

CURRICULUM VITAE

1. PERSONAL PARTICULARS

Name : HO LI NGEE
Date of Birth : 19th July 1974
Position : Senior Lecturer
Nationality : Malaysia
Office Address : School of Materials Engineering,
University Malaysia Perlis,
02600 Jejawi,
Perlis, Malaysia.



2. ACADEMIC QUALIFICATIONS

Apr 2003 – Mac 2006 : Ph.D / Oita University, Japan
Area : Material Engineering
Specialization : Mesoporous Materials
Dissertation : Synthesis and Characterization of Mesoporous Materials

Apr 2002 – Mac 2003 : Research student / Oita University, Japan
Area : Material Engineering
Specialization : Mesoporous Materials for Fluoride Removal

July 1996 – July 1999 : BSc. / University Science Malaysia
Major : Chemistry
Class : 2nd Upper (Hons)

3. WORKING EXPERIENCE

Year : June 2009 – Current
Position : **Senior Lecturer**
Department : School of Materials Engineering
Institution/ Organization : University Malaysia Perlis, Malaysia.

Year : Nov 2011 – Oct 2013
Position : **JSPS Postdoctoral Fellow**
Department : Joining and Welding Research Institute
Institution/ Organization : Osaka University, Japan

Year : October 2007 – March 2009
Position : **Postdoctoral Researcher**
Department : Joining and Welding Research Institute
Institution/ Organization : Osaka University, Japan

Year : May 2007 – September 2007
Position : **Visiting Researcher**
Department : Graduate School of Science and Technology
Institution/ Organization : Niigata University, Japan

Year : June 2006 – March 2007
Position : **Lecturer**
Department : School of Materials Engineering
Institution/ Organization : University Malaysia Perlis (KUKUM), Malaysia.

4. MEMBERSHIP OF PROFESSIONAL BODIES

- Ordinary Member of Institute of Materials Malaysia (IMM) (2015 ~ Current)
- Associate Member of Malaysia Institute of Chemistry (IKM) (2011~ Current)
- Member of Hong Kong Chemical, Biological & Environmental Engineering Society (HKCBEEES) (2017 ~ Current)
- Member of Japan Institute of Electronics Packaging (2008 - 2009)
- Member of Catalyst Society of Japan (2005 - 2006)
- Member of Chemistry Society of Japan (2003 - 2004)

5. CITATIONS / *h* - INDEX

- Total Documents in Scopus (+ lately accepted papers): **77 (63 impacted papers)**
- Total Citations (Scopus): **490**
- Cumulated impact factor (CIF): **153**
- *h*-index (Scopus): **12**
- RG Score: 31.74 (Higher than > **90%** of the RG members)

6. RESEARCH GRANTS

- 1. Mechanisms of electron transfer in Photocatalytic Fuel Cell for Electricity Generation and Degradation of Azo Dye**
Fundamental Research Grant Scheme (FRGS)
 - Amount: **RM 71,200.00**
 - **Project Leader**
 - Status: On-going (2016-2018)
- 2. Photocatalytic Activity of ZnO**
 - Incentive Journal Research Grant
 - Amount: **RM 15,000.00**
 - **Project Leader**
 - Status: Ongoing
- 3. Photocatalytic Fuel Cell**
 - Incentive Journal Research Grant
 - Amount: **RM 10,000.00**
 - **Project Leader**
 - Status: Completed
- 4. Fundamental Research of Copper and Copper Alloy Filled Electrically Conductive Adhesives with Enhanced Electrical Conductivity and Thermal Stability**
 - Fundamental Research Grant Scheme (FRGS)
 - Amount: **RM 68,000.00**
 - **Project Leader**
 - Status: Completed
- 5. Synthesis of Bioinspired Hierarchical Metal Oxides For Application As Photocatalyst**
 - Incentive Journal Research Grant
 - Amount: **RM 10,000.00**
 - **Project Leader**
 - Status: Completed
- 6. Metal Oxides As Photocatalyst in Photodegradation of Dyes**
 - Incentive Journal Research Grant
 - Amount: **RM 5,000.00**
 - **Project Leader**
 - Status: Completed

- 7. Development of Cu Filled Electrical Conductive Adhesive with High Reliability for Flexible Devices**
 - Japanese Society for the Promotion of Science (JSPS)
 - Amount: **Japanese Yen 300 million**
 - **Main researcher**
 - Status: Completed (*Grant No: 23-01376*)
- 8. Synthesis of Copper and Copper Alloy Nanoparticles for Application in the Electrically Conductive Adhesive**
 - UNIMAP Short Term Grant
 - Amount: **RM 15,000.00**
 - **Project Leader**
 - Status: Completed
- 9. A Fundamental Study of Silicon Carbide Nanotubes Formation By Microwaves Irradiation Assisted Shape Memory Synthesis**
 - Fundamental Research Grant Scheme (**FRGS**)
 - Amount: **RM 112,000.00**
 - **Co-Researcher**
 - Status: On-going (*Ref: FRGS/1/2014/TK04/UNIMAP/02/7*)
- 10. Deposition of Ag/AgCl Nanocubes onto the Fe₃O₄-SiO₂ Coreshell Nanostructure by Wet Chemistry Process for Multifunctional Applications**
 - Fundamental Research Grant Scheme (**FRGS**)
 - Amount: **RM 96,200.00**
 - **Co-Researcher**
 - Status: On-going (*Ref: FRGS/1/2014/TK04/UNIMAP/02/2*)
- 11. Ionic Conductivity Mechanism and Crystal Structure Analysis of YSZ Doped with Different Cation Valency**
 - Fundamental Research Grant Scheme (**FRGS**)
 - Amount: **RM 134,600.00**
 - **Co-Researcher**
 - Status: On-going (*Ref: FRGS/2/2014/SG06/UNIMAP/02/8*)
- 12. Study On Impurities Kinetic At Surface-Interface Region For Enhancement Of Photocatalytic Activity Of TiO₂ Solid Oxide In Water Splitting Process**
 - Fundamental Research Grant Scheme (**FRGS**)
 - Amount: **RM 103,000.00**
 - **Co-Researcher**
 - Status: On-going (*Ref: FRGS/2/2014/SG06/UNIMAP/02/3*)
- 13. Mechanism Study on Phytoremediation and Biodegradation of Azo Dye Wastewater using Aerobic-Anaerobic Baffled Constructed Wetlands**
 - Fundamental Research Grant Scheme (**FRGS**)
 - Amount: **RM 95,000.00**
 - **Co-Researcher**
 - Status: On-going (*Ref: FRGS/1/2015/SG01/UNIMAP/02/2*)
- 14. Innovative design of simultaneous bio-electricity generation and wastewater treatment by microbial fuel cell**
 - **Science Fund**, Malaysian Ministry of Higher Education
 - Amount: **RM 185,500.00**
 - **Co-Researcher**
 - Status: Completed
- 15. A Fundamental Study on Microcellular Foaming Behaviour of HDPE/PP Blends and Their Composites With Coconut Trunk Wood Fibers**
 - Fundamental Research Grant Scheme (**FRGS**)
 - Amount: **RM 52,400.00**
 - **Co-Researcher**
 - Status: Completed

