

CURRICULUM VITAE



Assoc. Prof. Datin Ir. Dr. Siti Aslina Hussain, PEng. CEng (UK), MIChemE

Department of Chemical and Environmental Engineering,
Faculty of Engineering,
Universiti Putra Malaysia,
43400 UPM,
Serdang Selangor

Orcid ID: orcid.org/0000-0001-8475-9791

ResearchGate: Siti Aslina Hussain

Linkedin website: linkedin.com/in/datin-dr-siti-aslina-hussain-30444882

Siti Aslina has over 20 years of experience in teaching, research and management and was attached to different academic institutions namely, UNITEK College, Taylor's College and finally with Universiti Putra Malaysia since 1997. Siti Aslina's area of expertise is diverse, from petroleum engineering to chemical process engineering and slightly touch in biomedical engineering and towards to process safety practice. Her depth knowledge and expertise in academic and research experiences, make her one of the most versatile lecturers in Universiti Putra Malaysia. Siti Aslina's currently hold a Professional Engineer from Board of Engineers Malaysia and ASEAN Chartered Professional Engineer, a Chartered Engineer from The Institution of Chemical Engineers, UK. Her strength and skill as engineer background make her more reliable to supervise students in any area. Siti Aslina's commitment with work, gives her high opportunity to hold few positions in institution. Siti Aslina's received an award Distinguished Woman in Engineering and more awards in research and innovation also in academic and teaching. She received more than 10 grants as head of project with more than RM1 millions in total as member of project. She actives in industry linkage nowadays and supported from her department. Her kind and caring nature encourage her to join and active in sports, challenge the mental strength and body healthy.

Education

1. Ph.D in Imperial College of Science, Technology & Medicine, London, England.
2. B. Eng (Hons) in University of Wales Swansea, England.
3. Diploma in Universiti Teknologi Malaysia (UTM), Kuala Lumpur, Malaysia.

Areas of Interest

1. Computational Methods in Engineering
2. Chemical Engineering
3. Process Safety & Loss Prevention
4. Multiphase Flow
5. Biomedical Engineering

Professional Qualification/ Membership/ Affiliation

1. ASEAN Chartered Professional Engineer (ACPE)
2. Chartered Member, The Institution of Chemical Engineers (IChemE)
3. Professional Member, Board of Engineers Malaysia (BEM)
4. Associate Member, American Chemical Society (ACS)
5. Associate Member, American Institute of Chemical Engineers (AIChE)
6. Graduate Member, Malaysia Board of Technologist (MBOT)
7. Graduate Member, Institution of Engineers Malaysia (IEM)
8. Member, Malaysia Invention and Design Society (MINDS)
9. Persatuan Pegawai Akademik UPM
10. Koperasi UPM
11. Kelab Sukan dan Sosial Fakulti Kejuruteraan, UPM

Appointments	
Recent Position	Duration
1. Panel Judges, SCICOSH, NIOSH	2024 – to date
2. Manager - Sponsorship, International Conference on Innovation in Chemical Engineering & Technology	2021 – to date
3. Head of Chemical Process Laboratory	2015 - to date
4. Panel Judges, International Invention, Innovation & Technology Exhibition (ITEX)	2006 - to date
5. External Examiner, Internal Examiner, Viva Chairman, Chairperson to MSc and PhD	2004 - to date
6. International and National Journal Reviewers	2004 - to date
7. Committee, Process Safety and Loss Prevention Postgraduate Symposium	2015 - to date
8. International and National Evaluator for Grant Progress Reports	2005 - to date
9. Facilitator and Personal Academic to Students	2005 – to date
10. Coordinator, Process Safety and Loss Prevention Programme	2010 – 2016
11. Ketua Perhubungan Perpustakaan, Engineering Faculty	2012 - 2016

