

# CURRICULUM VITAE

## A. Personal Record

Name : Dr Yeoh Fei Yee  
Gender : Male  
Date/Place Of Birth : 02-10-1977 / Malaysia  
Nationality : Malaysian  
Corresponding Address : 11, Lorong Bayu Mutiara 16,  
Taman Bayu Mutiara, 14000  
Bukit Mertajam, Penang,  
Malaysia.  
Telephone (Mobile) : +6017 – 4275623  
(Home) : +604 – 5022609  
Email Address : [fyeeh@yahoo.com](mailto:fyeeh@yahoo.com)  
Field of Specialization : Advanced nanoporous materials for  
biomedical, environmental and energy  
systems.

## B. Educational Record

Institution	Qualification	Date
Toyohashi University of Technology Toyohashi, Japan	D. Eng (Functional Materials)	2004 – 2007
Universiti Sains Malaysia Seri Ampangan, Malaysia	M. Sc. (Materials Engineering) (with the Best Thesis Award)	2002 – 2004
Universiti Teknologi Malaysia Skudai, Malaysia	B. Eng. – Hons (Mechanical Engineering)	1996 – 2000
SMJK Jit Sin Bukit Mertajam, Malaysia	SPM GCE “O” Level equiv.	1994 – 1995
SMJK Krian Parit Buntar, Malaysia	PMR	1990 – 1993
<b>Special Qualification</b>		
Shell Retail Academy	Certificate in Petroleum Retailing	2012

## C. Working Experience

**Current Position :** Senior Lecturer  
**Current Appointment :** Jun 2008 – Present  
**Work Address :** School of Materials & Mineral Resources Engineering  
USM Transkrian Engineering Campus  
Universiti Sains Malaysia  
14300 Nibong Tebal, Seri Ampangan  
Seberang Perai Selatan, Penang  
**Telephone Number :** 04 – 599 6175  
**Fax Number :** 04 – 594 1011  
**Email :** feiyee@usm.my

Position	Organization	Date
Guest Researcher	Mesoscale Materials Research Center	2012 – 2013
R&D Engineer	Lumileds Lighting (M) Sdn. Bhd. Penang, Malaysia	2004
Area Manager	Fuchs (M) Sdn. Bhd. Shah Alam, Malaysia	2003 – 2004
Sales Manager	WebEdge Technologies Sdn. Bhd.	2001 – 2002
E-Business Consultant	Perai, Malaysia	2000 – 2001

## D. I Awards

EcoClay  
National Category Winner : Water Efficiency  
Global Cleantech Innovation Program  
Global Environment Facility (GEF) - United Nations Industrial Development Organization  
(UNIDO) Cleantech Programme

EcoClay  
Gold Medal in 25<sup>th</sup> International Invention, Innovation and Technology Exhibition ITEX  
2011  
Ministry of Science, Technology & Innovation  
Kuala Lumpur Convention Center (KLCC), 8-10 May 2014

Champion  
Ancient Town Cultural Industry Development Competition  
The 12<sup>th</sup> China Synergy Programme for Outstanding Youth  
3-8 Nov 2013

Photoluminescent Rice Husk Glass  
Bronze Medal in 4<sup>th</sup> Exposition on Islamic Innovation 2013  
Universiti Sains Islam Malaysia (USIM)  
Stadium Tertutup Nilai, 25-27 October 2013

Photoluminescent Rice Husk Glass  
The 4<sup>th</sup> International Greentech & Ecoproducts Exhibition and Conference Malaysia 2014  
Ministry of Energy, GreenTech and Water  
KLCC, 10-13 October 2013

Nominee of National Young Scientist Award 2012  
Ministry of Science, Technology & Innovation, 2012

University Hall of Fame (Hadih Sanjungan): (2011):  
Journal Publication Category (Kategori Penerbitan Jurnal):  
Journal of Biomaterials Applications  
Universiti Sains Malaysia, 10 July 2012

University Hall of Fame (Hadih Sanjungan) : 2011  
Journal Publication Category (Kategori Penerbitan Jurnal):  
Journal of Thermal Analysis and Calorimetry.  
Universiti Sains Malaysia, 10 July 2012

Photoluminescent Rice Husk Glass  
Silver Medal in 22nd International Invention, Innovation and Technology Exhibition ITEX  
2011  
Ministry of Science, Technology & Innovation  
Kuala Lumpur Convention Center (KLCC), 18-22 May 2011

First Prize for Oral Presentation  
33 International Conference on Vacuum, Microbalance and Thermoanalytical Techniques  
& 3rd Compositum Conference, Hybrid Nanocomposites & Their Applications  
26-30 June 2011,  
Zamosc, Poland.

Long Term Training Program, International Cooperation Program of the Government of  
Japan (2007, Japan)  
Japan International Cooperation Agency (JICA), Japan

Doctoral Degree Scholarship Program in Japan (2004)  
ASEAN University Network / Southeast Asia Engineering Education Development  
Network (AUN/SEED-Net) & Japan International Cooperation Agency, Japan (JICA).

Best Thesis Award (2004)  
Universiti Sains Malaysia, Malaysia

Postgraduate Scholarship (2001)  
Awarded by Institute of Postgraduate Studies,  
University Sains Malaysia, Malaysia

## **E. Publications**

### **E. 1/4 Intellectual Properties:**

Trademark:

Yeoh, F.-Y. Universiti Sains Malaysia. Intellectual Property Corporation of Malaysia. "EcoClay" Trademark Class 19 (2013)

Trademark:

Yeoh, F.-Y. Universiti Sains Malaysia. Intellectual Property Corporation of Malaysia. "EcoClay" Trademark Class 21 (2013).

Patent:

Yeoh, F.-Y. & Lee, T.

Malaysian Patent Application no.: PI [2012700812](#), "Development of Photoluminescent Glass Derived from Rice Husk" Patent Filed (2012). Filing date: 24 Oct 2012

Patent:

Yeoh, F.-Y. & Tan, W.C.

Malaysian Patent Application No: PI 2011006412, "A Process in Producing Activated Carbon Fiber" Patent Filed (2011). Filing Date: 30 Dec 2011

### **E. 2/4 Books/Chapters**

Yeoh, F.-Y. & Othman, R. (2012). Comparison of Nano PLZT Powder Synthesis by Different Coprecipitation Routes. *Materials: Leading the Path of Engineers* (Othman, R., S. Sreekantan Ed.). ISBN: 978-983-861-557-0, Penang: Penerbit Universiti Sains Malaysia.

Suresh Chand, A., Azmi, K. A., Maghribi, M. M., Jalil, R. A., Mohamed, R., Sreekantan, S., Teh, A. Y., Yeoh, F.-Y. and Sanusi, Z. A. (2012). Universiti Sains Malaysia: The Blue Ocean Strategy (R. Mohamed Ed.). ISBN 978-983-861-559, Penang: Penerbit Universiti Sains Malaysia.

F.-Y. Yeoh (2012). Synthesis & Characterization of Sulfo-Functionalized Nanoporous Silica. ISBN 978-3-8484-8341-9, Saarbrücken: Lambert Academic Publishing (LAP).

Lew, K.-S., Othman, R., and Yeoh F.-Y. (2011), Drug Delivery by Mesoporous Hydroxyapatite Bioceramic, in *Topics in Chemistry and Material Science: Advanced Micro- and Mesoporous Materials – 11* (K. Hadjiivanov, V. Valtchev, S. Mintova, G. Vayssilov Eds.) 6 p. 56–72, ISSN 1314–0795©2011, Heron Press Ltd.

Yeoh, F.-Y., "Synthesis and Characterization of Sulfo-Functionalized Microporous and Mesoporous Silica.," Doctoral Thesis (2007), Toyohashi: Toyohashi University of Technology (TUT).

Yeoh, F.-Y., "Synthesis And Characterization Of Nano-Sized PLZT Powder Derived From A Modified Coprecipitation Method." Master Thesis, (2003) Seri Ampangan: Universiti Sains Malaysia (USM).

Yeoh, F.-Y., "Printed Circuit Board Machine.," Bachelor Thesis. (2000), Skudai: Universiti Teknologi Malaysia (UTM).

### E. 3/4 Journals

Gan, J., Ramakrishnan, S. and Yeoh, F.-Y., "A Review on Improvement of LED Light Extraction Efficiency through a Micro Repeating Structure.," *Reviews on Advanced Materials Science* (2015), **Accepted**. (ISI IF 1.287).

Lee, T., Zubir, Z., Jamil, F., Matsumoto, A. and Yeoh, F.-Y., "Combustion and Pyrolysis of Activated Carbon Fibre from Oil Palm Empty Fruit Bunch Fibre Assisted through Chemical Activation with Acid Treatment.," *Journal of Analytical and Applied Pyrolysis* **110** (2014), pp. 408–418. (ISI IF 3.07) DOI: 10.1016/j.jaap.2014.10.010

Lee, T., Tan, W.-C., Matsumoto, A. and Yeoh, F.-Y., "Methane Adsorption Microcalorimetry of Activated Carbon Fibre Combusted from Empty Fruit Bunch Fibre.," *Adsorption Science and Technology* (2015), **Accepted**. (ISI IF 0.93).