16. Fundamental study on phytoremediation of azo dye by up flow constructed wetland with different emergent plants and reactor's design

- Fundamental Research Grant Scheme (**FRGS**)
- Amount: **RM 48,000.00**
- **Co-Researcher**
- Status: Completed

17. Phytoremediation of PAH-containing wastewater by model up-flow constructed wetland

- **Short term grant**
- Amount: **RM 14,000.00**
- **Co-Researcher**
- Status: Completed

7. CONFERENCE ORGANIZATION / COMMITTEE

- International Conference on Functional Materials and Metallurgy (ICoFM 2016), 28 May 2016, Penang, Malaysia – **Editorial Committee**
- Malaysian Metallurgical Conference (MMC 2009), 1-2 Dec 2009, Perlis - **Editorial Committee**
- International Conference On Sustainable Materials (ICoSM 2007), 9-11 June 2007, Penang, Malaysia – **Secretary**
- The International Conference on Innovative Material Science and Technology (IMST 2016), August 19-21, 2016, Shenzhen, China - **Technical Program Committee (TPC)**
- 2nd Annual International Conference on Sustainable Development (ICSD 2016), December 2-4, 2016, Xi'an, Shaanxi, China - **Technical Program Committee (TPC)**
- International Conference on Energy Engineering and Environmental Protection (ICEEEP 2016), November 21-23, 2016, Sanya, China - **Technical Program Committee (TPC)**
- International Conference on Environment, Energy and Materials 2016 (EEM 2016), Dec 23-25, 2016, Zhangjiajie, China - **Technical Program Committee (TPC)**
- 4th Annual International Conference on Material Science & Environmental Engineering (MSEE 2016), December 16-18, 2016, Chengdu, China - **Technical Program Committee (TPC)**
- International Conference on Energy Engineering and Environmental Protection (EEEP 2017), November 20-22, 2017, Sanya, China - **Technical Program Committee (TPC)**
- 2nd International Conference on Innovative Material Science and Technology (IMST2017), October 20-22, 2017, Kunming, China - **Technical Program Committee (TPC)**
- 3rd Annual 2017 International Conference on Management Science and Engineering (MSE 2017), August 18-20, 2017, Guilin, Guangxi, China - **Technical Program Committee (TPC)**
- International Conference on Energy, Power and Environmental Engineering (ICEPEE 2017), April 23-24, 2017, Shanghai, China - **Technical Program Committee (TPC)**
- 2nd International Conference on Environmental Science and Engineering (ESE 2017), July 14 - 16, 2017, Xiamen, China - **Technical Program Committee (TPC)**

8. EDITORIAL EXPERIENCE

1. Editorial Board Member of American Journal of Materials Science (**Scientific & Academic Publishing**)
2. Editorial Board Member of International Journal of Water Science and Engineering (**American Association for Science and Technology**)
3. Editorial Board Member of Journal of Materials Sciences and Applications (**American Association for Science and Technology**)

4. Editorial Board Member of Journal of Chemical Engineering and Materials Science (*Academic Journals*)

9. REVIEWER EXPERIENCE IN JOURNALS

1. Reviewer of Crystal Growth & Design (**ACS**) - *IF: 4.055*
2. Reviewer of Journal of Adhesion (**Taylor & Francis**) - *IF: 1.628*
3. Reviewer of Journal of Colloid and Interface Science (**Elsevier**) - *IF: 4.233*
4. Reviewer of Journal of Hazardous Materials (**Elsevier**) - *IF: 6.065*
5. Reviewer of Material Science & Engineering: B (**Elsevier**) - *IF: 2.552*
6. Reviewer of Journal of Materials Science: Materials in Electronic (**Springer**) - *IF: 2.019*
8. Reviewer of Chemical Engineering Communications (**Taylor & Francis**) - *IF: 1.297*
9. Reviewer of Journal of Electronic Materials (**Springer**) - *IF: 1.579*
10. Reviewer of Environmental Technology (**Taylor & Francis**) - *IF: 1.751*
11. Reviewer of Environmental Chemical Engineering (**Elsevier**) – *Scopus (index)*

10. BOOK CHAPTER

1. 'Volume I: Synthesis of Inorganic Nanomaterials: Advances and Key'
- Chapter: Silicon Carbide Nanomaterials (Publisher: Elsevier)

