 2023. (*International*)
3. **Gold Award**, International Materials Technology Challenge (iMTC) 2023 (iMTC2023), Universiti Putra Malaysia, Selangor, Malaysia, 22 June 2023. (*International*)
4. **Silver Award**, International Materials Technology Challenge (iMTC) 2023 (iMTC2023), Universiti Putra Malaysia, Selangor, Malaysia, 22 June 2023. (*International*)
5. **Bronze Award**, International Materials Technology Challenge (iMTC) 2023 (iMTC2023), Universiti Putra Malaysia, Selangor, Malaysia, 22 June 2023. (*International*)
6. **Gold Award**, Pre-University Matriculation Innovation Competition 2023 (PIITRAM2023), Universiti Putra Malaysia, Selangor, Malaysia, 18 February 2023. (*National*)
7. **Silver Award**, Pre-University Matriculation Innovation Competition 2023 (PIITRAM2023), Universiti Putra Malaysia, Selangor, Malaysia, 18 February 2023. (*National*)
8. **Excellent Service Certificate for year 2021**, Universiti Putra Malaysia, 2022. (*University*)
9. **Silver Medal**, International Putra InnoCreative Carnival in Teaching and Learning 2022 (i-PicTL2022), Universiti Putra Malaysia, Selangor, Malaysia, 25 to 28 October 2022. (*International*)
10. **Gold Award**, Pre-University Matriculation Innovation Competition 2022 (PIITRAM2022), Pusat Asasi Pertahanan, Universiti Pertahanan Nasional Malaysia, Kuala Lumpur, Malaysia, 2 to 4 March 2022. (*National*)
11. **Excellent Service Certificate for year 2020**, Universiti Putra Malaysia, 2021. (*University*)
12. **Reviewer Recognition**, Journal of Food Processing and Preservation, 18 February 2021. (*International*)
13. **Excellent Service Certificate for year 2019**, Universiti Putra Malaysia, 2020. (*University*)
14. **Gold Award**, Innovation Competition and Exhibition 2020, Centre of Foundation Studies, Universiti Teknologi Mara, Cawangan Selangor Kampus Dengkil, Selangor, Malaysia, 6 to 8 March 2020. (*National*)
15. **Reviewer Recognition**, Journal of Food Processing and Preservation, 26 February 2020. (*International*)
16. **Pingat Berjasa**, Persatuan Seni Silat Cekak Ustaz Hanafi Malaysia, Universiti Putra Malaysia, 1 February 2020. (*National*)
17. **Excellent Service Awards for year 2018**, Dewan Besar, Universiti Putra Malaysia, 12 April 2019. (*University*)
18. **Elsevier Reviewer Recognition**, Outstanding Contribution in Reviewing, Optical Materials, February 2019. (*International*)
19. **Best Cluster Award**, International STEM Olympiad Istemo 2018, Universiti Putra Malaysia, 20–21 December 2018. (*National*)

20. **Gold Award**, International STEM Olympiad Istemo 2018, Universiti Putra Malaysia, 20–21 December 2018. (*National*)
21. **High Impact Project 2017**, Program Global I Lead STEM Kem Antara UPM, PIBG SBPI Selandar, Asasi Pertanian dan Fakulti Sains, Universiti Putra Malaysia, 18 to 22 December 2017. (*National*)
22. **Gold Award**, 6th International Innovation, Invention and Design Competition 2017 (INDES2017), Casuarina@Meru, Ipoh, Perak, Malaysia, 8 November 2017. (*International*)
23. **Silver Medal**, The International Invention, Innovation & Design Competition IIID Johor 2017, Amansari Residence Resort, Johor, Malaysia, 9 March 2017. (*International*)
24. **Best 2–minute presentation**, 5th International Conference on Functional Materials and Devices (ICFMD 2015), Johor Bahru, Malaysia, 4 to 6 August 2015. (*International*)
25. **Best poster presentation**, 13th International Conference on Frontiers of Polymers and Advanced Materials (ICFPAM 2015), Marrakesh, Morocco, 30 March to 2 April 2015. (*International*)
26. **Silver Medal**, 23rd International Invention, Innovation & Technology Exhibition ITEX 2012, Kuala Lumpur, Malaysia, 17 to 19 May 2012. (*International*)
27. **Best presentation design**, Annual Physics Colloquium of 2012, Physics Department, University of Malaya, 28 to 29 May 2012. (*Department*)