Publications	
Journals (Recent Journals)	
1. Nor Izliana Mohd Nizan, Nina Fatma Ali, Siti Aslina Hussain , Managing Ergonomic Risk Assessment Among Assembly Operator in Small-Scale Fabrication Sector, <i>Process Safety Progress</i> , 2024, pp. 1-9. https://doi.org/10.1002/prs.12585	
2. Xiaoju Li, Luqman Chauh Abdullah, Siti Aslina Hussain , Shafreeza Sobri, Mohamad Syazarudin, Tan Poh Aun, Jinzhao Hu. Variation Characteristics and Coordinated Emission Reduction of Air Pollutants in Megacity of Chengdu-Chongqing Economic Circle under Dual Carbon Goal. <i>Environmental Engineering Research</i> , 2024; 29(4): 230475 https://doi.org/10.4491/eer.2023.475	
3. Siti Aslina Hussain , Haziq Isyraf Rosdi, Synergizing Mesh Strategy and Ventilation Design for Enhanced Greenhouse Drying. (submission)	
4. Ahmad Rizal Mohamed and Siti Aslina Hussain , Novel Accident Causation Model and Investigation Technique for Complex Sociotechnical Systems, <i>Journal of Loss Prevention in the Process Industries</i> . (submission)	
5. Hamzah R. M. Hajiyat, Siti Aslina Hussain , Mohd Yusof Harun, Inlet Size and Location Impact on Greenhouse Dryer Process Dynamics, <i>Chemical Engineering Transactions</i> 2023, 106: 1123-1128 .	
6. Xiaoju Li, Luqman Chauh Abdullah, Siti Aslina Hussain , Shafreeza Sobri, Mohamad Syazarudin, Tan Poh Aun, Jinzhao Hu. Spatial variation, multi-meteorological factors and potential source analysis of air pollutants in Chengdu megacity of Chengdu-Chongqing economic circle. <i>Environmental Science and Pollution Research</i> . (submission)	
7. Mohd Shazman Zulkipli and Siti Aslina Hussain , Improving of PSM and HSEMS Compliance in Malaysian Upstream Oil and Gas Industry: A Case Study Assessment for Plug and Abandonment Activities, <i>Process Safety Progress</i> 2023 https://doi.org/10.1002/prs.12527	
8. Xiaoju Li, Luqman Chauh Abdullah, Siti Aslina Hussain , Shafreeza Sobri, Mohamad Syazarudin, Tan Poh Aun, Jinzhao Hu. Long-Term Spatiotemporal Evolution and Coordinated Control of Air Pollutants in a typical megamountain city of Cheng-Yu Region under the “Dual Carbon” Goal, <i>Journal of the Air & Waste Management Association</i> , 2023 https://doi.org/10.1080/10962247.2023.2232744 (Taylor & Francis).	
9. Xiaoju Li, Luqman Chauh Abdullah, Siti Aslina Hussain , Shafreeza Sobri, Mohamad Syazarudin, Tan Poh Aun, Jinzhao Hu. Long-Term Air Pollution Characteristics and Multiscale Meteorological Factor Variability Analysis of Mega-Mountain Cities in the Chengdu-Chongqing Economic Circle, <i>Water, Air & Soil Pollution</i> , 2023, 234(5), 328 (Springer).	
10. Xiaoju Li, Luqman Chauh Abdullah, Siti Aslina Hussain , Shafreeza Sobri, Mohamad Syazarudin, Tan Poh Aun, Jinzhao Hu. Characteristics of Air Pollution Variation and Potential Source Contributions of Typical Megacities in the Sichuan Basin, Southwest China, <i>Air Quality, Atmosphere & Health</i> , SSRN (open access online), 30 November, 2023.	