11. IMPACTED JOURNALS (CIF: 145.356)

- (1) **LN Ho***, T. Ishihara, H. Nishiguchi, Y. Takita, 'Removal of fluoride from water through ion exchange by mesoporous Ti oxohydroxide', *Journal of Colloid and Interface Science* (2004) Vol. 272, 399-403. (**Elsevier, IF: 4.233**)
- (2) **LN Ho***, T. Ikegawa, H. Nishiguchi, K. Nagaoka, Y. Takita, 'Synthesis and characterization of molybdenum incorporated mesoporous aluminophosphate', *Applied Surface Science*, (2006) Vol. 252, 6260-6268. (**Elsevier, IF: 3.387**)
- (3) **LN Ho***, S. Yukushima, R. Morikawa, N. Asaka, H. Nishiguchi, K. Nagaoka, Y. Takita, 'Synthesis of a thermally stable mesoporous aluminophosphate by using sodium aluminate as precursor', *Colloids and Surfaces A: Physicochemical and Engineering Aspects* (2005) Vol. 268, 40-44. (**Elsevier, IF: 2.714**)
- (4) **LN Ho***, H. Nishiguchi, K. Nagaoka, Y. Takita, 'Preparation of mesoporous nanocrystalline cerium phosphate with controllable pore size by using chelating agent', *Materials Chemistry and Physics* (2006) Vol. 97, 494-500. (**Elsevier, IF: 2.084**)
- (5) **LN Ho***, H. Nishiguchi, K. Nagaoka, Y. Takita, 'Synthesis and characterization of a series of mesoporous nanocrystalline lanthanides phosphate', *Journal of Porous Materials* (2006) Vol. 13, 237-244. (**Springer, IF: 1.624**)
- (6) **LN Ho***, H. Nishiguchi, K. Nagaoka, Y. Takita, 'Synthesis of Mesoporous, Nanocrystalline Lanthanum Phosphate in the Presence of Citric Acid and Stearic Acid', *Journal of Rare Earths* (2007) Vol. 25, 684-691. (**Elsevier, IF: 2.429**)
- (7) **LN Ho***, H. Nishikawa, N. Natsume, T. Takemoto, K. Miyake, M. Fujita, K. Ota, "Effects of trace elements in copper fillers on the electrical properties of conductive adhesives" *Journal of Electronic Materials* (2010) Vol. 39, 115-123. (**Springer, IF: 1.579**)
- (8) **LN Ho***, T. F. Wu, H. Nishikawa, T. Takemoto, 'Electrical Properties of Pre-Alloyed Cu-P containing Electrically Conductive Adhesive', *Journal of Adhesion* (2010) Vol.86, 805-813. (**Taylor & Francis, IF: 1.628**)

- (9) **LN Ho***, H. Nishikawa, T. Takemoto, 'Effect of Different Copper Fillers on The Electrical Resistivity of Conductive Adhesives', *Journal of Material Science: Materials in Electronics* (2011) Vol. 22,538-544. (**Springer, IF: 2.019**)
- (10) **LN Ho***, T. F. Wu, H. Nishikawa, T. Takemoto, K. Miyake, M. Fujita, K. Ota, 'Electrical Reliability of Different Alloying Content on Copper Alloy Fillers in Electrically Conductive Adhesives', *Journal of Material Science: Materials in Electronics* (2011) Vol. 22,735-740. (**Springer, IF: 2.019**)
- (11) **LN Ho***, S.-A. Ong, Y. L. See, 'Photocatalytic Degradation of Reactive Black 5 by Fish Scale-Loaded TiO₂ Composites', *Water, Air and Soil Pollution*, (2012) Vol. 223 (7) 4437-4442. (**Springer, IF: 1.702**)
- (12) **LN Ho*** and H. Nishikawa, 'Surfactant-Free Synthesis of Copper Particles for Electrically Conductive Adhesive Applications', *Journal of Electronic Materials* (2012) Vol.41 (9) 2527-2532. (**Springer, IF: 1.579**)
- (13) **LN Ho***, S.-A. Ong, H. Osman, F.-M. Chong, 'Enhanced Photocatalytic Activity of Fish Scale Loaded TiO₂ Composites Under Solar Light Irradiation', *Journal of Environmental Sciences*, (2012) Vol. 24 (6) 1142-1148. (**Elsevier, IF: 2.937**)
- (14) **LN Ho*** and H. Nishikawa, 'Influence of post-curing and coupling agents on polyurethane based copper filled electrically conductive adhesives', *Journal of Material Science: Materials in Electronics*, (2013) Vol. 24 (6) 2077-2081. (**Springer, IF: 2.019**)
- (15) **LN Ho***, T. F. Wu, H. Nishikawa, 'Properties of phenolic based Ag filled conductive adhesive affected by different coupling agents', *Journal of Adhesion*, (2013) Vol.89 (11) 847-858. (**Taylor & Francis, IF: 1.628**)
- (16) **LN Ho*** and H. Nishikawa, 'Copper Filled Electrically Conductive Adhesive with Enhanced Shear Strength', *Journal of Materials Engineering and Performance*, (2014) Vol. 23 (9) 3371-3378. (**Springer, IF: 1.331**)
- (17) **LN Ho*** and H. Nishikawa, 'Effect of porous copper on the properties of electrically conductive adhesives', *Journal of Material Science: Materials in Electronics*, (2015) Vol. 26 (10) 7771-7779. (**Springer, IF: 2.019**)
- (18) OM Min, **LN Ho***, SA Ong, YS Wong, 'Comparison between the photocatalytic degradation of single and binary azo dyes in TiO₂ suspensions under solar light irradiation', *Journal of Water Reuse and Desalination*, (2015) Vol. 5 (4) 579-591. (**IWA Publishing, IF: 0.686**)
- (19) NA Yusoff, **LN Ho***, SA Ong, YS Wong, WF Khalik, 'Photocatalytic activity of zinc oxide (ZnO) synthesized through different methods', *Desalination and Water Treatment*,(2016) Vol. 57(27) 12496-12507. (**Taylor & Francis, IF: 1.631**)
- (20) WF Khalik, **LN Ho***, SA Ong, YS Wong, NA Yusoff, F Ridwan, 'Decolorization and Mineralization of Batik Wastewater Through Solar Photocatalytic Process', *Sains Malaysiana*, (2015) Vol. 44 (4) 607-612. (**UKM, IF: 0.470**)
- (21) CH Voon, MN Derman, U Hashim, KR Ahmad, **LN Ho**, 'A simple one-step anodising method for the synthesis of ordered porous anodic alumina', *Journal of Experimental Nanoscience*, (2014) Vol. 9 (2) 106-112. (**Taylor & Francis, IF: 0.863**)
- (22) SA Ong, **LN Ho**, YS Wong, SF Chen, M Viswanathan, R Bahari, 'Mineralization of diazo dye (Reactive Black 5) in wastewater using recirculated up-flow constructed wetland reactor', *Desalination and Water Treatment*, (2012) Vol. 46 (1-3) 312-320. (**Taylor & Francis, IF: 1.631**)
- (23) SA Ong, **LN Ho**, YS Wong, K Raman, 'Performance and kinetic study on bioremediation of