PROFESSIONAL

1. **Advisory Committee**, Recent Advances in Functional Materials (RAFM–2024), Delhi, India, 23 November 2023 to 16 March 2024. (*International*)
2. **Jury**, Pre–University Matriculation Innovation Competition 2023 (PIITRAM2023), Universiti Putra Malaysia, Selangor, Malaysia, 18 February 2023. (*National*)
3. **Editor**, High Performance Polymers 2022, Vol. 34(6) 629, 4th International Conference on Science & Engineering of Materials 2021 (ICSEM–2021) (*International*)
4. **Guest Editor**, Malaysian Journal of Science, Vol. 41, Special issue (1) 2022, 3rd Virtual Symposium on Multidisciplinary Science 2021 (V–SMS2021) (*International*)
5. **Active Member**, VDGOD Professional Association, India, 1 November 2022 to 31 May 2023. (*International*)
6. **International Scientific Committee**, Advanced Functional Materials for Optics, Lasers and Photovoltaics Applications (AFMOLPhA'2022), Kenitra, Morocco, 14 to 16 June 2022. (*International*)
7. **Professional Technologist**, Malaysia Board of Technologists, 23 March 2022 until present. (*National*)
8. **Guest Editor**, Macromolecular Symposia, International Conference on Science and Engineering of Materials – ICSEM 2021 Part 1, Volume 401 (*International*)
9. **Secretary**, 7th International Conference on Functional Materials and Devices 2022 (ICFMD 2022), University of Malaya, Kuala Lumpur, Malaysia (*International*)
10. **International Advisory Board**, International Journal of Electroactive Materials, 1 January 2022 to 31 December 2024 (*International*)
11. **Judge**, 3rd Virtual Symposium on Multidisciplinary Science 2021 (VSMS2021) (Online Platform), Universiti Putra Malaysia, Selangor, Malaysia, 7 July 2021 (*International*)
12. **Guest Editor**, Advances in Mathematics: Scientific Journal, Special issue, 3rd Virtual Symposium on Multidisciplinary Science 2021 (*International*)
13. **Guest Editor**, Macromolecular Symposia, National Conference on Functional Materials NCFM 2020, Volume 397 (*International*)
14. **Guest Editor**, Advances in Mathematics: Scientific Journal, Special issue, 2nd Symposium on Multidisciplinary Science 2020 (*International*)
15. **Guest Editor**, CFD Letters. (*International*)
16. **Guest Editor**, Journal of Advanced Research in Fluid Mechanics and Thermal Sciences (*International*)
17. **Associate Guest Editor**, Journal of Sustainability Science & Management (JSSM), Special issue, 2nd Symposium on Multidisciplinary Science 2020. (*International*)
18. **Associate Member**, Advanced Lightning, Power and Energy Research (ALPER) Centre, Faculty of Engineering, Universiti Putra Malaysia, Malaysia, 8 July 2020 to present. (*National*)
19. **Organizing Committee**, National Conference on Environment & Energy Materials (NCEEM–2020), Sharda University, Greater Noida, India, 27 to 28 June 2020. (*International*)
20. **Graduate Technologist**, Malaysia Board of Technologists, 26 February 2020 until present. (*National*)
21. **Editorial Board**, SCIREA Journal of Physics, 2020 until present. (*International*)

22. **Editorial Board**, SCIREA Journal of Energy, 2020 until present. (*International*)
23. **Examiner**, Peperiksaan Semester Program Matrikulasi, Kementerian Pendidikan Malaysia, Ancasa Hotel & Spa, Kuala Lumpur, Malaysia, 26 to 31 October 2019. (*National*)
24. **Journal Guest Editor**, Journal of Multidisciplinary Engineering Science and Technology, Volume 6, Issue 12, December 2019, Special Issue for Symposium on Multidisciplinary Science (SMS 2019). (*International*)
25. **Editorial Board**, SCIREA Journal of Materials, 2019 until present. (*International*)
26. **Editorial Board**, SCIREA Journal of Chemistry, 2019 until present. (*International*)
27. **National Scientific Committee**, 15th International Conference on Frontiers of Polymers and Advanced Materials (ICFPAM 2019), Penang, Malaysia, 17 to 21 June 2019. (*International*)
28. **Jury**, ASPer Physics Exhibition (APEX) 2018/2019, Centre of Foundation Studies for Agricultural Science, Universiti Putra Malaysia, Selangor, Malaysia, 22 February 2019. (*Faculty*)
29. **Jury**, Proposal Defense Seminar for ASPer Physics Exhibition (APEX) 2018/2019, Centre of Foundation Studies for Agricultural Science, Universiti Putra Malaysia, Selangor, Malaysia, 12 October 2018. (*Faculty*)
30. **Jury**, I'M-SET Interschool Competition 2018, SMK Pasir Gudang 2, Johor, Malaysia, 28 July 2018. (*National*)
31. **Principal Investigator**, Centre for Ionics University of Malaya, Faculty of Science, University of Malaya, Kuala Lumpur, Malaysia, 1 June 2018 to 31 May 2023. (*National*)