11. **Siti Aslina Hussain**, Nur Khairunnisa Abd Halim, Mus'ab Abd. Razak and Mohd Amirul Syafiq Mohd Yunos, Population Balance Modeling for Characteristics of Bubble Breakup and Coalescence Dispersions, *The Canadian Journal of Chemical Engineering* (correction in progress).
12. Akmalarifin, Rukijan and **Siti Aslina Hussain**, Risk Assessment on the Centrifugal Pump Operation Regime at Power Plant in Malaysia Oil and Gas Industry, *JOSH* (submission in progress).
13. Ariff Asraf Rajeli, **Siti Aslina Hussain**, Pipeline Management Control as Strategy of Plant Process Safety in Oil And Gas Industry, *ePERINTIS* (submission in progress).
14. Mohamad Azmi Juhaili, **Siti Aslina Hussain**, Employee Awareness towards Risk Assessment of Chemical Hazards in the Manufacturing Process Plant in Sarawak, Malaysia, *JOSH* (submission in progress).
15. Shiva Rezaei Motlagh, Ramin Khezri, Razif Harun, Dayang Radiah Awang Biak, **Siti Aslina Hussain**, Ching Yern Chee, Soorathep Kheawhom, Kinetic and Thermodynamic Studies of Eicosapentaenoic Acid Extraction from *Nannochloropsis Oceanica* Using Tetramethyl Ammonium Chloride and Microwave Irradiation, *PLoS ONE*, 17(5): e026762, 2022 <https://doi.org/10.1371/journal.pone.0267626> (Q2).
16. Abdelkader Hassani, **Siti Aslina Hussain**, Mothanna Sadiq Al-Qubaisi, Mohamed Lakhder Belfar, Hakim Belkhalifa, Hamid Hammad Enezei, Hamid Zentou, Wisam Nabeel Ibrahim, Abd Almonem Doolaanea, Curcumin Gum Arabic Nanoparticles Demonstrate Potent Antioxidant and Cytotoxic Properties in Human Cancer Cells, *BIOCELL Tech Science Press*, 2022, 46(3): 677-687 (Q4).
17. Murtada Mohammed Abdulredha, **Siti Aslina Hussain**, Luqman Chuah Abdullah, Tee Lee Hong, Water-in-Oil Emulsion Stability and Demulsification via Surface-Active Compounds: A Review, *Journal of Petroleum Science and Engineering*, 2022, 109848 (Q1).
18. **Siti Aslina Hussain**, Nur Khairunnisa Abd Halim, Mus'ab Abd. Razak and Mohd Amirul Syafiq Mohd Yunos, CFD Analysis of Phase Holdup Behaviour in a Gas-Liquid Bubble Column, *Journal of Applied Science & Process Engineering*, 2021, Vol. 8, No. 1, pp. 738-749(non- SCOPUS).
19. Xiaoju Li, **Siti Aslina Hussain**, Luqman Chuah Abdullah, Shafreeza Sobri, Mohamad Syazarudin Md Said, Tan Poh Aun, Overview of Air Pollution in Typical Basin of China Under the Target of Carbon Neutrality, *International Journal of Environmental Research*, 15 ; pp 1109 – 1138 (2021) (Q3).
20. Shiva Rezaei Motlagh, Amal A. Elgharbawy, Ramin Khezri, Razif Harun, Dayang Radiah Awang Biak, **Siti Aslina Hussain**, Ionic Liquid Method for the Extraction of Lipid from Microalgae Biomass: a review. *Biomass Conv. Bioref.* (2021). <https://doi.org/10.1007/s13399-021-01972-2> (Q1).
21. Shiva Rezaei Motlagh, Razif Harun, Dayang Radiah Awang Biak, **Siti Aslina Hussain**, Rozita Omar, Amal A. M. Elgharbawy, Ramin Khezri, Ionic Liquid Based Microwave-Assisted Extraction of Lipid and Eicosapentaenoic Acid from *Nannochloropsis Oceanica* Biomass: Experimental Optimization Approach, *Journal of Applied Phycology* (2021) (Q1).
22. Azizkhani, S., **Hussain, S.A.**, Abdullah, N., Mohd Halim Shah Ismail, Abdul Wahab Mohammad, Synthesis and Application of Functionalized Graphene Oxide-silica with Chitosan for Removal of Cd (II) from Aqueous Solution. *J Environ Health Sci and Engineer* (2021) 19, 491-502. <https://doi.org/10.1007/s40201-021-00622-z> (Q3).
23. Xiaoju Li, **Siti Aslina Hussain**, Shafreeza Sobri, Mohamad Syazarudin Md Said, Overviewing the air quality models on air pollution in Sichuan Basin, China, *Chemosphere*, *Chemosphere* 271 (2021) 1295022 (Q1).
24. **Siti Aslina Hussain**, Michelle Anne Dison, Current Safety Culture Among Laboratory Users of the Faculty of Engineering in Universiti Putra Malaysia, *Journal of Energy and Safety Technology*. Vol. 3 (2): 11-29, 2021.
25. Abdelkader Hassani, Abul K. Azad, Hamid H. Enezei, **Siti Aslina Hussain**, ABM Helal Uddin, Synthesis and Characterization of Orotic Acid Loaded Chitosan Inclusion Complex, *International Journal of Drug Delivery Technology* (IJDDT), Vol 10 (1), 2020 (Q3).
26. Nora'in Mohd Ramli, **Siti Aslina Hussain**, Risk Assessment on Horizontal Wet Etching Equipment System in Manufacturing Plant Industry, *Journal of Energy and Safety Technology*. Vol. 3 (1): 01 – 11, 2020.
27. Sulaiha Ali, **Siti Aslina Hussain**, Mohd. Zahirasri Mohd Tohir, Ahmad Ainuddin Nuruddin, Thermogravimetric Analysis and Pyrolysis Kinetics of Malaysian Wood Species 2020 IOP Conf. Series - Material Science Engineering, 811(1), 012003, 2020 (non-SCOPUS).
28. Halim, N. K. A., **Aslina Hussain, S.**, Abd Razak, M. A., Yunos, M. A. S. M. Eulerian-Eulerian Approach to CFD Simulation of Two-Phase Bubble Column. 2020 IOP Conf. Series - Material Science Engineering, 811(1), 012006, 2020 (non-SCOPUS).
29. Abdelkader Hassani, **Siti Aslina Hussain**, Mohammad Mahdi Sabaghpour Azarian, Wisam Nabeel Ibrahim, Preparation, Characterization and Therapeutic Properties of Gum Arabic-Stabilized Gallic Acid Nanoparticles, *Scientific Reports*, Vol. 10, Article number: 17808 (2020) (Q1).