Anuar, A., Ahmad Salimi, M. N., Mohamed Daud, M. Z. and Yeoh, F.-Y., "Characterizations of Hydroxyapatite- *Saccharomyces cerevisiae* complex for bioethanol production.," *Advanced Materials Research* **925** (2014), pp. 149-153. DOI:10.4028/www.scientific.net/AMR.925.149 (Refereed)

Mohammad, N.F., Othman, R. and Yeoh, F.-Y., "Nanoporous Hydroxyapatite Preparation Method for Drug Delivery Applications.," *Reviews on Advanced Materials Science (RAMS)* **38** (2014), pp. 138-147. (ISI IF 1.287)

Lee, T., Ooi, C.-H., Othman, R., and Yeoh, F.-Y., (2014) "Activated Carbon Fiber – The Hybrid of Carbon Fiber and Activated Carbon.," *Reviews on Advanced Materials Science* **36** (2014), pp. 14-34. (ISI IF 1.287)

Ooi, C.-H., Lee, T., Pung, S.-Y. and Yeoh, F.-Y., "Activated Carbon Fiber derived from Single Step Carbonization-Activation Process.," *ASEAN Engineering Journal* (2014), **Accepted**. (Refereed)

Mohammad, N.F., Othman, R. and Yeoh, F.-Y., "The Effect of Surfactant Extraction Method on Pore Characteristics of Mesoporous Carbonated Hydroxyapatite.," *Advanced Materials Research* **858** (2014), pp. 190-198. DOI:10.4028/www.scientific.net/amr.858.190 (Refereed)

Cheah, W.-K., Othman, R. and Yeoh, F.-Y., "Organic and Inorganic Acid Activation of Activated Carbon Fiber from Palm Oil Empty Fruit Bunch.," *Advanced Materials Research* **858** (2014), pp. 122-130. doi:10.4028/www.scientific.net/AMR.858.122 (Refereed)

Lee, T., Othman, R. and Yeoh, F.-Y., "Development of Photoluminescent Rice Husk Glass.," *Biomass & Bioenergy.*, **59** (2013), pp. 380-392. 10.1016/j.biombioe.2013.08.028

Lee, T., Matsumoto, A., Othman, R. and Yeoh, F.-Y., "Activated Carbon Fiber derived from Pyrolysis of Palm Fiber.," *Advanced Materials Research*, **686** (2013), pp. 92-103. (doi:10.4028/www.scientific.net/AMR.686.92) (Refereed)

Mohammad, N.F., Yeoh, F.-Y. and Othman, R., "Synthesis of Nanoporous Carbonated Hydroxyapatite using Non-ionic Pluronic Surfactant.," *Advanced Materials Research* **686** (2013), pp. 33-43. (doi:10.4028/www.scientific.net/AMR.686.33) (Refereed)

Othman, R., Long, B.D., Yeoh, F.-Y., Farah, J., Azlila, Z. and Mohd Noor, A.F., "Microwave-Assisted Synthesis, Drying and Sintering of Phosphate-Based Bioceramic Materials.," *ASEAN Engineering Journal* **2** (2013), pp. 12-33. (Refereed)

Cheah, W.-K., Thung, W.-L., Othman, R. and Yeoh, F.-Y., "Preparation and Characterization of Amine-Functionalized SBA-15.," *Advanced Materials Research* **686** (2013), pp. 336-350. (doi:10.4028/www.scientific.net/AMR.686.336). (Refereed)

Ooi, C.-H., Ang, C.-L. and Yeoh, F.-Y., "The Properties of Activated Carbon Fiber derived from Direct Activation from Oil Palm Empty Fruit Bunch Fiber.," *Advanced Materials Research* **686** (2013), pp. 109-117. (doi:10.4028/www.scientific.net/AMR.686.109). (Refereed)

Chan, Y.-L., Pung, S.-Y., Hussain, N. S., Sreekantan, S. and Yeoh, F.-Y., "Photocatalytic Degradation of Rhodamine B using MnO<sub>2</sub> and ZnO Nanoparticles.," *Materials Science Forum* **756** (2013), pp 167-174. *Trans Tech Publications, Switzerland*. (Refereed)

Yeoh, F.-Y., "The Abuse of Hi-Tech Jargon in Malaysia.," *JNB 30<sup>th</sup> Anniversary* (2012), pp 103-105.

Yeoh, F.-Y., "USM Alternative Track for PhD Thesis Examination.," *Graduate Infolink* **1** (2012), pp. 8-9 (N.F Johari Ed.). ISSN 1511-4740, Universiti Sains Malaysia.

Cheah, W.-K., Ooi, C.-W., Othman, R. and Yeoh, F.-Y., "Synthesis of Mesoporous Hydroxyapatite through a Soft Template Route Using Non-Ionic Surfactant.," *ASEAN Engineering Journal* **1**(1) (2012), pp. 57-69. (Refereed)

Yeoh, F.-Y., "Regional Partnership in Engineering Education.," *International Cooperation in Engineering Education* **10** (2012), pp. 18-19, pp. 63-64.( ISSN 2185-1026)

Tan, W.-C., Othman, R., Matsumoto, A. and Yeoh, F.-Y., "The Effect of Carbonisation Temperatures on Nanoporous Characteristics of Activated Carbon Fiber (ACF) derived from Oil Palm Empty Fruit Bunch (EFB) Fiber.," *Journal of Thermal Analysis and Calorimetry* **108**(3) (2011), pp. 1025-1031. DOI: 10.1007/s10973-011-2043-2. (ISI IF 2.206)

Lew, K.-S., Othman, R., Ishikawa, K. and Yeoh, F.-Y., "Macroporous Bioceramics: A Remarkable Material for Bone Regeneration.," *Journal of Biomaterials Applications* **27**(3) (2011), pp. 345-358. DOI: 10.1177/0885328211406459. (ISI IF 2.764)

Tan, W.-C., Yap, S.-Y., Matsumoto, A., Othman, R., and Yeoh, F.-Y., "Synthesis and Characterization of Zeolites LTA and NaY from Rice Husk Ash.," *Adsorption* **17**(5) (2011), pp. 863-868. DOI 10.1007/s10450-011-9350-6. (ISI IF 1.735)

Yeoh, F.-Y., "Photoluminescent Glass derived from Rice Husk Ash.," *Buletin Enjinier* **13** (2011), 16

Lew, K.-S., Othman, R. and Yeoh, F.-Y., "Synthesis and Characterization of Mesoporous Hydroxyapatite.," *Advances in Science and Technology* **63** (2010), pp. 152-157. (Refereed)

Yeoh, F.-Y., Matsumoto, A. and Baba, T., "Facile Synthesis of Sulfo-functionalized Mesoporous Silica with Strong Acidity by Temperature-controlled Calcination.," *Journal of Porous Materials* **16** (2009), pp. 283. (ISI IF 1.136)

Yeoh, F.-Y., Matsumoto, A., Baba T. and Tsutsumi, K., "Synthesis and Characterization of Mesoporous Sulfo-Organosilica by Differential Heat of Ammonia Adsorption.," *Adsorption Science and Technology* **26**(7) (2008), pp. 479-489. (ISI IF 0.93)

Yeoh, F.-Y., Aziz, A. and Othman, R., "Synthesis of Nano PLZT Powder by 3 Different Coprecipitation Routes.," *Buletin Enjinier* **10**(2) (2008), pp. 8-10.

Yeoh, F.-Y., Matsumoto, A., Iwase, Y. and Baba, T., "Characterization of Acidic Property of Sulfo-group Functionalized Microporous and Mesoporous Silicas by Adsorption Microcalorimetry.," *Catalysis Today*, **132** (2008), pp. 46-51. (ISI IF 3.309)

Matsumoto, A., Yeoh, F.-Y., Fujihara, S., Tsutsumi, K. and Baba, T., "Acid Character and Catalytic Activity of Sulfo Functionalized Porous Silica with Ordered Structure.," *Adsorption Science and Technology* **24**(6) (2006), pp. 451-459. (ISI IF 0.93)

Yeoh, F.-Y., Othman, R., and Aziz, A., "Synthesis and characterisation of ferroelectric PLZT material using x-ray diffractometry.," *Malaysia Journal of Science* **21A** (2002), pp.77-81. (Refereed)

Yeoh, F., Othman, R. and Aziz, A., "Preparation of Nano Crystalline Lead Zirconate Titanate and Lead Lanthanum Zirconate Titanate Powder.," *Postgraduate Research Paper 2001-2002* **1** (2002), pp. 29-30, Seri Ampangan: Universiti Sains Malaysia (USM).

Yeoh, F.-Y., "Synthesis and Characterization of Sulfo-Functionalized Microporous and Mesoporous Silica.," Doctoral Thesis (2007), Toyohashi: Toyohashi University of Technology.

Yeoh, F.-Y., "Synthesis And Characterization Of Nano-Sized PLZT Powder Derived From A Modified Coprecipitation Method." Master Thesis, (2003) Seri Ampangan: Universiti Sains Malaysia (USM).

Yeoh, F.-Y., "Printed Circuit Board Machine.," Bachelor Thesis. (2000), Skudai: Universiti Teknologi Malaysia (UTM).

#### **E. 4/4 Conference Proceeding / Abstract / Presented Papers**

Pung,S.-Y. and Yeoh, F.-Y. (2014) Photocatalytic Study of Manganese Oxide Nanowires with Different Polymeric Phase. *2014 MTSF Grant Research Symposium*, p. 14. 3 Dec 2014, Universiti Malaya, Malaysia.

Ito, A., Otake, T., Anraku, S., Sato, T., Ariffin, K. S., and Yeoh, F.-Y. (2014) Anthropogenic influences on the geochemistry of stream waters in Malaysia : Effects of the tin tailing processing industry. Abstract: *11<sup>th</sup> Annual Meeting of Asia-Ocean Geosciences Society 2014*, 28 Jul – 1 Aug 2014, Sapporo – Japan.

Yeoh, F.-Y. and Mohammad, S. (2013) Ecoart - Fusion of Science and Art Into Green Technology for Sustainable Charity through Business Contribution. *1st National Conference on Knowledge Transfer (KTP-O1)*, 21 – 23 Aug 2013, Bangi – Malaysia.

Mohammad, N. F., Othman, R. and Yeoh, F.-Y. (2013) The Effect of Surfactant Washing on Pore Characteristic of Mesoporous Carbonated Hydroxyapatite. *Proceeding of Regional Conference on Materials and Regional Conference on Natural Resources and Materials Engineering (RCM5 and RCNRM5)* p. 19-20. 22-23 January 2013, Penang – Malaysia.

Mohammad, N. F., Othman, R., and Yeoh, F.-Y. (2012) Synthesis and Characterization of Carbonated Hydroxyapatite. Mesoporous Particles, *Conference Proceeding for 2012 Hong Kong International Conference on Engineering and Applied Science (HKICEAS)*, 14-16 Dec 2012, Hong Kong.

Chan, Y.-L., Pung, S.-Y., Hussain, N. S., Sreekantan, S. and Yeoh, F.-Y. (2012) Photocatalytic Degradation of Rhodamine B using MnO<sub>2</sub> and ZnO Nanoparticles. In *Proceeding of The 3<sup>rd</sup> ISESCO International Workshop and Conference on Nanotechnology (IWCN 2012)*, 6-7 Dec 2012, Universiti Kebangsaan Malaysia – Malaysia.

Cheah, W.-K. and Yeoh, F.-Y. (2012) Characterisation of Nanoporous Materials Using XRD. *International Conference on X-Rays and Related Techniques in Research and Industry (ICXRI 2012)*, p.81-82, 3-5 July 2012, Penang – Malaysia.