EXTRACURRICULAR ACTIVITIES

1. **Coordinator**, Kelab Silat Cekak Hanafi Pusat Asasi Sains Universiti Malaya, University of Malaya, Kuala Lumpur, 1 January to 22 October 2023
2. **Coordinator**, Persatuan Seni Silat Cekak Ustaz Hanafi Universiti Malaya, University of Malaya, Kuala Lumpur, 1 January to 22 October 2023
3. **Coordinator**, Kelab Silat Cekak Hanafi Pusat Asasi Sains Universiti Malaya, University of Malaya, Kuala Lumpur, 1 January to 31 December 2022
4. **Coordinator**, Persatuan Seni Silat Cekak Ustaz Hanafi Universiti Malaya, University of Malaya, Kuala Lumpur, 1 January to 31 December 2022
5. **Coordinator**, Kelab Silat Cekak Hanafi Pusat Asasi Sains Universiti Malaya, University of Malaya, Kuala Lumpur, 1 January to 31 December 2021
6. **Coordinator**, Persatuan Seni Silat Cekak Ustaz Hanafi Universiti Malaya, University of Malaya, Kuala Lumpur, 1 January to 31 December 2021
7. **Committee Members**, Majlis Anugerah Kecemerlangan Silat Cekak Hanafi 2020, Auditorium Radin Umar, Faculty of Engineering, Universiti Putra Malaysia, Selangor, Malaysia, 1 February 2020
8. **Coordinator**, Kelab Silat Cekak Hanafi Pusat Asasi Sains Universiti Malaya, University of Malaya, Kuala Lumpur, 1 January to 31 December 2020
9. **Coordinator**, Persatuan Seni Silat Cekak Ustaz Hanafi Universiti Malaya, University of Malaya, Kuala Lumpur, 1 January to 31 December 2020
10. **Trainer**, Kelab Silat Cekak Hanafi Pusat Asasi Sains Universiti Malaya, University of Malaya, Kuala Lumpur, 6 August 2019 to 11 March 2020
11. **Advisor**, Kejohanan Wajadiri Nasional Silat Cekak Hanafi 2019, Dewan Tunku Canselor, University of Malaya, Kuala Lumpur, Malaysia, 27 April 2019
12. **Assistant Coordinator**, Persatuan Seni Silat Cekak Ustaz Hanafi Universiti Malaya, University of Malaya, Kuala Lumpur, 1 January to 31 December 2019
13. **Liaison Officer**, Kejohanan Wajadiri Nasional Silat Cekak Hanafi 2018, Bukit Gambang Resort City, Gambang, Pahang, Malaysia, 21 April 2018
14. **Committee Panels**, Kejohanan Wajadiri Nasional Silat Cekak Hanafi 2018, Bukit Gambang Resort City, Gambang, Pahang, Malaysia, 21 April 2018
15. **Committee Board**, Majlis Mesyuarat Kebangsaan, Persatuan Seni Silat Cekak Ustaz Hanafi Malaysia, Session 2018/2021
16. **Committee Members**, Majlis Anugerah Kecemerlangan Silat Cekak Hanafi 2018, Dewan Anuwar Mahmud, Univesiti Kebangsaan Malaysia, Selangor, Malaysia, 13 January 2018
17. **3rd Level Trainer**, Akademi Silat Cekak Hanafi, Kuala Lumpur, Malaysia, Since 1 January 2018
18. **Assistant Coordinator**, Persatuan Seni Silat Cekak Ustaz Hanafi Universiti Malaya, University of Malaya, Kuala Lumpur, 1 January to 31 December 2018