30. Sepehr Azizkhani, Ebrahim Mahmoudi, Norhafizah Abdullah, Mohd Halim Shah Ismail, Abdul Wahab Mohammad, **Siti Aslina Hussain**, Synthesis and Characterization of Graphene Oxide-Silica-Chitosan for Eliminating the Pb(II) from Aqueous Solution, *Polymers*, 2020, 12 (9), 1922 (Q1).
31. Sulaiha Ali, **Siti Aslina Hussain**, Mohd. Zahirasri Mohd Tohir, Ahmad Ainuddin Nuruddin, Statistical Analysis of Malaysian Timber's Combustion data from Cone Calorimeter Test, *Pertanika J. Sci. & Technol.*, 2020, 28 (S1): 185 - 198 (SCOPUS).
32. Abdelkader Hassani, Syed Mahmood, Hamid Hammad Enezei, **Siti Aslina Hussain**, Hamad Ali Hamad, Aldoghachi AF, Abdullah Hagar, Abd Almonem Doolaaneaa, Wisam Nabeel Ibrahim, Formulation, Characterization and Biological Activity Screening of Sodium Alginate-Gum Arabic Nanoparticles Loaded with Curcumin, *Molecules*, 2020, Vol. 25 (9): 2244 (Q1).
33. Hassani Abdelkader, **Siti Aslina Hussain**, Norhafizah Abdullah, Suryani Kamarudin, Rozita Rosli, Synthesis, Antioxidant Potential and Angiotensin Converting Enzyme (ACE) Inhibitory Activity of Gum Arabic-Stabilized Magnesium Orotate Nanoparticles, *International Food Research Journal*, 2020, Vol 27 (1): 149-158 (Q4).
34. Shiva Rezaei Motlagh, Razif Harun, Dayang Radiah Awang Biak, **Siti Aslina Hussain**, Amal A. M. Elgharbawy, Ramin Khezri, Wan Azlina Wan Ab Karim Ghani, Cecilia Devi Wilfred, Kiman Silas, Prediction of Potential Ionic Liquids (ILs) for the Solid-Liquid Extraction of Docosahexaenoic Acid (DHA) from Microalgae using COSMO-RS Screening Model, *BioMolecules*, 2020, Vol 10: 1149 (Q1).
35. Shiva Rezaei Motlagh, Razif Harun, Dayang Radiah Awang Biak, **Siti Aslina Hussain**, Amal A. M. Elgharbawy, COSMO-RS Based Prediction for Alpha-Linolenic Acid (ALA) Extraction from Microalgae Biomass using Room Temperature Ionic Liquids (RTILs), *Mar. Drugs*, 2020, Vol. 18,108: 1-22 (Q1).
36. Yasir Talib Hameed, Azni Idris, **Siti Aslina Hussain**, Norhafizah Abdullah, Hasfalina Che Man, Effect of Pre-Treatment with a Tannin-Based Coagulant and Flocculant on a Biofilm Bacterial Community and The Nitrification Process in a Municipal Wastewater Biofilm Treatment Unit, *Journal of Environmental Chemical Engineering*, April 2020, Vol. 8, Issue 2, 103679 (SCOPUS).
37. Murtada Mohammed Abdulredha, **Siti Aslina Hussain**, Luqman Chuah Abdullah, Optimization of the Demulsification of Water in Oil Emulsion via non-Ionic Surfactant by the Response Surface Methods, *Journal of Petroleum Science and Engineering*, 2020, 184: 106463 (Q1).