Lee, T., Matsumoto, A., Othman, R. and Yeoh, F.-Y. (2013). Activated Carbon Fiber derived from Pyrolysis of Palm Fiber. *The 8<sup>th</sup> International Materials Technology Conference and Exhibition*, p. 59, 9-12 July 2012, Selangor – Malaysia.

Mohammad, N.F., Yeoh, F.-Y and Othman, R. (2013). Synthesis of Nanoporous Carbonated Hydroxyapatite using Non-ionic Pluronics Surfactant. *The 8<sup>th</sup> International Materials Technology Conference and Exhibition*, p. 58, 9-12 July 2012, Selangor – Malaysia.

Cheah, W.-K., Thung, W.-L., Othman, R. and Yeoh, F.-Y (2013). Preparation and Characterization of Amine-Functionalized SBA-15. *The 8<sup>th</sup> International Materials Technology Conference and Exhibition*, p. 65, 9-12 July 2012, Selangor – Malaysia.

Ooi, C.-H., Ang, C.-L. and Yeoh, F.-Y (2013). The Properties of Activated Carbon Fiber derived from Direct Activation from Oil Palm Empty Fruit Bunch Fiber. *The 8<sup>th</sup> International Materials Technology Conference and Exhibition*, p. 58, 9-12 July 2012, Selangor – Malaysia.

Mohammad, N. F., Yeoh, F.-Y., Neo, P.-L. and Othman, R. (2012) Synthesis and Characterization of Mesoporous Bioceramic Hydroxyapatite by Co-Precipitation Method, *Asian International Conference on Materials, Minerals and Polymer, MAMIP 2012*, p.56, 23 – 24 March 2012, Penang – Malaysia.

Cheah, W.-K., Ooi, C.-W., Othman, R. and Yeoh, F.-Y. (2012) Mesoporous Hydroxyapatite Synthesized Using Non-Ionic Pluronics Surfactant, *Asian International Conference on Materials, Minerals and Polymer, MAMIP 2012*, p.47, 23 – 24 March 2012, Penang – Malaysia.

Cheah, W.-K., Ooi, C.-W., Othman, R., and Yeoh, F.-Y. (2011) Synthesis of Mesoporous Hydroxyapatite Through Soft Template Route Using Non-Ionic Surfactant. In *4<sup>th</sup> Regional Conference on Materials Engineering*, 8-9 December 2011, Hanoi – Vietnam.

Yeoh, F.-Y. (2011) Regional Partnership in Engineering Education. In *Symposium Commemorating 10th Anniversary of ICEED and Commemorating Ceremony on 35th Anniversary of Toyohashi University of Technology*, 15-16 November 2011, Toyohashi – Japan.



Lee, T., Othman, R., and Yeoh, F.-Y. (2011) Methane Adsorption by Activated Carbon Fiber Derived from Combustion of Palm Fiber. In *Joint Research Seminar USM-NUT 2011*, p. 51-52, 17<sup>th</sup> Oct 2011, Penang – Malaysia

Cheah, W.-K., Othman, R. and Yeoh, F.-Y. (2011) Palm Oil Empty Fruit Bunch Derived Activated Carbon Fiber for Urea Adsorption. In *Joint Research Seminar USM-NUT 2011*, p. 55-56, 17<sup>th</sup> Oct 2011, Penang – Malaysia

Yeoh, F.-Y. (2011) Nanoporous Materials in Biomedical Applications. In *Joint Workshop USM-TUT "Towards Enhanced Partnership"*, 13 September 2011, Penang – Malaysia

Lee, T., Othman, R., Matsumoto, A. and Yeoh, F.-Y. (2011) Fibrous Activated Carbon derived from Pyrolysis of Palm Empty Fruit Bunch Fiber, In *Joint Workshop USM-TUT "Towards Enhanced Partnership"*, 13 September 2011, Penang – Malaysia

Lew, K.-S., Othman, R., Yeoh, and F.-Y. (2011) Ibuprofen Adsorption and Release by Mesoporous Bioceramics Hydroxyapatite. In *4th International Symposium on Advanced Micro- and Mesoporous Materials*, p. 43, 6-9 September 2011, Varna – Bulgaria.

W.-K. Cheah, Othman, R., Yeoh, F.-Y. (2011) Microporous Materials for Renal Toxin Removal in an Artificial Kidney System, In *4th International Symposium on Advanced Micro- and Mesoporous Materials*, p. 135, 6-9 September 2011, Varna – Bulgaria.

W.-C. Tan, Othman, R., A. Matsumoto and Yeoh, F.-Y (2011) The Effect of Carbonisation Temperatures on Nanoporous Characteristics of Activated Carbon Fiber (ACF) derived from Oil Palm Empty Fruit Bunch (EFB) Fiber. In *33<sup>rd</sup> International Conference on Vacuum, Microbalance, and Thermoanalytical Techniques, ICVMTT<sup>33</sup> and 3<sup>rd</sup> Compositum Conference Hybrid Nanocomposites and Their Applications*, p. 38-39, 26-30 June 2011, Zamosc – Poland.

Yeoh, F.-Y and K-S. Lew (2010) Synthesis and Characterization of Spherical Mesoporous Hydroxyapatite, In *12<sup>th</sup> International Ceramic Congress (CIMTEC 2010)*, p. 34, 6-11 June 2010, Montecatini Terme – Italy.

Yeoh, F.-Y and Tan, W.-C. (2010) Synthesis and Characterization of Zeolite Faujasite from Rice Husk Ash, in *10<sup>th</sup> International Conference on Fundamental of Adsorption (FOA 10)*, p. 265, 23-28 May 2010, Awaji – Japan.

P.-Q. Chan, Noor, A.F.M., Lockman Z. and Yeoh, F.-Y (2009) Preparation of Doped Zirconia Thin Film by Using Dip Coating, in *International Conference on Electronic Materials and Packaging (EMAP) 2009*, p. 67, 1-3 December 2009, Penang-Malaysia.

Yeoh, F.-Y and A. F. Mohd. Noor (2009) Novel Synthesis of Nano PLZT Powder by An Organometallic Coprecipitation Method, in *Proceeding of the 1<sup>st</sup> Regional Conference in Biotechnology: Focus on Biofuels and Bioenergy*, p. 63, 30-31 Jul. 2009, Manila – Philippines.

Yeoh, F.-Y and Othman, R. (2009) Synthesis and Characterization of Nano PLZT Powder (Poster), in *AUN-Seed/Net Regional Conference on Materials Engineering 2009 (RCM 2009)*. 16 – 17 Feb 2009, Hotel Equatorial, Penang – Malaysia.

Yeoh, F.-Y , Matsumoto, A. and Tsutsumi, K. (2008) A Novel Route for the Preparation of Sulfo-Functionalized Nanoporous Silica, in *Proceeding of the 1<sup>st</sup> Regional Workshop in the Interdisciplinary Area of Natural Resources / Materials*, p. 27, 18-19 Aug. 2008, Phnom Penh –Cambodia.

Yeoh, F.-Y , Matsumoto, A. and Baba, T. (2007). Characterization of Acid Property of Sulfo-group Functionalized Mesoporous Silica by Adsorption Microcalorimetry, in *The 11<sup>th</sup> Korea-Japan Symposium on Catalysis*, p. 68, 21 – 23 May 2007, Seoul – Korea.

Yeoh, F.-Y , Matsumoto, A., Baba, T. and Tsutsumi, K. (2007). Preparation of Sulfo group-Functionalized Mesoporous Silica and Characterization of Its Acidic Property by Adsorption Microcalorimetry, in *The 87<sup>th</sup> Annual Spring Seminar of Chemical Society of Japan*, 25 – 28 March 2007, Osaka – Japan.

Yeoh, F.-Y , Matsumoto, A. and Tsutsumi, K. (2007). Surface Functionalization of Nanostructured Silica, in *AUN/SEED-Net Field-wise Seminar 2007*, p. 99, 8 – 9 January 2007, Ho Chi Minh – Vietnam.

Yeoh, F.-Y , Matsumoto, A. and Tsutsumi, K. (2006). Surface Functionalization and Characterization of Mesoporous Silica, in *The Alps Science Seminar (アルプスサイエンスセミナー2006)*, 25-26 Aug 2006, Nagano – Japan.

Yeoh, F.-Y , Fujihara, S., Matsumoto, A., Baba, T. and Tsutsumi, K. (2006). Preparation and Adsorption Characterization Of Sulfo-group Functionalized Mesoporous Organosilica (Poster), in *The International Symposium on Zeolite and Microporous Crystal (ZMPC 2006)*, p.103, 30 Jul – 2 Aug 2006, Tottori – Japan.

Yeoh, F.-Y , Matsumoto, A., Fujihara, S., Baba, T. and Tsutsumi, K. (2005). Synthesis And Characterization Of Sulfo Included Mesoporous Silica, in *The 21<sup>st</sup> Zeolite Seminar*, p. 116, 21 – 22 Nov 2005, Toyohashi – Japan.

F.Y. Yeoh, A. Aziz, A. and Othman, R. (2003). Thermal Behaviour of Coprecipitation-Derived PLZT, *Proceeding for 3<sup>d</sup> International Conference on Recent Advances in Materials, Minerals and Environment (RAMM 2003)*, p. 364, 20 – 22 Oct 2003, Penang – Malaysia.

## **F. Research Grants**

### **F.1/3 Principle Investigator : International Grants**

Short Term Research Program in Japan 2013  
Hokkaido University (6/2/2014–12/2/2014)  
AUN/Seed-Net (Bangkok)  
RM 28142.80

Collaborative Research with Industry (CRI) 2011 (1/10/2011-10/3/2013)  
AUN/Seed-Net (Bangkok)  
Nanoporous Activated Carbon Fiber derived from Palm Empty Fruit Bunch  
USD 42500 (RM 134472)

Short Term Research Program in Japan 2013  
Waseda University (24/7/2012– 22/8/2012)  
AUN/Seed-Net (Bangkok) and JICA (Japan) RM15,150.

Travel Grant: SVAS -  
NTU, Singapore (27/12/2011-2/1/2012)  
AUN/Seed-Net (Bangkok) and JICA (Japan)  
RM 1941

Project Leader: Research Program for Alumni (RA) 2010 (1/5/2010-15/8/2011)  
AUN/Seed-Net (Bangkok)  
Synthesis and Characterization of Zeolites from Rice Husk Ash (Methane Separation for  
Natural Gas & Biogas purification)  
USD 2000 (RM 6505.20)

Short Term Research Program in Japan 2011  
Hokkaido University (5 – 17/2/2012)  
AUN/Seed-Net (Bangkok) and JICA (Japan) RM11,157.