19. **Committee Members**, Santapan Perdana Silat Cekak Hanafi, Dewan Besar Tun Rahah, Menara Yayasan Tun Razak, Kuala Lumpur, Malaysia, 28 October 2017
20. **Committee Panels**, Kejohanan Wajadiri Nasional Silat Cekak Hanafi 2017, Dewan Raja Muda Musa, Seksyen 7 Shah Alam, Selangor, Malaysia, 8 April 2017
21. **Liaison Officer**, Kejohanan Wajadiri Nasional Silat Cekak Hanafi 2017, Dewan Raja Muda Musa, Seksyen 7 Shah Alam, Selangor, Malaysia, 8 April 2017
22. **Committee Members**, Kejohanan Wajadiri Nasional Silat Cekak Hanafi 2017, Dewan Raja Muda Musa, Seksyen 7 Shah Alam, Selangor, Malaysia, 8 April 2017
23. **Assistant Coordinator**, Persatuan Seni Silat Cekak Ustaz Hanafi Universiti Malaya, University of Malaya, Kuala Lumpur, 1 January to 31 December 2017
24. **Committee Members**, Majlis Anugerah Kecemerlangan Silat Cekak Hanafi 2017, Universiti Kuala Lumpur–Malaysia France Institute, Bangi, Selangor, Malaysia, 21 January 2017
25. **Committee Members**, Malam Memoir Hanafi Silat Cekak Hanafi, Premeira Hotel Kuala Lumpur, Malaysia, 22 October 2016
26. **Committee Panels**, Kejohanan Wajadiri Nasional Silat Cekak Hanafi 2016, Kompleks Sukan Negeri Paroi, Negeri Sembilan, Malaysia, 9 April 2016
27. **Committee Members**, Kejohanan Wajadiri Nasional Silat Cekak Hanafi 2016, Kompleks Sukan Negeri Paroi, Negeri Sembilan, Malaysia, 9 April 2016
28. **Liaison Officer**, Kejohanan Wajadiri Nasional Silat Cekak Hanafi 2016, Kompleks Sukan Negeri Paroi, Negeri Sembilan, Malaysia, 9 April 2016
29. **Committee Members**, Majlis Hi Tea Serikandi Silat Cekak Hanafi, Kolej Kediaman Kelima, University of Malaya, Kuala Lumpur, Malaysia, 19 March 2016
30. **Participant**, Kursus & Penilaian Kompetensi Juri Silat Cekak Hanafi Peringkat Kebangsaan, D'Ark Hostel, Senawang, Negeri Sembilan, Malaysia, 5 March 2016
31. **Participant**, Persembahan Flashmob Silat Cekak Hanafi & "Protect Yourself", Karnival Karang kraf 2016, Kumpulan Media Karang kraf, Shah Alam, Selangor, Malaysia, 27 February 2016
32. **Committee members**, Majlis Anugerah Kecemerlangan Silat Cekak Hanafi 2016, International Islamic University Malaysia, Gombak, Selangor, Malaysia, 30 January 2016
33. **Assistant Coordinator**, Persatuan Seni Silat Cekak Ustaz Hanafi Universiti Malaya, University of Malaya, Kuala Lumpur, 1 January to 31 December 2016
34. **Committee members**, Sambutan Maulidur Rasul Silat Cekak Hanafi 2016, Akademi Silat Cekak Hanafi, Kuala Lumpur, Malaysia, 1 January 2016
35. **Committee members**, Malam 50 Tahun Silat Cekak Hanafi, Akademi Silat Cekak Hanafi, Kuala Lumpur, Malaysia, 7 November 2015
36. **Awarded** Sijil Menengah Persilatan, Persatuan Seni Silat Cekak Ustaz Hanafi Malaysia, 3 Mei 2015
37. **Participant**, Kejohanan Wajadiri Nasional Silat Cekak Hanafi 2015, Kompleks Sukan Jeonse & MSN, Kuala Lumpur, Malaysia, 25 April 2015
38. **Committee Board**, Majlis Mesyuarat Kebangsaan, Persatuan Seni Silat Cekak Ustaz Hanafi Malaysia, Session 2015/2018
39. **Participant**, Tauliah Tenaga Pengajar Silat Cekak Hanafi, Dewan MPAJ, Ampang, Selangor, Malaysia, 24 January 2015
40. **2nd Level Trainer**, Akademi Silat Cekak Hanafi, Kuala Lumpur, Malaysia, Since 1 January 2015
41. **Participant**, Kursus Asas Jurulatih Silat Cekak Hanafi Peringkat 1, Akademi Silat Cekak Hanafi, Kuala Lumpur, Malaysia, 27 to 28 September 2014
42. **Participant**, Variety Show, Festival Konvokesyen Universiti Malaya (FESKUM), University of Malaya, Kuala Lumpur, Malaysia, 12 October 2014