38. Mohamad Syazarudin Md Said, Wan Azlina Wan Abdul Karim Ghani, Hong Boon Tan, **Siti Aslina Hussain**, Denny Kok Sum Ng, Thermochemical Conversion of Napier Grass for Production of Renewable Syngas, *Processes*, 2019,7, 705, 1-14 (Q2).
39. Murtada Mohammed Abdulredha, **Siti Aslina Hussain**, Luqman Chuah Abdullah, Application of the Response Surface Methodology for Modeling the Demulsification of Water in Oil Emulsion, *Processes* 2019, 7(6), 382; <https://doi.org/10.3390/pr7060382> (Q2).
40. Hassani Abdelkader, **Siti Aslina Hussain**, Norhafizah Abdullah, Suryani Kamarudin, Rozita Rosli, Characterization of Magnesium Orotate-loaded Chitosan Polymer Nanoparticles for Drug Delivery System, *Chem. Eng. Technol.* 2019, 42, No. 9, 1–10 (Q2).
41. Sulaiha Ali, **Siti Aslina Hussain**, Mohd Zahir Mohd Tohir, Fire Test and Effects of Fire Retardant on the Natural Ability of Timber: A Review, *Pertanika J. Sci. & Technol.*, 2019, 27 (2): 853 - 881 (SCOPUS).
42. Shiva Rezaei Motlagh, Razif Harun, Dayang Radiah Awang Biak, **Siti Aslina Hussain**, Wan Azlina Wan Ab Karim Ghani, Ramin Khezri, Cecilia Devi Wilfred and Amal A. M. Elgharbawy, Screening of Suitable Ionic Liquids as Green Solvents for Extraction of Eicosapentaenoic Acid (EPA) from Microalgae Biomass Using COSMO-RS Model. *Molecules* 2019, 24(4), 713 (Q2).
43. Mujeli Mohammed, **Siti Aslina Hussain**, Mohammed Saedi Jami, Mohd Halim Shah Ismail and Dayang Radiah Awang Biak, Screening of Electrocoagulation Process Parameters for Treated Palm Oil Mill Effluent using Minimum-Runs Resolution IV Design, *International Journal of Environmental Science and Technology*, (2019); pp. 1-12. (Q1)
44. Hassani Abdelkader, **Siti Aslina Hussain**, Norhafizah Abdullah, Suryani Kamarudin, Rozita Rosli, Antioxidant Potential and Angiotensin Converting Enzyme (ACE) Inhibitory Activity of Orotic Acid-Loaded Gum Arabic Nanoparticles, *AAPS PharmSciTech* (2019), 20: 53 (Q2).
45. Murtada Mohammed Abdulredha, **Siti Aslina Hussain**, Luqman Chuah Abdullah, Overview on petroleum emulsions, formation, influence and demulsification treatment techniques, *Arabian Journal of Chemistry*, (2019) <https://doi.org/10.1016/j.arabjc.2018.11.014> (in-press) (Q2).
46. Mohammed Ngabura, **Siti Aslina Hussain**, Wan Azlina WA Ghani, Mohammed Saedi Jami and Yen Ping Tan, Optimization and Activation of Renewable Durian Husk for Biosorption of Lead (II) From an Aqueous Medium, *J Chem Technol Biotechnol*, 2019;94: 1384–1396 (Q2).