Travel Grant (16-29/10/2011)  
International Scientific Instrument Technology Workshop  
Instrument Technology Research Center, Taiwan

Nippon Sheet Glass (NSG) Foundation for Materials Science & Engineering 2010  
(1/1/2010-31/12/2011)  
Nippon Sheet Glass Foundation (Japan)  
Development of Photoluminescent Glass Derived from Rice Husk Ash  
USD 6500 (RM 22100)

Short Term Research Program in Japan 2010  
Toyohashi University of Technology (14/12/2010-4/1/2011)  
AUN/Seed-Net (Bangkok) and JICA (Japan)  
RM 15,014

Research Program for Alumni (RA) 2009 (1/8/2009-27/2/2010)  
AUN/Seed-Net (Bangkok)  
Synthesis and Characterization of Mesoporous Bioceramic Hydroxyapatite (HA)  
USD 2000 (RM6965.60)

Short Term Research Program in Japan 2009  
Kyushu University (17/10/2009 - 15/11/2009)  
AUN/Seed-Net (Bangkok)  
RM 16388

Project Leader: Research Program for Alumni (RA) 2008 (16/7/2008-15/2/2009)  
AUN/Seed-Net (Bangkok)  
Synthesis and Characterization of Low Bandgap t-Zirconia Thin film  
USD 2000 (RM 6582.40)

Short Term Research Program in Japan 2008 (21/11/2008 - 19/12/2008)  
AUN/Seed-Net (Bangkok) and JICA (Japan)  
RM 15675

Nippon Sheet Glass (NSG) Foundation Research Grant 2003 (1/6/2003-31/5/2004)  
Nippon Sheet Glass (NSG) Foundation, Japan  
Development of Nanocrystalline Ferroelectric PLZT Powder by a Modified Coprecipitation  
Method  
USD 10,000 (RM 38,000)

Malaysia Toray Science Foundation (MTSF) Research Grant (2002)  
(1/11/2002-31/10/2003)  
Toray Science Foundation, Japan  
Synthesis and Characterization of Advanced Nanostructured Pyroelectric Smart Material  
RM 25,000

### **F.2/3 Principle Investigator : National Grants**

Universiti Sains Malaysia Early Innovation Fund  
(Dana Inovasi Awal Universiti Sains Malaysia) 2013  
(20/6/2013-19/6/2014) Universiti Sains Malaysia.  
Up-scaling of Eco-Clay Production (RM 50,000)

University-Industry Engagement Project (Projek Libatsama Universiti-Industri) 2013.  
(1/8/2013-31/7/2015). Universiti Sains Malaysia. Biochar Conversion from Biomass  
Generated from Palm Oil Wastes. (RM 37,300)

Fundamental Research Grant Scheme (FRGS) 2013  
(1/5/2013-30/4/2015) Ministry of Higher Education (MOHE)  
Fundamental Investigation on Adsorption Mechanism of Renal Toxins on Nanoporous  
Biomaterials (RM 111,000)

Knowledge Transfer Program (KTP) 2013  
(1/8/2013-31/7/2015) Ministry of Higher Education (MOHE)  
EcoArt – Fusion of Science and Art into Green Technology for Sustainable Charity through  
Business Contribution (RM 175,000)

USM Overseas Travel Grant (USM Tabung Persidangan Luar Negara) 2012  
(14-16/12/2012)  
Hong Kong International Conference on Engineering and Applied Science  
Universiti Sains Malaysia  
RM 6,400

Exploratory Research Grant Scheme (ERGS) 2012  
(15/1/2012-14/1/2014) Ministry of Higher Education (MOHE)  
Renal Toxin Removal Through Adsorption by Nanoporous Silica for Artificial Kidney  
Application (RM 76,000)

Short-Term Research Grant 2012 (15/1/2012-14/1/2014)  
University Sains Malaysia / Ministry of Science, Technology and Innovation (MOSTI)  
Urea Adsorption by Advanced Nanoporous Bioceramic for Artificial Kidney Application  
RM 38,161

USM Overseas Travel Grant (USM Tabung Persidangan Luar Negara) 2011  
(6-9/9/2011)  
4th International Symposium on Advanced Micro- and Mesoporous Materials  
Universiti Sains Malaysia  
RM 15,535

Fundamental Research Grant Scheme (FRGS) 2010  
(1/5/2010-30/4/2012)  
Ministry of Higher Education (MOHE), Malaysia.  
Study on Nano Pores Formation in Bioceramic Hydroxyapatite  
RM32000

USM Overseas Travel Grant / USM Tabung Persidangan Luar Negara 2010  
(6-11/6/2010)  
Universiti Sains Malaysia  
International Conferences on Modern Materials & Technologies (12<sup>th</sup> International  
Ceramic Congress & 5<sup>th</sup> Forum on New Materials)  
RM 20,173

Short-Term Research Grant 2009 (1/2/2009-31/7/2011)  
University Sains Malaysia / Ministry of Science, Technology and Innovation (MOSTI)  
Synthesis and Characterization of Zeolitic Molecular Sieve from Rice Husk for Natural  
Gas Adsorption  
RM 39,600

Tabung Sentral Research University (RU) 2008 (6 Jan 2009)  
University Sains Malaysia / Ministry of Science, Technology and Innovation (MOSTI)  
Nitrogen Adsorption Apparatus  
RM 320,000

Incentive Grant USM 2008 (22/7/2008-23/7/2009)  
Low Band-Gap Niobium Doped Ytria Stabilized Zirconia Thin Film  
University Sains Malaysia  
RM 5000

### **F.3/3 Co-Researcher**

Post-Graduate Research Grant Scheme (PRGS)  
15/5/2013 - 14/11/2014 Universiti Sains Malaysia.  
Process Optimization of Advanced Nanoporous Activated Carbon Fiber derived from Empty Fruit Bunch Fiber for Renal Toxins Adsorption in an Artificial Kidney System (RM 4200)

Nanotechnology – Science Fund 2012 (1/1/2012-31/1/2014)  
Ministry of Science, Technology and Innovation, Malaysia  
TiO<sub>2</sub>/SiO<sub>2</sub> Photocatalyst for Dye Removal  
RM 214,000

Malaysia Toray Science Foundation (MTSF) Research Grant 2011  
(16/3/2012 - 15/3/2013)  
Malaysia Toray Science Foundation, Japan  
Photocatalytic Study of Manganese Oxide Nanowires with Different Polymeric Phase  
RM 15,000

MTDC Bridging Fund 2008  
Malaysia Technology Development Corporation (MTDC)  
Development and Production of Reformulated Calcium Phosphates for Bone Graft Substitute (REKAGRAF)  
RM 7,598,500

Co-researcher: Collaborative Research (CR) Grant Program 2008 (1/7/2008-30/6/2010)  
AUN/Seed-Net (Bangkok)  
Development of Porous Alumina for Gaseous Filtration  
USD 1750 (RM 5950)

### **G. Invited Speaker / Keynote Address**

Invited Speaker  
Nanoporous Materials for Environmental Applications  
Hub Formation with Pacific Rim Countries  
Nagaoka University of Technology, 2015  
12-14 Mar 2015

Invited Speaker  
Eco-Friendly Clay from Sustainable Water Resources  
The 5th International Greentech & Eco Products Exhibition & Conference Malaysia,  
Ministry of Energy, Green Technology and Water  
16/10/2014 - 19/10/2014

Invited Delegates : EcoClay  
Research Universities Carnival  
USM & Ministry of Education  
Sains@USM, 13-14 June 2014

Keynote Speaker  
Adsorption of Cation Residuals from REE Processing by Activated Carbon derived from Palm Wastes  
Workshop: Environmental Assessments and Remediation after Rare Earth Elements (REE) Mining and Processing  
Universiti Sains Malaysia – Hokkaido University, 2014

Keynote Speaker  
Energy, Environment & Recycling issues in Malaysia  
Minamata Environmental Evening Seminar, 27 – 30 Jan 2011  
Kumamoto University & Minamata City Council, Japan

Keynote Speaker  
Radioactive Cation Removal by Activated Carbon  
Universiti Sains Malaysia – Hokkaido University Joint Lab Seminar  
Hokkaido University, 2013

Invited Speaker  
Development of Photoluminescent Glass derived from Rice Husk  
Workshop: Development of Biorefinery based on Rice Straw  
Lund University – Hanoi University – Universiti Sains Malaysia, 28 Oct 2013

Invited Speaker  
Introduction to Blue Ocean Strategy  
Institute of Postgraduate Studies  
Universiti Sains Malaysia, 25 April 2013

Invited Speaker  
Biomass Asia Conference 2012,  
Sunway Putra Hotel, Kuala Lumpur, 20 – 22 May 2013,  
Malaysia Biomass Industry Confederation & Biomass-SP

Invited Speaker  
Blue Ocean Workshop  
Institute of Postgraduate Studies  
Universiti Sains Malaysia, 11 Dec 2012

Invited Speaker  
Alternative Track in PhD Examinations  
Institute of Postgraduate Studies  
Universiti Sains Malaysia, 27 Nov 2012

Invited Speaker  
JMTI Open Day: “The Impact & Contribution of LEP to Northern Region”  
Consulate General of Japan, 15 September 2012

Invited Speaker  
Forum : Education Opportunity in Japan  
Consulate General of Japan, 26 August 2012

Invited Speaker  
Functional Materials Derived from Biomass  
EU-Asia Biomass Best Practices & Business Partnering Conference 2012, 7 – 10 May 2012, Putra World Trade Center (PWTC)  
Biomass.SP (Malaysia-EU)

Invited Speaker  
Alternative Track in PhD Examinations  
The Business Seminar @ GSB  
Universiti Sains Malaysia, 25 – 26 April 2012

Invited Speaker  
Sustainability Study in USM Curriculum  
ProsPER.Net Workshop by RMIT University & United Nations University – Institute of  
Advanced Studies, 20 – 22 April 2012  
RMIT University Vietnam

Invited Speaker  
Regional Partnership in Engineering Education  
Symposium Commemorating 10th Anniversary of ICEED and Commemorating  
Ceremony on 35th Anniversary of Toyohashi University of Technology, 5-17 Nov 2011  
International Cooperation Center for Engineering Education Development (ICCEED)  
Toyohashi, Japan.