- diazo dye (reactive black 5) in wastewater using spent GAC-biofilm sequencing batch reactor', *Water, Air, and Soil Pollution*, (2012) Vol. 223 (4) 1615-1623. (Springer, IF: 1.702)
- (24) SA Ong, LN Ho, YS Wong, OM Min, MR Fahmi, 'Solar photocatalytic degradation of azo dye Reactive Black 5 in aqueous suspension of TiO₂', *Journal of Water Reuse and Desalination*, (2011) Vol. 1 (4) 202-207. (IWA Publishing, IF: 0.686)
- (25) SA Ong, LN Ho, YS Wong, OM Min, LS Lai, SK Khiew, V Murali, 'Photocatalytic mineralization of azo dye acid orange 7 under solar light irradiation,' *Desalination and Water Treatment*, (2012) 48 (1-3), 245-251. (Taylor & Francis, IF: 1.631)
- (26) V Murali, SA Ong, LN Ho, YS Wong, 'Decolorization of methyl orange using upflow anaerobic sludge blanket (UASB) reactor-An investigation of co-substrate and dye degradation kinetics', *Desalination and Water Treatment*, (2013) Vol. 51 (40-42) 7621-7630. (Taylor & Francis, IF: 1.631)
- (27) SA Ong, LN Ho, YS Wong, A Zainuddin, 'Adsorption Behavior of Cationic and Anionic Dyes onto Acid Treated Coconut Coir', *Separation Science and Technology (Philadelphia)*, (2013) Vol. 48 (14) 2125-2131. (Taylor & Francis, IF: 1.106)
- (28) SA Ong, LN Ho, YS Wong, SF Chen (2014). 'Artificial aeration to enhance mineralization of mono azo (Methyl Orange)-containing wastewater using recirculated up-flow constructed wetland', *Environmental Engineering and Management Journal*, (2014) Vol. 13 (1), 37-42. (Gheorghe Asachi Technical University of Iasi, Romania, IF: 1.008)
- (29) SA Ong, LN Ho, YS Wong, K Raman, R Bahari, 'Mineralization of Methyl Orange-containing wastewater by integrated anaerobic and aerobic processes using spent granular activated carbon-biofilm under sequencing batch reactor operation', *Desalination and Water Treatment*, (2013) Vol. 51 (13-15) 2813-2819. (Taylor & Francis, IF: 1.631)
- (30) SA Ong, OM Min, LN Ho, YS Wong, 'Comparative study on photocatalytic degradation of mono azo dye Acid Orange 7 and Methyl Orange under solar light irradiation.' *Water, Air and Soil Pollution*, (2012) Vol. 223 (8) 5483-5493. (Springer, IF: 1.702)
- (31) SA Ong, OM Min, LN Ho, YS Wong, 'Solar photocatalytic degradation of mono azo Methyl Orange and diazo Reactive Green 19 in single and binary dye solutions: Adsorbability vs photodegradation rate.' *Environmental Science and Pollution Research*, (2013) Vol. 20 (5) 3405-3413. (Springer, IF: 2.741)
- (32) V Murali, SA Ong, LN Ho, YS Wong, N Hamidin, 'Comprehensive review and compilation of treatment for azo dyes using microbial fuel cells', *Water Environment Research*, (2013) Vol. 85 (3) 270-277. (Water Environment Federation, IF: 0.91)
- (33) WF Khalik, SA Ong, LN Ho, YS Wong, NA Yusoff, F Ridwan, 'Evaluation on the molecular structure of azo dye in photocatalytic mineralization under solar light irradiation', *Desalination and Water Treatment*, (2015) Vol. 55 (8) 2229-2236. (Taylor & Francis, IF: 1.631)
- (34) V Murali, SA Ong, LN Ho, YS Wong, 'Evaluation of integrated anaerobic-aerobic biofilm reactor for degradation of azo dye methyl orange', *Bioresource Technology*, (2013) Vol. 143, 104-111. (Elsevier, IF: 5.651)
- (35) SA Ong, LN Ho, YS Wong, 'Comparison on biodegradation of anionic dye orange II and cationic dye methylene blue by immobilized microorganisms on spent granular activated carbon', *Desalination and Water Treatment*, (2015) 54 (2) 557-561. (Taylor & Francis, IF: 1.631)
- (36) NA Yusoff, SA Ong, LN Ho, YS Wong & WF Khalik, 'Degradation of phenol through solar-photocatalytic treatment by zinc oxide in aqueous solution', *Desalination and Water Treatment*, (2015) 54 (6) 1621-1628. (Taylor & Francis, IF: 1.631)