47. Mohd Amirul Syafiq Mohd Yunos, **Siti Aslina Hussain**, Susan Maria Sipaun, Industrial Radiotracer Application in Flow Rate Measurement and Flowmeter Calibration using ^{99m}Tc and ^{198}Au Nanoparticles Radioisotope, *Applied Radiation and Isotopes* 143 (2019) 24–28 (Q2).
48. Toh Jia Lin, **Siti Aslina Hussain**, **Gaseous Oxygen (GOX) System Upgrade for Mitigation to Process Safety Risk of Brownfield Unit**, *Journal of Occupational Safety and Health*, Vol. 15 No. 2 (2018).
49. Mohd Aliff Farhan, **Siti Aslina Hussain**, Quantitative Risk Assessment on Onshore Gas Terminal Plant, *Journal of Occupational Safety and Health*, Vol. 15 No. 2 (2018).
50. Sepehr Azizkhani, Ebrahim Mahmoudi, Arefeh Emami, **Siti Aslina Hussain**, A. Wahab Mohammad, Adsorption of Copper from Aqueous Solution by Chitosan using Molecular Imprinting, *Science and Technology Indonesia* e-ISSN:2580-4391 p-ISSN:2580-4405, Vol. 3, No. 4, October 2018.
51. Sepehr Azizkhani, Ebrahim Mahmoudi, Norhafizah Abdullah, Mohd Halim Shah Ismail, Abdul Wahab Mohammad and **Siti Aslina Hussain**, Removal of Cadmium (II) by Graphene Oxide-Chitosan Absorbent from Aqueous Solution, *International Journal of Engineering & Technology*, (2018) Vol 7 (3.26), pp. 5-8.
52. Mohammed Ngabura, **Siti Aslina Hussain**, Wan Azlina WA Ghani, Mohammed Saedi Jami and Yen Ping Tan, Utilization of Renewable Durian Peels in Biosorption of Zinc from Wastewater, *Journal of Environmental Chemical Engineering*, (2018) Vol 6, pp. 2528-2539. (SCOPUS)
53. Hassani Abdelkader, **Siti Aslina Hussain**, Norhafizah Abdullah, Suryani Kamarudin, Review on Micro-encapsulation with Chitosan for Pharmaceuticals Applications, *MOJ Curr. Res. & Rev.* Vol. 1, Issue 2, (2018); pp. 77-84.
54. Yasir Talib Hameed, Azni Idris, **Siti Aslina Hussain**, Norhafizah Abdullah, Hasfalina Che Man, Fatihah Suja, A Tannin-Based Agent for Coagulation and Flocculation of Municipal Wastewater as a Pretreatment for Biofilm Process, *Journal of Cleaner Production*, (2018) Vol. 182, pp. 198 - 205. (Q1)
55. Mohd Amirul Syafiq Mohd Yunos, Mark Dennis Anak Usang, Hanafi Ithnin, **Siti Aslina Hussain**, Hamdan Mohamed Yusoff, Susan Sipaun, Reconstruction Algorithm of Calibration Map for RPT Technique in Quadrilateral Bubble Column Reactor using MCNPX Code, *European Journal of Engineering Research and Science*, Vol. 3, Issue 1, (2018); pp. 20-27.
