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Academic Qualifications

1. Universiti Putra Malaysia, PhD in Chemistry, 2010
2. Universiti Kebangsaan Malaysia, MSc in Chemistry, 2004
3. Universiti Kebangsaan Malaysia, BSc in Oleochemistry, 2002
4. The University of Nottingham, Postgraduate Certificate in Higher Education (PGCHE), 2012
5. Basic Teaching Course Session 2/2012, Universiti Putra Malaysia, 10-17 July 2012
6. Toastmasters International Competent Communicator, 2018

Research Impact

Google Scholar

Citation : 8,177

H-index : 52

Publications

ISI-Cited Journal Articles

* As a Corresponding Author

2020

234. Sadrolhosseini A.R. and **Lim H.N.** Surface plasmon resonance sensor to detect n-hexane in palm kernel oil using polypyrrole nanoparticles reduced graphene oxide layer. *Journal of Sensors*. 2020. In Press.
233. Ahmad H., Zulkafly N.S.F., Shafie S., **Lim H.N.** and Ahmad F. Graphene oxide-polyvinyl alcohol film in micro cavity for optical comb generation. *International Journal of Nanotechnology*. 2020. In Press.
232. Khalifa A., Shafie S., Hasan W.Z.W., **Lim H.N.**, Rusop M., Pandey S.S., Vats A.K., AlSultan H.A. and Samalia B. Comprehensive performance analysis of dye-sensitized solar cells using single layer TiO₂ photoanode deposited using screen-printing technique. *Optik*. 2020. 223: 165595 (10 pages).
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230. Girei S.H., **Lim H.N.**, Ahmad M.Z., Mahdi M.A., Md Zain A.R. and Yaacob M.H. High sensitivity microfiber interferometer sensor in aqueous solution. *Sensors*. 2020. 20: 4713 (9 pages).
229. Chan K.F., **Lim H.N.***, Ahmad H. and Gowthaman N.S.K. Photovoltaic performance of bipyridine and dipyridophenazine ligands anchored ruthenium complex sensitizers for efficient dye-sensitized solar cells. *Solid State Sciences*. 2020. 107: 106368 (8 pages).
228. Rayung M. Aung M.M., Suait M.S., Abdullah L.C., Ahmad A. and **Lim H.N.** Performance analysis of jatropha oil-based polyurethane acrylate gel polymer electrolyte for dye-sensitized solar cells. *ACS Omega*. 2020. 5(24): 14267-14274.
227. Ling C.K., Aung M.M., Abdullah L.C., **Lim H.N.** and Uyama H. A short review of iodide salt usage and

- properties in dye sensitized solar cell application: Single vs binary salt system. *Solar Energy*. 2020. 206: 1033-1038.
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225. Wu H., Chung H.Y., Tsang D.C.Y., Huang N.M., Xie Z., **Lim H.N.**, Ok Y.S., Ng Y.H. Scavenger-free and self-powered photocathodic sensing system for aqueous hydrogen peroxide monitoring by CuO/ZnO nanostructure. *Chemical Engineering Science*. 2020. 226: 115886 (7 pages).
224. P. Arul, N.S.K. Gowthaman, S.A. John and **H.N. Lim***. Ultrasonic assisted synthesis of size-controlled Cu-MOF decorated GO composite: Sustainable electrocatalyst for the trace-level determination of nitrite in environmental water samples. *ACS Omega*. 2020. 5(24): 14242-14253.
223. Muzakir M.M., Zainal Z., **Lim H.N.**, Abdullah A.H., Bahrudin N.N. and Ali M.S.M. Electrochemically reduced titania nanotube synthesized from glycerol-based electrolyte as supercapacitor electrode. *Energies*. 2020. 13: 2767 (15 pages).
222. Altarawneh M., Ahmed O.H., Al-Harahsheh M., Jiang Z.T., Huang N.M., **Lim H.N.**, Dlugogorski B.Z. Co-pyrolysis of polyethylene with products from thermal decomposition of brominated flame retardants. *Chemosphere*. 2020. 254: 126766 (9 pages).
221. Ganesan T., Mukhtar N.H., **Lim H.N.** and See H.H. Mixed matrix membrane tip extraction coupled with UPLC-MS/MS for the monitoring of nonsteroidal anti-inflammatory drugs in water samples. *Separations*. 2020. 7: 19 (10 pages).
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214. Ganesan T., **Lim H.N.** and See H.H. Automated mixed matrix membrane microextraction prior to liquid chromatography for the determination of chlorophenoxy acid herbicides in sewage water samples. *Chromatographia*. 2020. DOI: 10.1007/s10337-020-03865-4.
213. Al-Zahrani A., Zainal A., Talib Z.A., **Lim H.N.** and Holi A. Bismuth sulphide decorated ZnO nanorods heterostructure assembly via controlled SILAR cationic concentration for enhanced photoelectrochemical cells. *Materials Research Express*. 2020. 7(2): 025510 (11 pages)
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210. Gowthaman, N.S.K., **Lim H.N.***, Balakumar V. and Shankar S. Ultrasonic synthesis of CeO₂@organic dye nanohybrid: Environmentally benign rapid electrochemical sensing platform for carcinogenic pollutant in water samples. *Ultrasonics Sonochemistry*. 2020. 64: 104828 (11 pages)