- (37) WE Thung, SA Ong, **LN Ho**, YS Wong, F Ridwan, YL Oon, YS Oon, HK Lehl, 'A highly efficient single chambered up-flow membrane-less microbial fuel cell for treatment of azo dye Acid Orange 7-containing wastewater', *Bioresource Technology*, (2015) Vol. 197, 284-288. ([Elsevier, IF: 5.651](#))
- (38) YL Oon, SA Ong, **LN Ho**, YS Wong, YS Oon, HK Lehl, WE Thung, 'Hybrid system up-flow constructed wetland integrated with microbial fuel cell for simultaneous wastewater treatment and electricity generation', *Bioresource Technology*, (2015) Vol. 186, 270-275. ([Elsevier, IF: 5.651](#))
- (39) WE Thung, SA Ong, **LN Ho**, YS Wong, YL Oon, YS Oon, HK Lehl, 'Simultaneous wastewater treatment and power generation with innovative design of an upflow membrane-less microbial fuel cell', *Water, Air, and Soil Pollution*, (2015) Vol. 226 (5) Article number 2410. ([Springer, IF: 1.702](#))
- (40) YS Oon, SA Ong, **LN Ho***, YS Wong, YL Oon, HK Lehl, WE Thung, 'Long-term operation of double chambered microbial fuel cell for bio-electro denitrification', *Bioprocess and Biosystems Engineering*, (2016) Vol. 39, 893-900. ([Springer, IF: 1.870](#))
- (41) YL Oon, SA Ong, **LN Ho**, YS Wong, FA Dahalan, YS Oon, HK Lehl, WE Thung, 'Synergistic effect of up-flow constructed wetland and microbial fuel cell for simultaneous wastewater treatment and energy recovery', *Bioresource Technology*, (2016) Vol. 203, 190-197. ([Elsevier, IF: 5.651](#))
- (42) WE Thung, SA Ong, **LN Ho**, YS Wong, YL Oon, YS Oon, HK Lehl, 'Bioelectricity Generation in Batch-Fed Up-Flow Membrane-Less Microbial Fuel Cell: Effect of Surface Morphology of Carbon Materials as Aqueous Biocathodes', *Water, Air, and Soil Pollution*, (2016) Vol. 227, 254. ([Springer, IF: 1.702](#))
- (43) SL Lee, **LN Ho***, SA Ong, YS Wong, CH Voon, WF Khalik, NA Yusoff, N Nordin, 'Enhanced Electricity Generation and Degradation of Azo Dye Reactive Green 19 in Photocatalytic Fuel Cell with ZnO/Zn as Photoanode', *Journal of Cleaner Production*, (2016) Vol.127, 579-584. ([Elsevier, IF: 5.715](#))
- (44) WF Khalik, **LN Ho***, SA Ong, YS Wong, NA Yusoff, F Ridwan, 'Solar Photocatalytic Mineralization of Dye New Coccine in Aqueous Phase Using Different Photocatalysts', *Water, Air and Soil Pollution*, (2016) Vol. 227, 118. ([Springer, IF: 1.702](#))
- (45) HK Lehl, SA Ong, **LN Ho**, YS Wong, FN Mohd Saad, YL Oon, YS Oon, CY Yong, WE Thung, 'Multiple aerobic and anaerobic baffled constructed wetlands for simultaneous nitrogen and organic compounds removal', *Desalination and Water Treatment*, (2016) Vol. 57 (60) 29160-29167. ([Taylor & Francis, IF: 1.631](#))
- (46) SL Lee, **LN Ho***, SA Ong, YS Wong, CH Voon, WF Khalik, NA Yusoff, N Nordin, 'A highly efficient immobilized ZnO/Zn photoanode for degradation of azo dye Reactive Green 19 in a photocatalytic fuel cell', *Chemosphere*, (2017) Vol. 166, 118-125. ([Elsevier, IF: 4.208](#))
- (47) NA Yusoff, SA Ong, **LN Ho**, YS Wong, WF Khalik, SL Lee, 'Evaluation of biodegradation process: Comparative study between suspended and hybrid microorganism growth system in sequencing batch reactor (SBR) for removal of phenol', *Biochemical Engineering Journal*, (2016) Vol.115, 14-22. ([Elsevier, IF: 2.892](#))
- (48) SL Lee, **LN Ho***, SA Ong, GM Lee, YS Wong, CH Voon, WF Khalik, NA Yusoff, N Nordin, 'Comparative Study of Photocatalytic Fuel Cell for Degradation of Methylene Blue under Sunlight and Ultra-Violet Light Irradiation', *Water, Air and Soil Pollution*, (2016) Vol. 227 (8) 445. ([Springer, IF: 1.702](#))
- (49) YS Oon, SA Ong, **LN Ho**, YS Wong, YL Oon, HK Lehl, WE Thung, N Nordin, 'Microbial fuel cell operation using monoazo and diazo dyes as terminal electron acceptor for simultaneous decolourisation and bioelectricity generation', *Journal of Hazardous Materials*, (2017) Vol. 325, 170-177. ([Elsevier, IF: 6.065](#))

- (50) YL Oon, SA Ong, **LN Ho**, YS Wong, FA Dahalan, YS Oon, HK Lehl, WE Thung, 'Role of macrophyte and effect of supplementary aeration in up-flow constructed wetland-microbial fuel cell for simultaneous wastewater treatment and energy recovery', *Bioresource Technology*, (2017) Vol. 224, 265-275. (**Elsevier, IF: 5.651**)
- (51) WF Khalik, SA Ong, **LN Ho**, YS Wong, CH Voon, SY Yusuf, NA Yusoff, SL Lee, 'Influence of supporting electrolyte in electricity generation and degradation of organic pollutants in photocatalytic fuel cell', *Environmental Science and Pollution Research*, (2016) Vol. 23, Issue 16, 16716-16721. (**Springer, IF: 2.741**)
- (52) WF Khalik, **LN Ho***, SA Ong, CH Voon, YS Wong, N Yusoff, SL Lee, SY Yusuf, 'Optimization of degradation of Reactive Black 5 (RB5) and electricity generation in solar photocatalytic fuel cell system', *Chemosphere*, (2017) Vol. 184, 112-119. (**Elsevier, IF: 4.208**)
- (53) WE Thung, SA Ong, **LN Ho**, YS Wong, F Ridwan, YL Oon, YS Oon, HK Lehl, 'Sustainable green technology on wastewater treatment: The evaluation of enhanced single chambered up-flow membrane-less microbial fuel cell', *Journal of Environmental Sciences*, (2017) Article in Press. (**Elsevier, IF: 2.937**)
- (54) HK Lehl, SA Ong, **LN Ho**, YS Wong, FNM Saad, YL Oon, YS Oon, WE Thung, CY Yong, 'Decolorization and mineralization of Amaranth dye using multiple zoned aerobic and anaerobic baffled constructed wetland', *International Journal of Phytoremediation*, (2017) Vol.19, Issue 8, 725-731. (**Taylor and Francis, IF: 1.770**)
- (55) YY Lau, YS Wong, SA Ong, **LN Ho**, K Hussin, NA Lutpi, 'Intermolecular mechanistic treatment of recalcitrant environmental pollutants: Azo, benzene, naphthalene and vinyl sulfone', *Journal of the Taiwan Institute of Chemical Engineers*, (2017) Vol. 76, 27-34. (**Elsevier, IF: 4.217**)
- (56) SA Ong, **LN Ho**, YS Wong, KA Mohammad Pakri, 'Comparative study on the biodegradation of mixed remazol dyes wastewater between integrated anaerobic/aerobic and aerobic sequencing batch reactors', *Rendiconti Lincei*, (2017), Article in Press, 1-5. (**Springer, IF: 0.693**)
- (57) N Nordin, **LN Ho***, SA Ong, AH Ibrahim, YS Wong, SL Lee, YS Oon, YL Oon, 'Hybrid system of photocatalytic fuel cell and Fenton process for electricity generation and degradation of Reactive Black 5', *Separation and Purification Technology*, (2017) Vol. 177, 135-141. (**Elsevier, IF: 3.359**)
- (58) YS Oon, SA Ong, **LN Ho**, YS Wong, YL Oon, HK Lehl, WE Thung, 'Microbial Fuel Cell Operation Using Nitrate as Terminal Electron Acceptor for Simultaneous Organic and Nutrient Removal', *International Journal of Environmental Science and Technology*, (2017), Article In Press. (**Springer, IF: 1.915**)
- (59) NA Yusoff, **LN Ho***, SA Ong, YS Wong, WF Khalik, MF Ridwan, 'Enhanced Photocatalytic Activity of ZnO Nanoparticles Synthesized through Sol-Gel Method', *Sains Malaysiana*, (2017) Accepted. (**UKM, IF: 0.470**)
- (60) W. F. Khalik, S. A. Ong, **LN Ho**, Y. S. Wong, N. A. Yusoff, F. Ridwan, 'Comparison on solar photocatalytic degradation of Orange G and New Coccine using zinc oxide as catalyst', *Environmental Engineering and Management Journal*, (2014), Accepted. (**Gheorghe Asachi Technical University of IASI, Romania, IF: 1.008**)
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- (3) **LN Ho**, T Hatsumori, K Uematsu, T Ishigaki, K Toda, M Sato, 'Synthesis of phosphate phosphor for a white LED', *Physics Procedia*, (2009) Vol. 2 (2) 171-183.
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- (5) **LN Ho**, H Nishikawa, 'Copper filled polyurethane based electrically conductive adhesive with improved mechanical strength', **EMPC 2013** - European Microelectronics Packaging Conference: The Winding Roads of Electronics Packaging 2013, Article number 6698695.
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- (9) KK Eing, B. Johar, **LN Ho**, Y Zabar, 'Influence of Sintering Temperature on Crystallization Behavior of Cordierite synthesized from Non-Stoichiometric Formulation', *MATEC Web of Conferences*, (2016) Vol. 78, Article number 01099.
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phenol', **AIP Conference Proceedings**, (2017) Vol. 1828, Article number 020032.