56. Hassani Abdelkader, **Siti Aslina Hussain**, Norhafizah Abdullah, Suryani Kamarudin, Rozita Rosli, M.K.Alomar, A. Rasedee, M. Al-Qubaisi, Cytotoxicity and Apoptotic Activity of Magnesium Orotate Nanoparticles Towards Human Hepatoma Cell Line Hepg2, *Journal of Experimental and Theoretical Nanotechnology Specialized Researches (JETNSR)* Vol. 1 (1), 2017.
57. Nur Sofuwani, **Siti Aslina Hussain**, Siti Mazlina Mustafa Kamal, Benefit of Lactose Concentration between Goat's Milk and Commercialized Powder Milk. *Journal of Food Processing & Technology* (8) Issues 7, (2017); pp. 682. (SCOPUS)
58. Mohd Amirul Syafiq Mohd Yunos, **Siti Aslina Hussain**, Hamdan Mohamed Yusoff, Susan Sipaun, Design and Fabrication of Quadrilateral Bubble Column Test Rig for Multiphase Flow Investigations, *Scholars Journal of Engineering and Technology (SJET)*, 2017; 5(2):34-43.
59. Mohd Amirul Syafiq Mohd Yunos, Nur Khairunnisa Abd Halim, **Siti Aslina Hussain**, Hamdan Mohamed Yusoff, Susan Sipaun, Investigations of Bubble Size, Gas Hold-Up, and Bubble Rise Velocity in Quadrilateral Bubble Column Using High-Speed Camera, *American Journal of Engineering, Technology and Society*, 2017; 4(1): 5-15.
60. **Siti Aslina Hussain**, Siti Nadimah Muhammad, Azni Idris, Numerical Studies of Cosmic Media II in Wastewater Treatment Plant using Computational Fluid Dynamics, *Jurnal Teknologi* (accepted).
61. Tan Boon Hong, Abdul Raheem, Wan Azlina Wan Abdul Abdul Karim, **Siti Aslina Hussain**, Denny Ng Kok Sum, Thermogravimetric Study of Napier Grass in Inert and Oxidative Atmospheres Conditions, *Journal of Physical Sciences*, Vol 28, Supp. 1, pp.155-169, 2017.
62. Nur Sofuwani, Z.A., **Siti Aslina, H.** and Siti Mazlina, M.K. Separation of Lactose From Raw Goat's Milk by Cross-Flow Hollow Fiber Ultrafiltration Membrane, *International Food Research Journal*, Vol 23 (Suppl): S209-S219, December 2016.
63. Yasir Talib Hameed, Azni Idris, **Siti Aslina Hussain**, Norhafizah Abdullah, A Tannin-Based Agent for Coagulation and Flocculation of Municipal Wastewater: Chemical Composition, Performance Assessment Compared to Polyaluminum Chloride, and Application in a Pilot Plant, *Journal of Environmental Management*, Vol. 184, pp. 494-503, 2016.
64. **Siti Aslina Hussain**, Azni Idris, Spiral Motion of Air Bubbles in Multiphase Mixing for Wastewater Treatment, *Procedia Engineering*, Vol 148, pp. 1034-1042, 2016.
65. Nurul Lina Mohamad, Siti Mazlina Mustapa Kamal, Mohd Noriznan Mokhtar, **Siti Aslina Hussain**, Norhafizah Abdullah, Dynamic Mathematical Modelling of Reaction Kinetics for Xylitol Fermentation using *Candida Tropicalis*, *Biochemical Engineering Journal*, Vol 111, pp. 10-17, 2016.

66. Seyedehsara Masoomi Dezfooli, Tan Wen Siang, Beng Ti Tey, **Siti Aslina Hussain**, Chien Wei Ooi, Expression and Purification of The Matrix Protein of Nipah Virus in Baculovirus-Insect Cell System, *Biotechnology Progress, American Institute of Chemical Engineer*, pp. 1-7, 2015 (doi: 10.1002/btpr.2192)
67. Raheleh Samavati, Norhafizah Abdullah, Kourosh Tahmasbi Nowtarki, **Siti Aslina Hussain**, Dayang Radiah Awang Biak, Mojtaba Kalhor Mohammadi, The Application and Rheological Behavior of Igebu Garri (Cassava Derivative) as a Fluid Loss Inhibitor in WBM Formation, *International Journal of Scientific Research in Chemical Engineering*, Vol. 1, No. 44, pp. 56-65, 2014.
68. Samavati R, Abdullah N, Tahmasbi Nowtarki K, **Hussain S. A**, Awang Biak D. R., Rheological and Fluid Loss Properties of Water Based Drilling Mud Containing HCl-Modified Fufu as a Fluid Loss Control Agent, *International Journal of Chemical Engineering and Applications*, Vol. 5 No. 6 pp. 446-450, 2014.
69. Samavati R., Abdullah N., Tahmasbi Nowtarki K., **Hussain S. A.**, Awang Biak D. R., The Prospect of Utilizing a Cassava Derivative (Fufu) as a Fluid Loss Agent in Water Based Drilling Muds, *International Journal of Chemical Engineering and Applications*, Vol. 5 No. 2 pp. 161-168, 2014.
70. Mohd Amirul Syafiq Mohd Yunos, **Siti Aslina Hussain**, Hamdan Mohamed Yusoff, Jaafar Abdullah, Preparation and Quantification of Radioactive Particle for Tracking Hydrodynamics Behavior in Multiphase Reactors, *Applied Mechanics and Materials*, Vol. 625, pp. 509-516, 2014.
71. Nur Sofuwani Zainul Abidin, **Siti Aslina Hussain**, Siti Mazlina Mustapa Kamal, Removal of Lactose from Highly Goats' Milk Concentration through Ultrafiltration Membrane, *Applied Mechanics and Materials*, Vol. 625, pp. 596-599, 2014.
72. **Siti Aslina Hussain**, Tan Hong Tat, Azni Idris, Numerical Study of Fluid Flow across Multiple Cosmo Ball, *International Journal Nano and Biomaterials*, Vol. 5 (1), pp. 89-102, 2014.
73. Mohd Amirul Syafiq Mohd Yunos, **Siti Aslina Hussain**, Hamdan Mohamed Yusoff, Jaafar Abdullah, Preparation and Quantification of Radioactive Particle for Tracking Hydrodynamics Behavior in Multiphase Reactors, *Applied Radiation and Isotopes*, Vol. 91, pp. 57-91, 2014.
74. **Siti Aslina Hussain**, Shaista Bano, Hooi Sim Yeoh, Omar Rozita, Simulation on Temperature Distribution of Oil Palm Empty Fruit Bunches during the Microwave Pyrolysis Process, *Asia-Pac. J. Chem. Eng.* Vol. 9 (1), pp. 39, 2014.
75. Mohd Halim Shah Ismail, **Siti Aslina Hussain**, M. Amin Shavandi, Zahra Haddadian, Simulation of Hot Gas Desulfurization using Liquid Tin in Scrubber, *Research Journal in Engineering and Applied Science* 1(4), pp. 258-265, 2012.
76. Mohd Amirul Syafiq Mohd Yunos, **Siti Aslina Hussain**, Jaafar Abdullah, Engku Mohd Fahmi Engku Chik, Noraishah Othman, Shahidan Radiman, Development of Gold Nanoparticle Radiotracers for Investigating Multiphase System in Process Industries, *Advanced Material Research*, Vol. 545, pp. 105-110, 2012.
77. **Siti Aslina Hussain**, Tan Hong Tat, Mohd Ismail Abdul Hamid, Norhafizah Abdullah, Azni Idris, Pressure Reduction on Blood Flow in Aorta Coronary Sinus Conduit, *PERTANIKAJournal of Science and Technology*, Vol. 20 (2), pp. 347-353, 2012.
78. **Siti Aslina Hussain**, Mohd Imran Rosly, Norhafizah Abdullah, Numerical Method on Drug Release from Nanoparticles using CFD, *Journal of Nano Research*, Vol 13, pp. 61-68, 2011.
79. **Siti Aslina Hussain**, Tan Hong Tat, Azni Idris, Numerical Studies of Fluid Flow Across a Cosmo Ball by Using CFD, *Journal of Applied Sciences*, Vol. 10, No 24, pp 3384-3387, 2010.
80. Rashmi W., Choong, T. S. Y., T. G. Chuah, **Hussain, S. A**, Khalid, M, Effect of Interphase Forces on Two-Phase Liquid: Liquid Flow in Horizontal Pipe, *Journal-The Institution of Engineer, Malaysia*, Vol. 71, No 2, pp 35-40, 2010.
81. Rashmi G. Walvekar, Thomas S. Y. Choong, **H. Siti Aslina**, M. Khalid, T. G. Chuah, Numerical Study of Dispersed Oil-Water Turbulent Flow in Horizontal Tube, *Journal of Petroleum Science and Engineering*, DOI:10.1016/j.petrol.2008.12.019, 2009.
82. **Siti Aslina H.**, Wan Hassan M. J., Siti Mazlina M. K., Influence of Oil and Water Holdup on Mixture Velocity in Horizontal Flows, *Journal of Chemical Engineering of Japan*, Vol. 41, No 9, pp 837-844, 2008.
83. M. K. Siti Mazlina, A. G. L. Abdullah, A. R. Nur'Aliaa, **Siti Aslina H.**, Rozita O., Comparison on Optimum Conditions of Enzymatic Treatment between Two Malaysian Star Fruit Varieties (B11 and B10) for Juice Clarification using Response Surface Methodology *PERTANIKAJournal of Science and Technology*, Vol. 16, No 1, pp 1-13, 2008.
84. **Siti Aslina H.**, Wan Hassan M. J., Yun Xu X, