CURRICULUM VITAE

A. BUTIR-BUTIR PERIBADI ***(Personal Details)***		
Nama Penuh *(Full Name)*	Ernee Noryana Binti Muhamad	Gelaran *(Title):* Dr.

Jawatan/Jabatan/Fakulti *(Designation/Department/Faculty)*
Senior Lecturer, Department of Chemistry, Faculty of Science, Universiti Putra Malaysia, 43400 Serdang, Selangor. Tel: +603-9769-1444 Email: ernee@upm.edu.my

B. KELAYAKAN AKADEMIK ***(Academic Qualification)***		
Nama Sijil / Kelayakan *(Certificate / Qualification obtained)*	Nama Sekolah Institusi *(Name of School / Institution)*	Bidang pengkhususuan *(Area of Specialization)*
Bachelor of Science (BSc. Hons)	Universiti Putra Malaysia	Industrial Chemistry
Master of Science (MSc.)	Universiti Putra Malaysia	Material Chemistry
Doctor of Philosophy (PhD)	Hokkaido University, Japan	Chemical Process Engineering

C. SENARAI PENERBITAN (Sila masukan nama pengarang, tajuk, nama jurnal, jilid, muka surat dan tahun diterbitkan) *(List of publications – author (s), title, journal, volume, page and year published)*	
Journal	***List of Top 10 publications:*** 1. Nda-Umar, U.I., Ramli, I., **Muhamad, E.N.**, Taufiq-Yap, Y.H., Azri, N. (2022) Synthesis and characterization of sulfonated carbon catalysts derived from biomass waste and its evaluation in glycerol acetylation. ***Biomass Conversion and Biorefinery***, 12(6), pp. 2045–2060. 2. Nur Alia Sheh Omar, Ramli Irmawati, Yap Wing Fen, **Ernee Noryana Muhamad**, Faten Bashar Kamal Eddin, Nur Ain Asyiqin Anas, Nur Syahira Md Ramdzan, Nurul Illya Muhamad Fauzi, Mohd Adzir Mahdi (2022). Surface refractive index sensor based on titanium dioxide composite thin film for detection of cadmium ions. ***Measurement*** 187 (2022) 110287.

	3. Mohamad Rasid Shera Farisya, Ramli Irmawati, Ishak Nor Shafizah, Yun Hin Taufiq-Yap, **Ernee Noryana Muhamad**, Siew Ling Lee and Nurrulhidayah Salamun (2021). Assessment on the Effect of Sulfuric Acid Concentration on Physicochemical Properties of Sulfated-Titania Catalyst and Glycerol Acetylation Performance. ***Catalysts*** 11, 1542 4. Elisa Rasoulli, Abdul Halim Abdullah, **Ernee Noryana Muhamad,** Pooneh Kia (2021). Synthesis of Ag/ZnO photocatalysts for the photodegradation of methyl orange dye. ***Journal of research in nanoscience and nanotechnology***, Vol 2 (1), 61-69. 5. Osman, N.S., Sulaiman, S.N., **Muhamad, E.N**., Tan, S.T., Abdullah, A.H. (2021) Synthesis of an ag_3po_4/nb_2o_5 photocatalyst for the degradation of dye. ***Catalysts***, 11(4), 458 6. Nda-Umar, U.I., Irmawati, R., **Muhamad, E.N.**, ...Yahaya, M., Taufiq-Yap, Y.H. (2021) Organosulfonic acid-functionalized biomass-derived carbon as a catalyst for glycerol acetylation and optimization studies via response surface methodology. ***Journal of the Taiwan Institute of Chemical Engineers***, 118, pp. 355–370 7. Nda-Umar, U.I., Ramli, I., **Muhamad, E.N**., Azri, N., Taufiq-Yap, Y.H. (2020). Influence of heterogeneous catalysts and reaction parameters on the acetylation of glycerol to acetin: A review", ***Applied Sciences*** 10 (20) 1-34, 7155. 8. **Ernee Noryana Muhamad**, Dian Wahyuni Md Bahrin; Khairunisa Mokhtar (2020). Transesterification of rendered chicken fats catalyzed by waste chicken eggshells for biodiesel production. ***Asian Jornal of Green Chemistry***, 4(4) , 367-378 9. Yahaya, M., Ramli, I., **Muhamad, E.N.**, Nda-Umar, U.I., Taufiq-Yap, Y.H. (2020). K_2O doped dolomite as heterogeneous catalyst for fatty acid methyl ester production from palm oil. ***Catalysts*** 10(7) 1-17, 791. 10. JamJam, N.M., Yap, Y.H.T., **Ernee, N.M.**, Saiman, M.I. & Saleh, T.A. (2019). Free solvent oxidation of molecular benzyl alcohol by newly synthesized AuPd/titania catalysts. ***Inorganic Chemistry Communications***, 107, 107471. 11. Nur Faradila Anuar, Azman Maamor, H.N.M. Ekramul Mahmud, **Ernee Noryana Muhamad**. (2019). Thermogravimetric analysis o slow pyrolisis in chicken skin waste. ***Energy Sources, Part A: Recovery, Utilization adn Environmental Effects***, 43 (9): 1-13 12. Nda-Umar, U.I., Ramli, I., Taufiq-Yap, Y.H. & **Ernee, N.M**. (2019) An Overview of Recent Research in the Conversion of Glycerol into Biofuels, Fuel Additives and other Bio-Based

	Chemicals. ***Catalysts***, 9(1), 15. 13. Siti Nur Surhayani Jefri, Abdul Halim Abdullah, **Ernee Noryana Muhamad**. (2019). Response surface methodology: photodegradation of methyl orange by CuO/ZnO under UV light irradiation. ***Asian Journal of Green Chemistry***, 3 (2019) 271-287. ISSN: 2588-4328. 14. Daud, N.A., Chieng, B.W., Ibrahim, N.A., Talib, Z.A., Ernee, N.M., & Abidin, Z.Z. (2017). Functionalizing Graphene Oxide with Alkylamine by Gamma-ray Irradiation Method. ***Nanomaterials***, 7, 135. 15. Aqliliriana, C.M., **Ernee, N.M.,** Irmawati, R. (2015) Preparation and Characterization of Modified Calcium Oxide fromNatural Sources and Their Application In The Transesterification of Palm Oil", ***Int. J. of Scientific & Tech. Research***, 4 (11), 168-175. ISSN: 2277- 8616. 16. Takeguchi Tatsuya, Yamanaka Toshiro, Asakura Kiyotaka, **Muhamad Ernee Noryana**, Uosaki Kohei, and Ueda Wataru (2012). Evidence of nonelectrochemical shift reaction on a CO-tolerant high entropy state Pt-Ru anode catalyst for reliable and efficient residential fuel cell systems. ***Journal of the American Chemical Society,*** 134 (35), 14508 (2012). ISSN: 0002-7863. (Q1) 17. Wong, M.S., Irmawati, R., Ahangar, H.A., Yap, Y.H.T., Tan, Y.P., **Muhamad, E.N.** (2012). Physicochemical studies of Ni, Co, and Pt promoted MoVNbOx catalysts synthesized by impregnation method. ***Oriental Journal of Chemistry*** 28 (1), 59 (2012). ISSN: 0970 - 020X. 18. Guoxiong Wang, Tatsuya Takeguchi, **Ernee Noryana Muhamad**, Toshiro Yamanaka, and Wataru Ueda. (2011). Effect of Addition of SnOx to the Pt2Ru3/C Catalyst on CO Tolerance for the Polymer Electrolyte Fuel Cell. ***J. Electrochem. Soc.*** 158 B448. ISSN: 0013-4651. (Q1) 19. Guoxiong Wang, Tatsuya Takeguchi, **Ernee Noryana Muhamad**, Toshiro Yamanaka, Wataru Ueda (2011). Investigation of grain boundary formation in PtRu/C catalyst obtained in a polyol process with post-treatment. ***International Journal of Hydrogen Energy***, 36 (5) 3322 (2011). ISSN: 0360-3199. (Q1) 20. Guoxiong Wang, Tatsuya Takeguchi, Toshiro Yamanaka, **Ernee Noryana Muhamad,** Motofumi Matsuda and Wataru Ueda. (2010). Effect of preparation atmosphere of Pt–SnOx/C catalysts on the catalytic activity for H2/CO electro-oxidation. ***Applied Catalysis B – Environmental,*** 98 (1-2) 86. ISSN: 0926-3373. (Q1) 21. Toshiro Yamanaka, TatsuyaTakeguchi, Guoxiong Wang, **Ernee**

	Noryana Muhamad and Wataru Ueda. (2010). Particle size dependence of CO tolerance of anode PtRu catalysts or polymer electrolyte fuel cells. ***J. Power Sources,*** 195 (19) 6398 (2010). ISSN: 0378-7753. (Q1) 22. **Ernee Noryana Muhamad**, Tatsuya Takeguchi, Feng Wang, Guoxiong Wang, Toshiro Yamanaka, Wataru Ueda. (2009). A Comparative Study of Variously prepared Carbon-Supported Pt/MoOx Anode Catalysts for a Polymer Electrolyte Fuel Cell. ***Journal of The Electrochemical Society***, 156 (11) B1361 (2009). ISSN: 0013-4651. (Q1) 23. Guoxiong Wang, Tatsuya Takeguchi, **Ernee Noryana Muhamad**, Toshiro Yamanaka, Masahiro Sadakane, Wataru Ueda. (2009). Preparation of Well-Alloyed PtRu/C Catalyst by Sequential Mixing of the Precursors in a Polyol Method. ***Journal of The Electrochemical Society***, 156 (11) B1348. ISSN: 0013-4651. (Q1) 24. Guoxiong Wang, Tatsuya Takeguchi, Yi Zhang, **Ernee Noryana Muhamad**, Masahiro Sadakane, Shen Ye, Wataru Ueda. (2009). Effect of SnO2 Deposition Sequence in SnO2-Modified PtRu/C Catalyst Preparation on Catalytic Activity for Methanol Electro-Oxidation. ***Journal of The Electrochemical Society***, 156 (7) B862. ISSN: 0013-4651. (Q1) 25. **Ernee Noryana Muhamad**, Tatsuya Takeguchi, Guoxiong Wang, Yuri Anzai, Wataru Ueda. (2009). Electrochemical Characteristics of Pd Anode Catalyst Modified with TiO2 Nanoparticles in Polymer Electrolyte Fuel Cell. ***Journal of The Electrochemical Society***, 156 (1) B32. ISSN: 0013-4651. (Q1) 26. **E. N. Muhamad**, R. Irmawati, Y.H. Taufiq-Yap, A.H. Abdullah, B.L. Kniep, F. Girgsdies and T. Ressler. (2008). Comparative Study of Cu/ZnO Catalysts Derived From Different Precursors As A Function of Aging. ***Catalysis Today***, 131, 118. ISSN: 09205861. (Q2) 27. **E. N. Muhamad**, R. Irmawati, A.H. Abdullah, Y.H. Taufiq-Yap and S.B. Abdul Hamid. (2007). Effect of Number of Washing on the Characteristics of Copper Oxide Nanopowders. ***Malays. J. Analy. Sc.,*** 11(1) 294-301. ISSN: 1394-2506.
Books/Monographs	

Chapter in book	1. **Ernee Noryana Muhamad**, Khairunisa Mokhtar, Dian Wahyuni Md Bahrin (2018). Transesterification of palm oil catalyzed by various types of waste eggshells in different alcohol medium. *Emerging Themes In Fundamental and Applied Science Volume 2* (pg: 30-38). Selangor; UPM Press. eISBN 978-967-344-826-5. 2. **Ernee Noryana Muhamad**, Lee Zhien Huey, Nurazizah Othman. Preparation and characterization of platinum and palladium modified with metal oxide catalysts for polymer electrolyte membrane fuel cell (PEMFC). *Emerging Themes In Fundamental and Applied Science Volume 2* (pg: 146-153). Selangor; UPM Press. eISBN 978-967-344-826-5.
Proceedings	1. **Ernee Noryana Muhamad**, Tatsuya Takeguchi, Guoxiong Wang, Toshiro Yamanaka, Wataru Ueda. (2010). Prospective of Pd/MO_x as Alternative Pt Anode Catalyst for Polymer Electrolyte Fuel Cell. *ECS Transaction*, 28(23) 253. ISSN: 1938-6737. 2. Toshiro Yamanaka, Tatsuya Takeguchi, Guo-Xiong Wang, **Ernee Noryana Muhamad** and Wataru Ueda. (2010). In Situ Observation of CO Oxidation by Anode PtRu/C Catalysts for Polymer Electrolyte Fuel Cells. *ECS Transaction*, 28(23) 283. ISSN: 1938- 6737. 3. Guoxiong Wang, Tatsuya Takeguchi, Toshiro Yamanaka, **Ernee Noryana Muhamad** and Wataru Ueda. (2010). Improving CO Tolerance of Pt_2Ru_3/C Catalyst by the Addition of Tin Oxide. *ECS Transaction*, 28(23) 307. ISSN: 1938-6737. 4. Tatsuya Takeguchi, Toshiro Yamanaka, Guoxiong Wang, **Ernee Noryana Muhamad**, Wataru Ueda. (2009). Structures and CO Tolerance of Anode PtRu Catalysts for Polymer Electrolyte Fuel Cells.*ECS Transaction*, 25(1) 1319. ISSN: 1938-6737. 5. Tatsuya Takeguchi, Guoxiong Wang, **Ernee Noryana Muhamad**, Wataru Ueda. (2008). The Effect of Modification of PtRu Anode Catalyst with SnO_2 on CO Tolerance. *ECS Transaction*, 16 (2) 713 (2008). ISSN: 1938-6737. 6. I. Ramli, **E.N. Muhamad**, A.H. Abdullah, Y.H. Taufiq-Yap and S.B. Abdul Hamid. (2004). Influence of number of washing on the characteristic of nanocrystalline copper oxide powders. *Nanotech 2004*, vol. 3, (2004) 99-102, ISBN: 0-9728422-9-2.