Invited Speaker  
Nanoporous Materials Characterizations  
International Scientific Instrument Technology Workshop 2011, 16-29 Oct 2011  
National Applied Research Laboratories, Taiwan

Invited Speaker  
USM Alternative Track in PhD Examinations  
20 Jan 2012  
Institute of Postgraduate Studies (IPS), Universiti Sains Malaysia

Invited Speaker  
Synthesis of Mesoporous Hydroxyapatite through Soft Template Route Using Non-Ionic  
Surfactant  
4<sup>th</sup> Regional Conference on Materials Engineering, 8-9 Dec 2011  
Hanoi University of Technology, Vietnam.

Keynote Speaker  
Towards Enhanced Partnership: Past, Present & Future,  
Toyohashi University of Technology - Universiti Sains Malaysia Joint Seminar,  
Collaborative Microelectronic Design Excellent Centre (CEDEC), 12-13 September 2011  
Toyohashi University of Technology - Universiti Sains Malaysia, Malaysia

Invited Speaker  
Porous Bioceramics  
Seminar on Bioceramics, 20 Oct 2009, 27 Oct 2009 & 10 Nov 2009  
Kyushu University, Japan

Invited Speaker  
A Novel Route for the Preparation of Sulfo-Functionalized Nanoporous Silica  
1<sup>st</sup> Regional Workshop in the Interdisciplinary Area of Natural Resources / Materials,  
18 – 19 Aug 2008  
Institute of Technology Cambodia (ITC)



## **Visiting Professorship**

Visiting Scientist  
Synthesis and Characterization of Silica Cryogel  
Short-term Research in Japan, 6 – 18 Feb 2014  
Hokkaido University

Guest Researcher  
Mesogel Materials Research Center, Nano Science and Technology Research Institute,  
Waseda University, 25 July 2012 – 31 March 2013

Visiting Scientist  
Orientation of Pore Structure in Nanoporous Silica Film  
Short-term Research in Japan, 24 July – 22 Aug 2012  
Waseda University

Visiting Scientist  
Synthesis and Characterisation of Carbon Cryogel  
Short-term Research in Japan, 4 – 17 Feb 2012  
Hokkaido University

Visiting Scientist  
Nanoporous Activated Carbon Fiber for Ultracapacitor  
Short-term Visit in ASEAN, 27 Dec 2011 – 2 Jan 2012  
Nanyang Technological University

Visiting Scientist  
Porous Materials for Natural Gas & Biogas Storage  
Short-term Research in Japan, 15 Dec 2010 - 5 Jan 2011  
Toyohashi University of Technology

Visiting Scientist (14 May 2010-29 May 2010)  
Conversion of Zeolite NaY from Rice Husk Ash  
Toyohashi University of Technology, Japan

Visiting Scientist  
Development of Porous Bioceramic  
Short-term Research in Japan, 17 Oct 2009 – 15 Nov 2009  
Kyushu University

Visiting Professorship  
Seminar on Environment and Energy, 23 – 26 Sep 2009  
Kumamoto University, Japan

Visiting Scientist  
Characterization of Zeolites for Biogas Separation  
Short-term Training in Japan, 21 Nov 2008 – 19 Dec 2008  
Toyohashi University of Technology

Invited Visiting Scholar  
Seminar on Synthesis & Characterization of Nano-porous Materials (2004)  
AUN/SEED-Net – JICA – Toyohashi University of Technology (TUT)

## **H Reviewers & Examiners**

### **Editor**

ASEAN Engineering Journal, 2012

### **National Advisory Committee:**

IEEE EMBS (Malaysia) Chapter

International Conference on Biomedical Engineering - 2012 ICoBE - 27/2/2012 - 28/2/2012

### **Editor for the MicroSoM (2009)**

MicroSoM (Bulletin of the Electron Microscopy Society of Malaysia, EMSM), Electron Microscopy Society of Malaysia (EMSM).

### **Committee Member in Editor Board (2009)**

Proceeding of the Recent Advances in Materials Minerals & Environment (RAMM) Conference.

### **Editor for the MicroSoM (2009)**

MicroSoM (Bulletin of the Electron Microscopy Society of Malaysia, EMSM), Electron Microscopy Society of Malaysia (EMSM).

### **Editor for the MicroSoM (2003)**

MicroSoM (Bulletin of the Electron Microscopy Society of Malaysia, EMSM), Electron Microscopy Society of Malaysia (EMSM).

### **Examiner (2012):** Soo Mun Teng

Synthesis and Characterization of ZrO<sub>2</sub> Thin Films Using Sputtering and Sol-Gel Method, Universiti Sains Malaysia (USM).

### **External Examiner (2011):** Nur Hashimah binti Alias

Carbon Dioxide Separation Using Modified Porous Adsorbents in Pressure Swing Adsorption System, Universiti Teknologi Malaysia (UTM).

### **Examiner (2011):** Radin Shafinaz bt Jamil

Synthesis of Porous Alumina through Sol-gel Auto-combustion Method for Biomedical Application, Universiti Sains Malaysia (USM).

### **Examiner (2010):** Nguyen Xuan Thanh Tram

Synthesis of Carbonate-Substituted Hydroxyapatite by a Mechanical Activation Method, Universiti Sains Malaysia (USM).

### **Examiner (2009):** Rahayu Sanuman binti Mohd Zin,

Modification of Multi-Wall Carbon Nanotubes for Tim Application, Universiti Sains Malaysia (USM).

### **Reviewer (2014)**

14/10/2014 - 23/10/2014

Removal of Sulfur Dioxide with High Concentration on Surface Modified Activated Carbon Fibers by Nitrogen-containing Group

*Recent patents on Chemical Engineering*

Editor-in-Chief: Yousheng Tao

4/7/2014 - 3/7/2014

Surfactant-assisted Immobilization of TiO<sub>2</sub> onto Glass Substrates for Photocatalytic Degradation of Methylene Blue  
ASEAN Engineering Journal  
Editor : Shin Mukai

**Reviewer (2013):**

5/2/2013 - 5/2/2013

Upgrading of bio-oil from biomass fast pyrolysis in China: A review  
*Renewable & Sustainable Energy Reviews*  
Editor-in-Chief: Lawrence L. Kazmerski

- Carbon Dioxide Capture at Various Temperatures Using Ca (OH)<sub>2</sub> Nanorod Fabricated by Sol-Gel Route in Ethanol Media
- Utilization of Sludge from Sidoarjo Mudflow for Zeolite Synthesis
- Nanoclay for Micropollutant Removal in Wastewater-Effective Alternative

Proceeding of ICAMN III 2013

**Reviewer (2012):**

24/9/2012 - 2/10/2012

Electric Vehicles and Renewable Energy Reviews  
*Renewable & Sustainable Energy Reviews*  
Editor-in-Chief: Lawrence L. Kazmerski

Electric Vehicles and Renewable Energy Reviews  
*Potential Production and distribution of microalgae in China*  
Editor-in-Chief: Lawrence L. Kazmerski

Guest Editor: Z. A. Ahmad (2012) Preparation and Characterization of Modified Mesoporous Silicate MCM-41. *Advanced Materials Research 2012*.

Guest Editor: Z. A. Ahmad (2012) Dehydration Studies of Biomass Resources for Activated Carbon Production using BET and XRD Techniques. *Advanced Materials Research 2012*.

Guest Editor: Z. A. Ahmad (2012) Preparation and Characterization Modified Mesoporous Silica MCM-41. *Advanced Materials Research 2012*.

**Reviewer (2011):**

The Challenges and Recommendations of Biofuel for Internal Combustion Engines  
*Renewable & Sustainable Energy Reviews*

24/10/2011 - 21/11/2011

Editor-in-Chief: Lawrence L. Kazmerski

From geopolymers to zeolite: A study on fabricated processing of NaA zeolite  
*Chemical Engineering Journal*

24/10/2011 - 21/11/2011

Editor: Jesus Santamaria

**Reviewer (2009)**

Proceeding of Regional Conference on Materials 2009 (RCM 2009)

- Micro Structural Evolution of High Speed Steel Matrix Composite Reinforced by Titanium Carbide Nanoparticles During Sintering Process
- FTIR Analysis of the Photosensitive Polyimide with Process Time Delay in Photolithography Process
- Epoxy Hollow Particles Reinforced Epoxy Composites

## **I. List of Consultancy / Trainings / Industrial Works**

Characterization of Graphite, 10 Nov 2014 – 14 Nov 2014

for

**MyCO2 Sdn. Bhd.**

EcoClay – The Fusion of Arts and GreenTech for Sustainable Charity through Business Contribution. 1 August 2013 – 31 July 2015

for

**Asia Community Services (ACS) & Forward Act Marketing**

Blue Ocean Strategy Trainers' Program, 11-12 April 2013 – RM 15,000

for

**Institute for Molecular Medicine (INFORMM)**

Carbon Materials, 26 Feb 2013 *with Professor Shin Mukai (Hokkaido University) and Professor Noriyoshi Kakuta (Toyohashi University of Technology)*

for

**USAINS Holding**

Radioactive & Chemical Remediation and Fundamental of Adsorption by Nanoporous Materials, 14-15 Jan 2013 *with Professor Tsutomu Sato (Hokkaido University) and Professor Akihiko Matsumoto (Toyohashi University of Technology), Marco Perini (Agilent Vacuum Technologies, Italy), Zulkifli (Quantachrome, Singapore)*

for

**USAINS Holding**

Biomaterials: The technological frontier from synthesis to application, 3-4 Dec 2012 *with Professor Kunio Ishikawa (Kyushu University) and Professor Mitsugu Todo (Kyushu University)*

for

**USAINS Holding**

Biochar Production from Palm Biomass. 1 August 2012 – Present

for

**Keramikos Ventures Sdn. Bhd.**

Industrial Placement 17 June 2012 – 16 July 2012

for

**Titatech Engineering Sdn. Bhd.**

Blue Ocean Strategy Trainers' Program, 28-29 May 2012 – RM 50,000

Blue Ocean Strategy Trainers' Program, 22-23 September 2011 – RM 40,000

Blue Ocean Strategy Trainers' Program, 25-27 July 2011 – RM 50,000

Blue Ocean Strategy Trainers' Program, 11-12 July 2011 – RM 40,000

for

**Akademik Kepimpinan Pengajian Tinggi / Higher Education Leadership Academy (Akept), Ministry of Higher Education Malaysia**

Technical Expert in Legal Dispute: Study on Gold Layer, 5 May 2014  
Investigation on Gold Diffusion in Solder Layer, 20 Oct 2011  
Examination of Porosity by Nitric Acid Treatment, 9 May 2011  
Elements Identification and Measurement of Gold Layer Thickness in Connector,  
22 Oct 2010  
Examination of Gold Layer, 8 Oct 2010  
Examination of Gold Layer in Connector, 7 Aug 2010  
Examination of Gold Layer in Connector ,4 May 2011  
*for :*

**Oriental Fastech Manufacturing Sdn Bhd.**

Materials For Power Plant Maintenance Project, 2009-2010  
Development of Anti-abrasive Ceramic Body – For Cement Plant Application, 2008  
*for Titatech Engineering*

Hardness & Microstructure Analysis & Comparison, 20 May 2011  
*for Avalanche Med Sdn. Bhd.*

Determination of NaOH Concentration, 4 Sep 2012  
Sludge Composition Analysis, 13 Aug 2011  
*for Dekad Aliran Sdn Bhd.*

Evaluation & Comparison of Chemical Composition & Mechanical Properties of Copper &  
Stainless Steel Materials from Different Sources, 27 Aug 2010  
*for Amphenol TCS (M) Sdn Bhd.*

Development of Barium Titanate Dummy Plate, 2009  
*for Akty Industry (Formerly Hitachi Metal)*

Development of Thermal Insulating Paint – For Power Plant Application, 2010  
Development of Photoluminescent Glass derived from Rice Husk Ash 2009  
*for Kawan Dynamic Sdn. Bhd.*

Increasing Brightness of White LED with White LED Holder for LCD TV, 2004  
Development of 1000 Lumens LED, 2004  
Materials Selection of LED Infinity Lens, 2004  
*for Lumileds Lightings Sdn Bhd.*

Examination, Characterization and Application Development of Sarawak Clay, 2003  
*for Genesis Sdn. Bhd.*

## **J. Professional Memberships**

Ordinary Member  
Malaysia Nanotechnology Association (MNA), (2012)  
Membership Number 131

Member (2010 – 2012)  
International Adsorption Society

Blue Ocean Strategic Planning Committee, 2010  
for Universiti Sains Malaysia

Registered Member  
Chemical Society of Japan (CSJ)

Registered Graduate Engineer (Since 31 Jan 2004, Malaysia)  
Board of Engineer Malaysia

Registered Ordinary Member (24 May 2002, Malaysia)  
Institute of Materials Malaysia (IMM)

## **Professional Activities**

Session Chairman for The The 5<sup>th</sup> Regional Conference on Materials Engineering 2012 (RCM 5) 5<sup>th</sup> Regional Conference on Natural Resources and Materials Engineering 2012 (RCNRM 5)  
22 – 23 Jan 2012, Park Royal Hotel, Penang  
AUN/Seed-Net, ASEAN Foundation and Universiti Sains Malaysia  
Penang – Malaysia

Secretary for Organizing Committee  
AUN-Seed/Net : The 5<sup>th</sup> Regional Conference on Materials Engineering 2012 (RCM 5) 5<sup>th</sup> Regional Conference on Natural Resources and Materials Engineering 2012 (RCNRM 5)  
22 – 23 Jan 2012, Park Royal Hotel, Penang  
AUN/Seed-Net, ASEAN Foundation and Universiti Sains Malaysia  
Penang – Malaysia

Organizing Committee, International Conferene on X-Rays & Related Techniques in Research & Industry (ICXRI 2012), 3-5 July 2012, Vistana Hotel, Penang.  
XAPP Malaysia & Universiti Sains Malaysia  
Penang – Malaysia

Organizing Committee, Japan Professor Dispatch Program: Fundamental on Adsorption by Prof Akihiko Matsumoto (Toyohashi University Technology), 10-14 Sep 2012,  
AUN-Seed/Net - Universiti Sains Malaysia

Organizing Committee, Japan Professor Dispatch Program: Development & Evaluation of Highly-Functional Carbon Materials from Waste Textile & Dechlorinated Waste PVC by Vice President of Toyohashi University Technology. Prof Noriyoshi Kakuta (Toyohashi University Technology), 10-14 Sep 2012,  
AUN-Seed/Net - Universiti Sains Malaysia

Organizing Committee, Japan Professor Dispatch Program: Preparation of Functional Mesoporous Materials by Prof Kazuyuki Kuroda (Waseda University), 10-14 Sep 2012, AUN-Seed/Net - Universiti Sains Malaysia

Organizing Committee, Joint Research Seminar USM-NUT 2011, 17 Oct 2011, Universiti Sains Malaysia – Nagaoka University of Technology (Japan), Penang – Malaysia

Organizing Committee, Joint Workshop USM-TUT “Towards Enhanced Partnership”, 13 September 2011, Universiti Sains Malaysia – Toyohashi University of Technology (Japan), Penang – Malaysia

Organizing Committee, Round Table Meeting for Kumamoto University Delegation, 5 – 7 Jan 2010, Penang – Malaysia

Young Person's Lecture Competition 2009 (National level), 22/7/2009 - 22/7/2009  
Young Person's Lecture Competition 2009 (USM level), 25/5/2009 - 25/5/2009  
Institute of Materials, Minerals & Mining (IOM<sup>3</sup>)

Session Chairman for Forum of 1<sup>st</sup> Regional Conference on Materials (2009)  
16 – 17 Feb 2009, Hotel Equatorial, Penang  
AUN/Seed-Net, ASEAN Foundation and Universiti Sains Malaysia

Organizing Chairman (2009)  
Seminar Series on Functional Materials 1: Biomaterials & Porous Materials  
18 Feb 2009, USM Transkrian Engineering Campus

Secretary for Organizing Committee  
AUN-Seed/Net Regional Conference on Materials Engineering 2009 (RCM 2009)  
16 – 17 Feb 2009, Hotel Equatorial, Penang  
AUN/Seed-Net, ASEAN Foundation and Universiti Sains Malaysia

Organizing Committee for Shortcourse on Sol-Gel Science & Technology: Coatings in NanoCentury, by Professor Atsunori Matsuda, Toyohashi University of Technology, 9 –10 Feb 2009, USM Transkrian Engineering Campus

Organizing Committee for Technical Presentation on AAS, ED-XRF and ICP  
By Alpha Analytical  
21 Aug 2008, USM Transkrian Engineering Campus

Organizing Committee for Technical presentation on XRF (2008)  
By DKSH Technology  
USM Transkrian Engineering Campus

Organizing Committee for Technical presentation on XRF, XRD, UTM and CNC  
By DI Instruments  
USM Transkrian Engineering Campus

Organizing Chairman for Seminar of Research Methodology and Thesis Writing  
2003, USM Transkrian Engineering Campus

President (2002-03, USM)  
Postgraduate Students, School of Material and Mineral Resources Engineering,  
Universiti Sains Malaysia (USM)

## **Forum**

Member of Panel Discussion: International Student Program - 2014  
Toyohashi University of Technology – Universiti Sains Malaysia

Alumni – Invited Delegate  
China Synergy Programme for Outstanding Youth (2013)  
2013  
China Synergy Program for Outstanding Youth, (Guangzhou – Beijing) China

Alumni – Invited Delegate  
China Synergy Programme for Outstanding Youth (2010)  
13-21 July 2010  
China Synergy Program for Outstanding Youth, (Shanghai – Beijing) China

Session Chairman  
Porous Materials Forum in  
The 1st Regional Conference on Materials 2009  
16 – 17 Feb 2009  
AUN/Seed-Net

International Youth Forum (2007, Seoul - Korea)  
National Council of Youth Organization in Korea (NCYOK), Asian Youth Council (AYC),  
World Assembly of Youth (WAY)

Delegate  
Dragon 100 Young Chinese Leaders Forum (2005)  
The Dragon Foundation, Hong Kong S.A.R., China

Delegate  
China Synergy Programme for Outstanding Youth (2004)  
China Synergy Programme for Outstanding Youth, Hong Kong – China



## **Service to the Universities & Community**

School Committee (2014)  
AJK Akreditasi  
Pusat Pengajian Kejuruteraan Bahan & Sumber Mineral

University Committee Member (2014 – 2015)  
Jawatankuasa Kecil Buku Program Internship Pelajar  
Industry and Community Engagement Division, Universiti Sains Malaysia

University Committee Member (2013 – 2014)  
Jawatankuasa Kecil Buku Program Internship Pelajar  
Industry and Community Engagement Division, Universiti Sains Malaysia

University Committee Member (2013 – 2014)  
Industry Liason Committee  
Industry and Community Engagement Division, Universiti Sains Malaysia

Poster Judge (2013, USM)  
Pembentangan Poster Latihan Industri 2013 (Exhibition of Industrial Training 2013)  
Universiti Sains Malaysia (USM)

Poster Judge (2010, USM)  
Pembentangan Poster Latihan Industri 2010 (Exhibition of Industrial Training 2010)  
Universiti Sains Malaysia (USM)

Poster Judge (2010, USM)  
Poster Competition for 4th Colloquium on Postgraduate Research; Colloquium on  
Materials, Mineral and Polymer 2010  
Universiti Sains Malaysia (USM)

Coordinator for AIMST Ceramic & Glass Course  
29/6/2008 - 29/6/2008

Poster Judge (2009, USM)  
Pembentangan Poster Latihan Industri 2008 (Exhibition of Industrial Training 2009)  
Universiti Sains Malaysia (USM)

Poster Judge (2008, USM)  
Pembentangan Poster Latihan Industri 2008 (Exhibition of Industrial Training 2008)  
Universiti Sains Malaysia (USM)

Poster Judge (2003, USM)  
Pembentangan Poster Latihan Industri 2003 (Exhibition of Industrial Training 2003)  
Universiti Sains Malaysia (USM)

## **L. Professional Developments / Trainings**

Bengkel Perancangan Kluster, Jawatankuasa & Champion Bahagian Jaringan dan Masyarakat 2015  
10-11 Feb 2015  
Auditorium INFORMM

Peningkatan Kualiti Pengajaran & Pembelajaran (P&P)  
13 Feb 2015  
Auditorium Kompleks Dewan Kualiah, USM Engineering

Seminar Outcome Based Learning  
12 Feb 2015  
Bilik Seminar , PPKBSM

U Start Malaysia Conference 2015  
By Ministry of Education Malaysia  
20-21 Jan 2015  
@The Pullman

Malaysia – CLMV (Cambodia, Laos, Myanmar, Vietnam) Regional Cooperation in Technology Transfer and R&D Commercialization Workshop  
14-16 October 2014  
@Hotel Bangi-Putrajaya, Malaysia

“Creation of a Knowledge Society”: 1<sup>st</sup> National Conference on Knowledge Transfer  
21-23 August 2013  
@Equatorial Hotel (Bangi), Malaysia

Moodle e-Learning Workshop  
5 Aug 2014  
@School of Materials & Mineral Resources Engineering, USM

Seminar on Materials Characterization by X-Ray Fluorescence (XRF) and X-Ray Diffraction (XRD)  
24 Apr 2014  
Organized by PANalytical & DKSH  
@School of Materials & Mineral Resources Engineering, USM

Seminar on Materials Characterization, Analytical Chemistry & Stability Testing  
8 Apr 2014

Pre-Conference Workshop : Rare Earth Processing and Applications in Advanced Materials  
21 Jan 2013

Principles and Applications of Adsorption by Activated Carbon  
7 Mar 2013

Seminar Kecemerlangan OBE & Pendaftaran (PEng)  
6 Sep 2012

Kursus Mengenal Kehebatan Diri  
2 July 2012

HSSE (Health, Safety, Security & Environment) Training  
20-21 June 2012

Effective Supervision  
23-24 Nov 2010  
Universiti Sains Malaysia

Effective Research  
1-2 Dec 2010  
Universiti Sains Malaysia

Team Building  
25 Nov 2010  
Universiti Sains Malaysia

Writing & Publication  
13 December 2010  
Universiti Sains Malaysia

Development of Academic Professional  
14 December 2010  
Universiti Sains Malaysia

Blue Ocean Strategy (BOS) – Execution Workshop  
Jan – May 2010  
Universiti Sains Malaysia

EQ Genius Seminar  
28 Apr 2010  
Universiti Sains Malaysia

Seminar on Drug Delivery Strategies of Infectious Diseases  
24 Feb 2010  
Universiti Sains Malaysia

MTSF Grant Research Symposium  
16 Dec 2009 (Auditorium Rimba Limu – UM, KL)  
Malaysia Toray Science Foundation

2009 Biotechnology Entrepreneur Workshop  
7 – 10 July 2009 (Sheraton Imperial Hotel, Kuala Lumpur)  
Malaysian Biotechnology Corporation

Research Acculturation Workshop  
24 – 25 June 2009 (Engineering Campus, USM)  
Engineering & Technology Research Platform, USM

Courses on Learning & Teaching  
8 – 19 June 2009, (USAINS – Universiti Sains Malaysia)  
Registry Department (Training Unit), USM

Kursus Induksi (Induction Course)  
18-25 May 2009, (Engineering Campus, USM)  
Registry Department, USM

Pilot Workshop on Intellectual Property Management –  
JICA-Net Distance Learning Seminar  
24 Apr 2009 (School of Computer Science, USM)  
JICA – Innovation Office

Intellectual Property & Commercialization Seminar  
30 Mar 2009 (Suntech Cybercity, Penang)  
Innovation Office – Universiti Sains Malaysia

XRF Presentation by Bruker  
23 Nov 2008 (School of Materials & Mineral Resources Engineering, USM)  
Bruker (M) Sdn. Bhd. & Kemuning Scientific Sdn. Bhd.

National Innovation Conference & Exhibition (NICE) 2008  
Innovation: The Foundation of Wealth Creation & Prosperity  
6-8 Nov 2008 (PWTC - Kuala Lumpur, Malaysia)  
Ministry of Science, Technology and Innovation (MOSTI), Malaysia.

MTDC Commercialization Bootcamp  
7 Nov 2008 (PWTC - Kuala Lumpur, Malaysia)  
By Dr John Kapeleris (Australian Institute for Commercialization)  
Malaysia Technology Development Corporation (MTDC), Malaysia

Sesi Taklimat “Professional Interview” dan Bengkel untuk Jurutera Professional  
BEM IEM Seminar  
29 Oct 2008 (School of Civil Engineering, USM)  
Universiti Sains Malaysia

Program kenegaraan Khusus untuk Pensyarah-pensyarah muda IPTA bertajuk “Towards  
a glorious nationhood”  
16 Sep 2008 (Putrajaya International Convention Centre, PICC – Putrajaya, Malaysia)  
Akademi Kepimpinan Pengajian Tinggi (AKEPT), Ministry of Higher Education (MOHE),  
Malaysia

Amanat Khas Y.B. Dato Seri Mohd Khaled Nordin, Menteri Pengajian Tinggi, Sempena  
APEX universiti  
4 Sep 2008 (Dewan Tuanku Syed Putra (DTSP), USM Penang)  
Ministry of Higher Education (MOHE) & Universiti Sains Malaysia

Strategizing and Formulating a Research Proposal  
Guide to Writing Science Fund/FRGS Grant Application: An Insiders Perspective  
By Prof Asma Ismail Timbalan Naib Canselor (Penyelidikan & Inovasi)  
25 Aug 2008 (USM Transkrian Engineering Campus)  
Universiti Sains Malaysia

Dana Pengkomersilan R&D (CRDF) dan Dana Perolehan Teknologi (TAF)  
7 Aug 2008, (USM Transkrian Engineering Campus)  
Malaysia Technology Development Corporation Sdn. Bhd. (MTDC)

Peranan, Fungsi dan Hala Tuju Bahagian Jaringan Industri dan Masyarakat  
By Prof. Lim Koon Ong, Timbalan Naib Canselor (Jaringan Industri dan Masyarakat)  
6 Aug 2008 (Transkrian Engineering Campus)  
Universiti Sains Malaysia

Sesi Pertemuan Timbalan Naib Canselor (Penyelidikan & Inovasi) Bersama Dengan Staf Akademik Usm Kampus  
Prof Asma Ismail Timbalan Naib Canselor (Penyelidikan & Inovasi)  
28 Jul 2008 (Transkrian Engineering Campus)  
Universiti Sains Malaysia

Valve and Fitting Installation Seminar  
21 Aug 2007 (Toyohashi, Japan)  
Nagoya Valve and Fitting Pvt Ltd.  
Toyohashi University of Technology (TUT), Japan

Workshop for Safety and Handling of Liquid Nitrogen  
11 Jul 2007 (Toyohashi, Japan)  
By Masayuki Nagao (Toyohashi University of Technology)  
Toyohashi University of Technology (TUT), Japan

TEM Workshop  
10 Jul 2007 (Toyohashi, Japan)  
By Koichi Muramoto (Toyohashi University of Technology)  
Toyohashi University of Technology (TUT), Japan

Multipolymer Reactions, Organocatalytic Mitsunobu Reactions and Multifunctional Polymers, 8 Jun 2007, (Toyohashi, Japan)  
By Patrick Toy (University of Hong Kong, Hong Kong S.A.R., China)  
The Society of Polymer Science, Japan (Tokai division)

Modification of Natural Rubber on Its Double Bonds,  
27 Feb 2007 (Toyohashi, Japan)  
By Thao Vo-Huu (Ho Chi Minh City University of Technology)  
Toyohashi University of Technology (TUT), Japan

Oxides for Electronic Devices Applications  
20 Feb 2007 (Toyohashi, Japan)  
By Zainovia Lockman (Universiti Sains Malaysia, Malaysia)  
Toyohashi University of Technology (TUT), Japan

Density Functional Theory (DFT) Methods and Characterization of Porous Materials,  
28 Nov 2006 (Toyohashi, Japan)  
By Peter I. Ravikovitch (TRI/Princeton, U.S.A.)  
Toyohashi University of Technology (TUT)

Design of Nanomaterials Based on the Interaction of Organic and Inorganic Materials,  
30-31 Oct 2006 (Toyohashi, Japan)  
By Kazuyuki Kuroda (Waseda University, Japan)  
Toyohashi University of Technology (TUT), Japan

Intellectual Property System and Policy ~ Jica Training  
22 Sep. 2006 (Toyohashi, Japan)  
By Hiroshi Kato (GRIPS, Japan)  
Japan International Cooperation Agency (JICA), Japan

Introduction to ONR Research Global – Asia  
19 Sep. 2006 (Toyohashi, Japan)  
By Mostafa A.H. Talukder (Office of Naval Research Global – Asia, U.S. Navy)  
Toyohashi University of Technology (TUT), Japan

Peacebuilding Workshop  
19 – 20 Aug. 2006 (Okinawa, Japan)  
Japan International Cooperation Agency (JICA), Japan

Post-war Reconstruction of Okinawa and Peacebuilding ~ The Reconstruction process of  
education sector and Peace education  
15 – 22 Aug. 2006 (Okinawa, Japan)  
Japan International Cooperation Agency (JICA), Japan

Tokyo Symposium on Nanoarchitecture of Porous Materials  
29 Jul. 2006 (Tokyo, Japan)  
Waseda University / Japan Association of Zeolite (JAZ), Japan

The Application of Oral Proficiency Interview (OPI) in the Evaluation and Development of  
Language Skill  
15 Mar. 2006 (Toyohashi, Japan)  
By Osamu Kamata (Nansan University, Japan)  
Toyohashi University of Technology (TUT), Japan

Frequency Response Method (FRM) for Investigation of Gas/Surface Dynamic  
Phenomena, 27 Feb. 2006 (Toyohashi, Japan)  
By Yusuke Yasuda (Toyama University, Japan)  
Toyohashi University of Technology (TUT), Japan

Safety and Handling of High Pressure Gas,  
1 Feb. 2006 (Toyohashi, Japan)  
By Miyazaki Kazuyuki (Tayo Nissan, Japan)  
Toyohashi University of Technology (TUT), Japan

Recycling of Various Rubber Wastes, 16 Dec. 2005 (Toyohashi, Japan)  
By Hanafi Ismail (University Sains Malaysia)  
Toyohashi University of Technology (TUT), Japan

Intelligence Measurement Programme (IQ Score: 129), 11 Nov. 2005  
Tickle Inc., (United States of America)

JICA Introductory Seminar, 22 – 26 Mar. 2005 (Tokyo, Japan)  
Japan International Cooperation Agency (JICA), Japan

Intensive Japanese Language Course, 2004 (Nagoya, Japan)  
Chubu International Center, Japan International Cooperation Agency (JICA), Japan

Project Management Workshop, 14 Oct. 2004 (Penang, Malaysia)  
Kepnoe Tregor, International

Statistical Process Control  
2004 (Penang, Malaysia)  
QMS Management

Failure Mode & Effect Analysis (Design & Process)  
2004 (Penang, Malaysia)  
QMS Management

National Symposium on Science and Technology  
2003 (K.L., Malaysia)  
Ministry of Science, Technology & Environment (MOSTE)

Statistical Analysis using SPSS  
2003 (Penang, Malaysia)  
Universiti Sains Malaysia (USM), Malaysia

Workshop for Toolbook Instructor II V 8.5  
Universiti Sains Malaysia (USM), Malaysia

Introduction to Matlab  
2002 (Penang, Malaysia)  
Universiti Sains Malaysia (USM), Malaysia

World Engineering Congress (WEC 2002), 2002 (Kuching, Malaysia)  
Institute of Engineers, Malaysia (IEM), Malaysia

\* *Professional Developments / Trainings with involvements as organizing committee or involvements in presentation is presented in section H & E respectively*

## **K. Supervision**

### **K. 1/4 PhD**

Ooi Chee Heong, Jan 2015  
Urea Adsorption by Nanoporous Carbon

Lee Ting, Aug 2011  
Methane Adsorption by ACF derived from EFB

Nur Farahiyah Binti Mohamad, Nov 2011  
Drug Delivery of Mesoporous Hydroxyapatite

Cheah Wee Keat, Nov 2010  
Nanoporous Materials for Artificial Kidney

### **K. 1/4 Master**

Industrial / Part time  
Joshua Gan Oon Joo  
Nanopore Alignment in LED Panel

Co-Supervise  
Adilah Anuar  
Optimization the Process Conditions of Submerged Fermentation for Bioethanol  
Production  
*Co-Supervision with Dr Midhat Nabil Ahmad Salimi*  
*School of Bioprocess Engineering*  
*Universiti Malaysia Pahang*

Ooi Chee Heong, Aug 2011  
Nanoporous Carbon for Urea Adsorption

Lew Kien Seng, 2009  
Synthesis and Characterization of Nanoporous HA

Tan Wan Cheng, 2009  
Development of Zeolite from Rice Husk Ash for Natural Gas Adsorption

Co-Supervise  
Sengphet Keokandong, 15 Aug 2008  
Development of Porous Alumina for Gaseous Filtration

Co-Supervise  
Chan Pooi Quan, 1 Oct 2008  
Nanostructure Thin Film Tetragonal Zirconia for Semiconducting Application



Masku, 2013  
Development of Air Purifier from Nanoporous Materials.

Sim Yee Yang, 2009  
Development of Thermal Insulating Paint

Lee Ting, 2009  
Development of Photoluminescent Glass derived from Rice Husk Ash

Cheah Wee Keat, 2009  
Development of Anti-abrasive Ceramic Body

Wong Chiew Hun, 2009  
Synthesis of Carbon Aerogel by Super-critical Drying

### **K3/3 Undergraduate Final Year Project**

Ng Zi Shin 2015  
Metal Immobilization of Sludge by Nanoporous Clay

'Aqilah bt Ghazali 2015  
Synthesis of Thin Layer Graphene

Muhammad Fahim Abdul Rahman 2014  
Immobilization of Al in WTP Sludge using Zeolite

Ong Chin Siang, 2014  
Design Optimization of Cigarette Smoke Removal System using Nanoporous Activated Carbon Fiber

Lim Siew Ming, 2013  
Metal Immobilization of WTP Sludge by Pottery Clay

Nur Azwani, 2013  
Comparative Characterization of Biochar derived from Different Biomass

Liew Hui Min, 2012  
Activated Carbon derived from palm waste

Tham Ren Haw, 2012  
Formulation of Pottery Clay from WTP Sludge

Thung Wei Lee, 2012  
Nanoporous Silica for Artificial Kidney Applications

Ang Choon Li, 2011  
Urea Adsorption by Activated Carbon Fiber for Artificial Kidney

Ling Hang Hock, 2011  
Development of Barium Titanate Dummy Plate

Oh Shao Kang, 2011  
Application Development of Clay Sludge from Water Treatment Plant

Zarina Binti Dan, 2010  
Particle size and shape control of microporous hydroxyapatite

Ooi Chin Wei, 2010  
Synthesis of Micro / mesoporous hydroxyapatite with interconnected pores

Nurul Adlida Binti Mainor, 2010  
Synthesis of Micro / mesoporous carbonated hydroxyapatite

Lim Kein Hwa, 2010  
Zeolite for natural gas adsorption

Lew Kien Seng, 2009  
Synthesis and Characterization of Microporous HA

Neoh Pei Ling, 2009  
Synthesis and Characterization of Mesoporous HA

Yap Sing Yoh, 2009  
High silica zeolite for natural gas adsorption

Chang Shan Shan, 2009  
Carbon aerogel for ultracapacitor

Ooi Inn Cheq, 2009  
Semiconductive yttria stabilized zirconia (YSZ)

Tan Wan Cheng, 2009  
Semiconductive niobate doped yttria stabilized zirconia (N doped YSZ)

## L. Subjects Taught

<b>Semester 2014-15-2</b>	<b>Subject Code</b>
Physical Chemistry of Engineering Materials	EBB 160/3
Final Year Project	EBB 407/6
Fluid Power & Turbo Machine	EBB 409/3
Industrial Training	EBB 350/5
Open Ended Lab	EBB 204/2
Inter-Racial Relationship	SHE 101/2

  

<b>Semester 2014-15-1</b>	<b>Subject Code</b>
Engineering Drawing	EBS 110
Core Entrepreneurship	WUS 101/2
Final Year Project	EBB 407/6
Materials Selection & Design	EBB 407
Engineering Materials	EBB 113
Fluid Mechanics	EBS 238
Material Introduction lab: Particle Size Distribution	EBB 155

  

<b>Semester 2013-14-2</b>	<b>Subject Code</b>
Physical Chemistry of Engineering Materials	EBB 160/3
Final Year Project	EBB 407/6
Fluid Power & Turbo Machine	EBB 409/3
Industrial Training	EBB 350/5
Open Ended Lab	EBB 204/2
Inter-Racial Relationship	SHE 101/2

  

<b>Semester 2013-14-1</b>	<b>Subject Code</b>
Engineering Drawing	EBS 110
Core Entrepreneurship	WUS 101/2
Final Year Project	EBB 407/6
Engineering Materials	EBB 113
Fluid Mechanics	EBS 238
Material Introduction lab: Particle Size Distribution	EBB 155

  

<b>Semester 2012-13-2</b>	<b>Subject Code</b>
Physical Chemistry of Engineering Materials	EBB 160/3
Final Year Project	EBB 407/6
Fluid Power & Turbo Machine	EBB 409/3
Industrial Training	EBB 350/5
Materials Characterization Lab: Slag Attack on Refractory Materials	EBB 204/2
Research Project	EBB 555/23

<b>Semester 2012-13-1</b>	<b>Subject Code</b>
Engineering Drawing	EBS 110
Core Entrepreneurship	WUS 101/2
Final Year Project	EBB 407/6
Engineering Materials	EBB 113
Fluid Mechanics	EBS 238
Material Introduction lab: Particle Size Distribution	EBB 155

<b>Semester 2011-12-2</b>	<b>Subject Code</b>
Physical Chemistry of Engineering Materials	EBB 160/3
Final Year Project	EBB 407/6
Fluid Power & Turbo Machine	EBB 409/3
Industrial Training	EBB 350/5
Materials Characterization Lab: Slag Attack on Refractory Materials	EBB 204/2
Research Project	EBB 555/23

<b>Semester 2011-12-1</b>	<b>Subject Code</b>
Engineering Drawing	EBS 110
Core Entrepreneurship	WUS 101/2
Final Year Project	EBB 407/6
Engineering Materials	EBB 113
Fluid Mechanics	EBS 238
Material Introduction lab: Particle Size Distribution	EBB 155

<b>Semester 2010-11-2</b>	<b>Subject Code</b>
Physical Chemistry of Engineering Materials	EBB 160/3
Core Entrepreneurship	WUS 101/2
Final Year Project	EBB 407/6
Fluid Power & Turbo Machine	EBB 409/3
Industrial Training	EBB 350/5
Materials Characterization Lab: Slag Attack on Refractory Materials	EBB 204/2
Research Project	EBB 555/23

<b>Semester 2010-11-1</b>	<b>Subject Code</b>
Engineering Drawing	EBS 110
Final Year Project	EBB 407/6
Core Entrepreneurship	WUS 101/2
Engineering Materials	EBB 113
Fluid Mechanics	EBS 238
Material Introduction lab: Particle Size Distribution	EBB 155

<b>Semester 2009-10-2</b>	<b>Subject Code</b>
Physical Chemistry of Engineering Materials	EBB 160/3
Core Entrepreneurship	WUS 101/2
Ethnic Relationship	SHE 101/2
Final Year Project	EBB 407/6
Fluid Power & Turbo Machine	EBB 409/3
Industrial Training	EBB 350/5
Materials Characterization Lab: Slag Attack on Refractory Materials	EBB 204/2
Research Project	EBB 555/23

<b>Semester 2009-10-1</b>	<b>Subject Code</b>
Ceramic Processing	EBB 523
Engineering Drawing	EBS 110
Engineering Materials	EBB 113
Fluid Mechanics	EBS 238
Material Introduction lab: Particle Size Distribution	EBB 155

<b>Semester 2008-09-2</b>	<b>Subject Code</b>
Physical Chemistry of Engineering Materials	EBB 160/3
Core Entrepreneurship	WUS 101/2
Ethnic Relationship	SHE 101/2
Final Year Project	EBB 407/6
Fluid Power & Turbo Machine	EBB 409/3
Industrial Training	EBB 350/5
Materials Processing Laboratory	EBB 317/2
Materials Characterization Lab: Slag Attack on Refractory Materials	EBB 204/2
Research Project	EBB 555/23

<b>Semester 2008-09-1</b>	<b>Subject Code</b>
Ceramic Processing* ( <i>Postgraduate course</i> )	EBB 523
Engineering Drawing	EBS 110
Engineering Materials	EBB 113
Thinking Techniques	EUT 201 / HTV 201/2
Crystallography and Bonding in Solids	EBS 202
Fluid Mechanics	EBS 238
Microscopy Lab: Cold Work	EBB 325
Material Introduction lab: Particle Size Distribution	EBB 155

## **M. Referees**

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