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 3. Huang N.M., Radiman S., **Lim H.N.**, Yeong S.K., Khiew P.S., Chiu W.S., Kong, S.N. and Mohamed Saeed G.H. Synthesis and characterization of ultra small PbS nanorods in sucrose ester microemulsion. Materials Letters. 2009. 63 (3-4): 500-503 [IF 1.748, ISI 56/192 – Q2].
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 1. Huang N.M., Radiman S., **Lim H.N.**, Khiew P.S., Chiu W.S., Chia C.H. and Hashim R. Synthesis and characterization of cobalt sulfide using sucrose ester micelles and application as dye adsorption agent. Sains Malaysiana. 2009. 38 (6): 863–868.

Book Chapters

1. Xin Jie Lee, **Hong Ngee Lim**, Mohd Basyaruddin Abdul Rahman, Che Azurahanim Che Abdullah, Kasturi Muthoosamy. Functionalization of graphene for drug delivery. Elsevier. 2017.
2. A. A. B. Hamra, **H. N. Lim**, S. M. Hafiz, Y. Andou, M. Altarawneh, Z. T. Jiang, N. M. Huang. Modification of carbon-based electro-active materials for supercapacitor applications. In Energy Applications of Carbon-based Polymer Nanocomposite. Elsevier. 2017.
3. Yusoff Norazriena, Alagarsamy Pandikumar, Huang Nay Ming, **Lim Hong Ngee**. Graphene based electrochemical platform for biosensor applications. Advanced Bioelectronics Materials (Advanced Materials Book Series). Editors: Ashutosh Tiwari, Hirak K. Patra, Anthony P.F. Turner. Wiley-Scrivener Publishing, USA. 2015. 189-214. ISBN: 978-1-118-99830-4.
4. Alagiri Mani, Khosro Zangene Kamali, Alagarsamy Pandikumar, Lim Yee Seng, **Lim Hong Ngee**, Huang Nay Ming. Graphene-polypyrrole nanocomposite: An ideal electroactive material for high performance supercapacitors. Graphene Materials: Fundamentals and Emerging Applications (Advanced Materials Book Series). Editors: Ashutosh Tiwari, Mikael Syvajarvi. Wiley-Scrivener Publishing, USA. 2015. 225-244. ISBN: 978-1-118-99837-3.
5. **Lim Hong Ngee**, Huang Nay Ming, Chia Chin Hua, Ian Harrison. Inorganic Nanostructures Decorated Graphene. In Advanced Topics in Crystal Growth. InTech Publication. 2013. ISBN: 978-953-51-1010-1.
6. Mahnaz M. Abdi, Anuar Kassim, Mehdi Jonoobi, **Lim Hong Ngee**. Conducting Polymers For Electromagnetic Interference (EMI) Shielding. In Materials For EM Shielding - Theory, Development, Applications. Transworld Research Network. 2012. ISBN: 978-81-308-0499-6.

Books

1. Alagarsamy Pandikumar, Huang Nay Ming and **Lim Hong Ngee**. Emerging Functional Materials: Advances in Energy and Environmental Applications. ISBN-13: 978-3-03835-647-9. Trans Tech Publications Inc. 2016.
2. Alagarsamy Pandikumar, Huang Nay Ming and **Lim Hong Ngee**. Multi-Functional Nanoscale Materials and Their Potential Applications. ISBN-13: 978-3-03835-338-6. Trans Tech Publications Inc. 2015.

Invitation as Speaker

International

No	Role	Conference	Venue	Year
1	Invited	Workshop of Solar Energy Conversion Research Centre in Kyushu Institute Technology	Japan	30-31 Jan 2020
2	Invited	Xiamen University – Xiamen University Malaysia Bilateral Symposium on Energy Materials	China	22-24 Nov 2019
3	Keynote	Upm-Kyutech International Symposium On Applied Engineering And Sciences (SAES2019)	Malaysia	11-12 Nov 2019
4	Panel	Loreal-UNESCO For Women In Science	Malaysia	17 Oct 2019
5	Keynote	Silver Jubilee Assembly of Advanced Functional Congress	Sweden	24-27 Mar 2019
6	Invited	Introduction to UPM, ITMA and MSCL	Thailand	20-26 Jan 2019
7	Invited	Energy Materials and Nanotechnology Auckland Meeting	New Zealand	17-21 Dec 2018
8	Invited	International Fundamental Science Congress	Malaysia	23-24 Oct 2018
9	Keynote	International Conference on Nanomaterials and Nanotechnology	Sweden	9-12 Oct 2018
10	Invited	International Symposium on Advanced Materials and Nanotechnology (i-SAMN)	Malaysia	15-16 Aug 2018
11	Panel	5 th Education Nation Conference by Asian World Summit	Malaysia	25 Apr 2018
12	Invited	25 Annual World Forum on Advanced Materials (25th POLYCHAR)	Malaysia	9-13 Oct 2017
13	Invited	UKM Scientific Seminar For Instrumentation And Biocompatibility	Malaysia	15-16 Aug 2017
14	Invited	Symposium on Advanced Materials and Nanotechnology (SAMN)	Malaysia	18-19 Jul 2017
15	Invited	Academic visit from Yadanabon University, Myanmar	Malaysia	14-15 Jun 2017
16	Invited	The many facets of graphene. 4 th UPM and Kyutech International Symposium on Applied Engineering and Sciences 2016 (SAES2016), Kyushu Institute of Technology, Japan	Japan	17-18 Dec 2016
17	Invited	A multitude of interactions with graphene oxide. Workshop session: International Collaboration for Developing Future-Oriented Appropriate Technologies for a Sustainable Environment and Society, 4 th UPM and Kyutech International Symposium on Applied Engineering and Sciences 2016 (SAES2016), Kyushu Institute of Technology, Japan.	Japan	17-18 December 2016
18	Invited	Grapheneous flexible substrates and their potential applications. The Fundamental Science Congress (FSC) 2016, Universiti Putra Malaysia	Malaysia	9-10 Aug 2016
19	Invited	Functionalizing graphene oxide as an active for polyacrylonitrile. International Symposium on Advanced Polymeric Materials (ISAPM) 2016, Putra World Trade Centre,	Malaysia	16-19 May 2016

		Kuala Lumpur		
20	Invited	Carbon nanofibers reinforced with reduced graphene oxide. pp 234. 2 nd Annual World Congress of Smart Materials-2016 (WCSM-2016), Grand Copthorne Waterfront Hotel, Singapore	Singapore	4-6 Mar 2016
21	Invited	Influence of p-toluenesulfonate towards polypyrrole-reduced graphene oxide counter electrode for dye-sensitized solar cell. 28 th Regional Symposium Of Malaysia Analytical Sciences (SKAM28), Weil Hotel, Ipoh, Perak	Malaysia	17-20 Aug 2015
22	Invited	Fabrication of graphene-based supercapacitor from electrospun nanofiber. UPM-Kyutech MSSC Seminar – International Research Collaboration, Faculty of Biotechnologi and Biomolecular Sciences, Universiti Putra Malaysia	Malaysia	5-6 Mar 2015
23	Invited	Fabrication of graphene reinforced with polypyrrole nanoparticles, The Regional Fundamental Science Congress 2014, Faculty of Engineering, Universiti Putra Malaysia	Malaysia	19-20 Aug 2014
24	Invited	International Symposium on Advanced Polymeric Materials (ISAPM)	Malaysia	13-16 May 2014

National

No	Conference	Year
1	Managing Intellectual Property and Commercialisation Workshop	2-4 Jul 2019
2	Program Hari Pendidik Universiti Putra Malaysia	5-6 Dec 2018
3	Physical Science Department, Faculty of Applied Sciences, Tunku Abdul Rahman University College	24 Jul 2017
4	Laboratory Safety Course (LSC)	2016
5	Putra Collodium on Carbon Materials (Putracon.3)	2016
6	Workshop on Advanced Materials and Nanotechnology (WAMN)	2016
7	International Future Scientists Conference	2016
8	Bengkel Pengendalian Alatan Gas Chromatography Mass Spectrometer (GCMS)	2016
9	Hari Inovasi Itma dan Fakulti Sains	2016
10	Once in a Blue Moon, Unshackling Young Academics, Bangunan Canselori Putra UPM	11-12 Apr 2016
11	Road to Postgraduate Seminar, Bilik Saintis Gemilang, Universiti Putra Malaysia	20 Apr 2015
12	Opportunity for Young Researchers. Empowering Young Researchers, Faculty of Science, Bilik Saintis Gemilang, Universiti Putra Malaysia	13-14 Apr 2015
13	Strategies to synthesize ubiquitous graphene: A review, Putra Colloquium on Graphene (Putra Graphene '14), Tower Block, Faculty of Engineering, Universiti Putra Malaysia	15 Dec 2014
14	Graphene-based supercapacitor electrodes, 2 nd Malaysian Graphene and Carbon Nanotube Workshop (MGCW), Dewan Seminar, Menara Razak, UTM, KL	20 Oct 2014
15	It all happened on a Friday, Putra Nobel Minds, Bilik Saintis Gemilang, UPM, Serdang, Selangor	9 October 2014
16	Synthesis of graphene-based materials, Materials Science and Technology Seminar, Dewan Taklimat, Fakulti Kejuruteraan, Universiti Putra Malaysia	24 June 2013
17	Preparation of polypyrrole/graphene nanocomposite film via electrodeposition, Kolokium Polimer Jabatan Kimia UPM – Lembaga Ilmu Pengetahuan Indonesia (LIPI), Bilik Saintis Gemilang, UPM, Serdang, Selangor	11 October 2012
18	17 th Malaysian Chemical Congress (17MCC)	15-17 Oct 2012
19	20 th Scientific Conference on Microscopy Society of Malaysia (EMSM)	20-22 Dec 2011

Professional Memberships

International

No	Society	Role	Membership No	Year
1	Royal Society of Chemistry	Fellow	515516	2019
2	International Association of Advanced Materials	Member	798272603870	2019
3	Royal Society of Chemistry	Affiliate	515516	2015 – 2018

National

No	Society	Role	Membership No	Year
1	Institut Kimia Malaysia (IKM)	Member	M/3519/6357/12	2020
2	Institut Kimia Malaysia (IKM)	Member	M/3519/6357/12	2019
3	Institut Kimia Malaysia (IKM)	Member	M/3519/6357/12	2018
4	Toastmasters International	Member	05255953	1 Apr 2018-30 Sept 2018
5	Toastmasters International	Member	05255953	1 Oct 2017-31 Mar 2018
6	Toastmasters International	Club Officer Assignment	05255953	1 Jul 2017 – 30 Jun 2018
7	Putra Toastmasters Club	Sergeant at Arms	01351977	30 Nov 2016-30 Jun 2017
8	Young Scientist Network-Academy of Science Malaysia (YSN-ASM)	Member	–	1 Dec 2017 – 31 Dec 2020
9	Institut Kimia Malaysia (IKM)	Member	M/3519/6357/12	2017
10	Institut Kimia Malaysia (IKM)	Member	M/3519/6357/12	2016
11	Institut Kimia Malaysia (IKM)	Member	M/3519/6357/12	2016
12	Functional Device Laboratory, ITMA	Research Associate	–	2012-2017

Committee Memberships

No	Role	Seminar	Year
1	Deputy President	FORMS Seminar Series 1/2019	2019
2	Chairperson	International Symposium on Advanced Materials and Nanotechnology (iSAMN2019)	19-20 Aug 2019
3	Chairperson for Plenary Session	iSAMN2019	19-20 Aug 2019
4	Sponsorship Committee	iSAMN2019	19-20 Aug 2019
5	Sponsorship Committee	iFSC 2019	30-31 Oct 2019
6	Scientific Committee	International Conference on Catalysis 2018 (iCAT2018)	13-15 Nov 2018
7	Secretary	The 2 nd Malaysian Metal-Organic Frameworks Workshop 2018 (MyMOF2018)	29 Oct-2 Nov 2018
8	Committee	Malaysia CSS Curriculum Development Workshop with the US Department of State, Sandia National Laboratory	26 Feb-2 Mar 2018
9	Organizer	Science Outreach Workshop in conjunction with the Kuala Lumpur Engineering Science Fair (KLESF)	3-5 Nov 2017
10	Scientific	International Symposium on Industrial Chemistry and Chemical	2017

	Committee	Technology (ISICCT2017), sub-conference of the International Conference on Recent Advancements in Science and Technology (ICoRAST2017)	
11	Vice President	Symposium on Advanced Materials and Technology (SAMN2017)	2017
12	Chair for Keynote Session	Symposium on Advanced Materials and Technology (SAMN2017)	2017
13	Chair for Parallel Session	Symposium on Advanced Materials and Technology (SAMN2017)	2017
14	Committee	International Conference on Recent Advances in Material Chemistry (ICRAMC-2017)	2017
15	Scholarship Evaluation Committee/Panelist	Human Life Advancement Foundation	2016
16	Committee	The 7th Asian Conference on Colloid and Interface Science (ACCIS-7) and the 9th Asian Consortium on Computational Materials Sciences (ACCMS-9)	2016
17	Committee	Loyalty Award ISAPM	2016
18	Committee for Technical Publication	International Materials Technology Conference and Exhibition (IMTCE)	2016
19	Secretary	International Symposium on Advanced Polymeric Materials (ISAPM)	2016
20	Technical Programme Committee	The 4 th International Conference on Biomedical Engineering and Biotechnology (iCBEB)	2015
21	Technical Programme Committee	The 3 rd International Conference on Biomedical Engineering and Biotechnology (iCBEB)	2014
22	Secretary	ISAPM	2014
23	Technical Programme Committee	iCBEB	2013