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1. **LN Ho**, T. Ishihara, H. Nishiguchi, Y. Takita, 'Fluoride ion exchange by mesoporous $Ti(OH)_4$ ', *83rd Annual Meeting of Chemistry Society of Japan (18th-21st March 2003)*, Waseda University, Tokyo, Japan.
2. **LN Ho**, H. Nishiguchi, K. Nagaoka, Y. Takita, 'Synthesis and characterization of a series of mesoporous lanthanide phosphate', *Proceeding of 3rd International Conference on Materials for Advanced Technologies (ICMAT, August 3-8th, 2005) in Singapore*.
3. **LN Ho**, H. Nishiguchi, K. Nagaoka, Y. Takita, 'Synthesis and characterization of mesoporous lanthanum phosphate through carboxylic acid route', *Proceeding of The International Chemical Congress of Pacific Basin Societies (Pacifichem 2005) in Honolulu, Hawaii*.
4. **LN Ho**, T. Ishihara, H. Nishiguchi, Y. Takita, 'Fluoride ion exchange properties of mesoporous titanium-oxo-hydroxide', *Proceeding of the International Conference on Science and Technology (ICSTIE, 8-9th December 2006) UiTM, Penang, Malaysia*.
5. T. Hatsumori, **LN Ho**, K. Uematsu, K. Toda and M. Sato, 'Fabrication of a blue phosphate phosphor for use in a white LED', Annual Meeting of the Ceramic Society of Japan, (16 - 18 March 2008), Tokyo University of Science, Tokyo, Japan.
6. T. Hatsumori, **LN Ho**, K. Uematsu, K. Toda and M. Sato, 'Synthesis of phosphate phosphor for a white LED', *Proceeding of the 15th International Conference on Luminescence and Optical Spectroscopy of Condensed Matter (ICL '08, 7-11 July 2008)*, Lyon, France.
7. H Nishikawa, **LN Ho**, T Takemoto, Y Kashiwagi, M Yamamoto and M Nakamoto, 'Electrical property of conductive adhesive using Cu nanoparticles with organic layer', *Proceeding of the 83rd National Meeting of Japan Welding Society (10-12th September 2008)* Kitakyushu International Conference Center, Fukuoka, Japan.
8. **LN Ho**, H Nishikawa, N Natsume, T Takemoto, 'Evaluation of Electrically Conductive Adhesive Containing Copper Particles with Oxidation Prevention', *Proceeding of the 18th Micro-Electronics Symposium (MES 2008, 18-19th September 2008)* Kyoto University, Kyoto, Japan.
9. **LN Ho**, H. Nishikawa, T. Takemoto, 'Electrical Properties and Thermal Stability of Cu-P Containing Electrically Conductive Adhesives', *Malaysian Metallurgical Conference 2009 (MMC 2009, 1st & 2nd Dec 2009)* Kuala Perlis, Perlis, Malaysia.
10. **LN Ho**, H. Nishikawa, T. Takemoto, 'Copper Alloy Filled Electrically Conductive Adhesives', *10th National Symposium On Polymeric Materials 2010 (NSPM 2010, 8-10th Nov 2010)* Langkawi, Kedah, Malaysia.
11. **LN Ho**, H. Nishikawa, T. Takemoto, 'Effect of Cu Morphology on Electrical Resistivity of Electrically Conductive Adhesive', *2nd ASEAN-APCTP Workshop on Advanced Materials Science and Nanotechnology 2010 (AMSN 2010, 21-23rd Dec 2010)* Tanjung Bungah, Penang, Malaysia.
12. **LN Ho**, P-I Chua, H. Osman, S-A Ong, 'Photocatalytic Degradation of Dye by Titania Loaded Biomaterials under Solar Light', *14th Asian Chemical Congress 2011, Contemporary Chemistry for Sustainability and Economic Sufficiency (14th ACC 2011, 5-8th September 2011)* Bangkok, Thailand.
13. **L-N Ho**, H. Nishikawa, 'Effects of Silane Coupling Agents on the Properties of Copper

- Filled Electrically Conductive Adhesive', 2012 2nd International Conference on Microelectronics, Optoelectronics and Nanoelectronics (2nd **ICMON 2012**, 25-26th August 2012), Shanghai, China.
14. **LN Ho**, T-F Wu, H. Nishikawa, 'Rheological, electrical and mechanical properties of Ag filled electrically conductive adhesive', The 4th International Conference on The Characterization and Control of Interfaces for High Quality Advanced Materials (4th **ICCCI 2012**, 2-5th September 2012), Kurashiki, Okayama, Japan.
 15. **LN Ho**, H. Nishikawa, 'Properties of Polyurethane Based Electrically Conductive Adhesive Prepared with Different Tertiary Amines', The International Symposium on Visualization in Joining & Welding Science through Advanced Measurements and Simulation, (**Visual-JW 2012**, 28-30th November 2012), Osaka, Japan.
 16. **LN Ho**, H. Nishikawa, 'Properties of Porous Copper Filled Electrically Conductive Adhesives', 2013 14th International Conference on Electronic Packaging Technology, (**ICEPT 2013**, 11-14th August 2013), Dalian, China.
 17. **LN Ho**, H. Nishikawa, 'Copper Filled Polyurethane Based Electrically Conductive Adhesive with Improved Mechanical Strength', 19th European Microelectronics and Packaging Conference (**EMPC 2013**, 9-12th September 2013), Grenoble, France.
 18. **LN Ho**, H. Nishikawa, 'Effect of Polymeric Resins on the Properties of Cu filled Electrically Conductive Adhesives', 15th International Conference on Electronic Materials and Packaging (**EMAP 2013**, 6-9th October 2013), Seoul / Ilsan, Korea.
 19. SA Ong, **LN Ho**, YS Wong, SF Chen, R. Bahari, 'Performance evaluation on phytoremediation of mono azo (Methyl Orange)-containing wastewater using recirculated up-flow constructed wetland', 14th Asian Chemical Congress 2011 (14th **ACC 2011**, Sep 5 – 8th), Bangkok, Thailand.
 20. OM Min, SA Ong, YS Wong, **LN Ho**, 'TiO₂ –assisted photocatalytic degradation of azo dyes under solar light irradiation, 2nd International Chemical and Environmental Engineering Conference (**ICEEC 2011** Dec 21 – 23rd), Kuala Lumpur.
 21. V Murali, SA Ong, YS Wong, **LN Ho**, KA Pakri, 'Degradation of synthetic dye wastewater by using combined anaerobic-aerobic and aerobic sequencing batch reactors', The 2nd International Malaysia-Ireland Joint Symposium on Engineering, Science and Business (**IMiEJS 2012** June 18 – 20th), Kuala Lumpur, Malaysia,.
 22. OM Min, SA Ong, YS Wong, T. Nuraiti **LN Ho**, 'Photocatalytic decolorization of binary azo dyes solution by using TiO₂ suspensions, The 2nd International Malaysia-Ireland Joint Symposium on Engineering, Science and Business (**IMiEJS 2012**, June 18-20th), Kuala Lumpur, Malaysia,.
 23. NA Yusoff, SA Ong, **LN Ho**, YS Wong, WF Khalik, 'Comparison of Photocatalyst Performances for Mineralization of Phenol', International Postgraduate Conference on Engineering and Management, Universiti Malaysia Perlis, (**IPCEM 2014**, 25-26th January 2014), Perlis.
 24. WF Khalik, SA Ong, **LN Ho**, YS Wong, NA Yusoff, 'Mineralization of New Coccine using CuO, Fe₂O₃, TiO₂ and ZnO by Solar Photocatalytic', International Postgraduate Conference on Engineering and Management 2014 Universiti Malaysia Perlis (**IPCEM 2014**, 25-26th January 2014), Perlis.
 25. OM Min, SA Ong, YS Wong, **LN Ho**, 'Prepared Iron-doped TiO₂ powder by Reflux Sol-gel Method and their High Photocatalytic Activity for Reactive Green 19' International Postgraduate Conference on Engineering and Management 2014 Universiti Malaysia Perlis (**IPCEM 2014**, 25-26th January 2014), Perlis.
 26. OM Min, SA Ong, YS Wong, **LN Ho**, 'Effects of Synthesis Ni doped TiO₂ on Photocatalytic Degradation Process' International Conference on Business Innovation , Entrepreneurship and Engineering 2013 (**ICOBIEE 2013**, 6-8th December), Penang.

27. YS Oon, SA Ong, **LN Ho**, YS Wong, YL Oon, HK Lehl, WE Thung, 'Study on Double Chambered Microbial Fuel Cell For Electricity Generation and Wastewater Treatment', The 2nd IWA Malaysia Young Water Professional Conference 2015, (**YWP 2015**) 17-20th March 2015, Kuala Lumpur.
28. WE Thung, SA Ong, **LN Ho**, YS Wong, YL Oon, YS Oon, HK Lehl, 'Innovative Design of Up-flow Membrane-less Microbial Fuel Cell for Dye-Containing Wastewater Treatment and Electricity Generation', The 2nd IWA Malaysia Young Water Professional Conference 2015, (**YWP 2015**) 17-20th March 2015, Kuala Lumpur.
29. YL Oon, SA Ong, **LN Ho**, YS Wong, YS Oon, HK Lehl, WE Thung, 'Simultaneous Wastewater Treatment and Electricity Generation by Using a Novel Hybrid System Up-Flow Constructed Wetland – Microbial Fuel Cell', The 2nd IWA Malaysia Young Water Professional Conference 2015, (**YWP 2015**) 17-20th March 2015, Kuala Lumpur.
30. HK Lehl, SA Ong, **LN Ho**, YS Wong, F. Naemah, YL Oon, YS Oon, WE Thung, CY Yong, 'Removal of Inorganic Compounds and Nutrients Using Aerobic and Anaerobic Baffled Constructed Wetland Reactor', The 2nd IWA Malaysia Young Water Professional Conference 2015, (**YWP 2015**) 17-20th March 2015, Kuala Lumpur.
31. SL Lee, **LN Ho**, SA Ong, YS Wong, CH Voon, WF Khalik, NA Yusoff, 'Simultaneous Wastewater Treatment and Electricity Generation by Using Photocatalytic Fuel Cell', The 10th International Materials Technology Conference & Exhibition (**IMTCE 2016**) 16-19th May 2016, Kuala Lumpur.
32. N Nordin, **LN Ho**, SA Ong, AH Ibrahim, YS Wong 'Hybrid Wastewater Treatment System of Photocatalytic Fuel Cell and Electro-Fenton Process', 5th International Conference on Environmental Research & Technology (**ICERT 2017**), 23-25th August 2017, Penang.

14. INTERNATIONAL / UNIVERSITY / SCHOOL COMMITTEES

1. Visit to Yamaguchi University, Japan, together with 8 postgraduate students of my research group under **Sakura Program** fully sponsored by the Japan government (Dec 2016).
2. Organized **MOU** between School of Materials Engineering, UniMAP and Joining and Welding Research Institute (JWRI), Osaka University, Japan (Nov 2015).
3. **Chairperson** for previva of Master student in School of Materials Engineering.
4. **Internal examiner** for proposal defense and viva of Master and PhD students in School of Materials Engineering.
5. Committee of postgraduate study of School of Materials Engineering
6. Person-in-charge for instrument of surface porosity analysis (BET)
7. Person-in-charge for instrument of atomic absorption spectrometer (AAS)
8. Committee of Final Year Project – Academic year 2010/2011
9. Speaker for Materials Characterization Workshop organized by School of Materials Engineering (August 2017)
10. Invited speaker for JWRI-UM Symposium (20-21 November, 2012).

15. INDUSTRIAL COLLABORATION AND CONSULTATION

1. Research and consultation with Nippon Electric Glass (Malaysia).
2. Research collaboration and consultation with Mitsui Mining and Smelting Co. Ltd. (Japan)
3. Research collaboration with Harima Chemical Inc. (Japan)

16. AWARDS / HONOURS / FELLOWSHIPS / SCHOLARSHIPS

- 2017: Anugerah Kecemerlangan in Impacted Journal (UniMAP)
- 2016: Anugerah Kecemerlangan in Impacted Journal (UniMAP)
- 2015: Biography profile was selected in the **Who's Who in the World 2015 (32nd Ed.)** by Marquis Who's Who.
- 2013: **Outstanding Poster Paper Award** – awarded by **EMAP/ISMP 2013**, 15th International Conference on Electronic Materials and Packaging (Oct 6-9th, 2013), KINTEX, Seoul / Ilsan, Korea.
- 2011-2013: **JSPS Postdoctoral Fellowship** awarded by the **Japan Society for the Promotion of Science (JSPS)**
- 2002-2006: **Monbukagakusho Scholarship** awarded by the **Ministry Education of Japan (PhD)**
- 1995-1999: Scholarship awarded by the **JPA, Malaysia (BSc)**

Awards in Research Product:

- 'Photocatalytic Fuel Cell (PFC) for Organic Wastewater Treatment and Electricity Generation', **Ekspo Rekacipta dan Pameran Penyelidikan UniMAP (EREKA 2016) - Silver**
- 'ZnO immobilized Alginate Beads with Recycle Ability for Treatment of Organic Wastewater', **Ekspo Rekacipta dan Pameran Penyelidikan UniMAP (EREKA 2016) – Bronze**
- 'Double - chamber Photocatalytic Fuel Cell' **Ekspo Rekacipta & Pameran Penyelidikan UniMAP (2015) - Bronze**
- 'Anaerobic - Aerobic Baffled Constructed Wetland (AABCW) Reactor', **EYReC-MyRIS Young Inventor Show (EMYIS 2015) – Bronze**
- Oon YL, Ong SA, Ho LN, Wong YS, **Biocomposite TiO₂/FS** – Macau International Innovation and Invention Expo **2013 – Gold**
- Oon YL, Ong SA, Ho LN, Wong YS, Biocomposite TiO₂/FS - Taiwan Invention Products Promotion Association (**TIPPA 2013**) – **Gold**
- Oon YL, Thenmolhi R, Ong SA, Ho LN, Wong YS, Biocomposite TiO₂ / Fish Scale – International Engineering Invention & Innovation Exhibition (**i-ENVEX 2013**) – **Gold**
- Oon YL, Ong SA, Ho LN, Wong YS, Biocomposite Titanium Dioxide/Fish Scale - Asian Young Investors Exhibition (**AYIE**) 2013 - **Gold**
- Ong SA, Oon YL, Ho LN, Wong YS, Biocomposite TiO₂/Fish Scales - Malaysia Technology Expo (**MTE 2013**) – **Silver**
- Oon YL, Ong SA, Ho LN, Wong YS, 'Biocomposite TiO₂/FS' - World Invention Intellectual Properties Association **2013 - Special Award**
- Ong SA, Ohm MM, Ho LN, Wong YS, Biocomposite TiO₂-Chitosan – Ekspo Rekacipta & Pameran Penyelidikan UniMAP (**EREKA 2012**) – **Bronze**
- Ong SA, Oon YL, Ho LN, Wong YS, 'Biocomposite TiO₂/Fish Scales' - Ekspo Rekacipta & Pameran Penyelidikan (**EREKA 2012**) – **Gold**
- Hakimah O., Ho LN, Teh PL, Tan YH, Lokman HI, Norzaidi Z, 'Durio-Plast As Biodegradable Polymer Composite', Engineering Invention & Innovation Exhibition (**ENVEX 2010**) – **Gold**
- Hakimah O, Ho LN, Teh PL, Tan YH, Lokman HI, Norzaidi Z, 'Durio-Plast As Biodegradable Polymer Composite', **BioMalaysia, BioInno Awards 2010 – Gold**

17. PATENT / COPYRIGHT

- **Bio Composite of Titanium Dioxide/Fish Scale** (PI No:2012003508)
- **An Aerated Up-Flow Constructed Wetland** (PI No: 2014 702678)

18. TEACHING EXPERIENCE

- Materials Characterization (EBT323)
- Materials Physical Chemistry (EBT 251)
- Analytical Chemistry (EBT 253)
- Materials Structure and Properties (EBT 207)
- Fundamental of Ceramics (EBT 222)
- Metallurgical Thermodynamic (EBT 314)
- Extractive Metallurgy (EBT 212)
- Fundamental of Chemistry (FBP 107)

19. RESEARCH INTERESTS

- Synthesis and characterization of nanoparticles and porous materials
- Photocatalytic degradation of dye using TiO₂ and ZnO
- Energy recovery by photocatalytic fuel cell
- Sustainable wastewater treatment system
- Electrically conductive adhesive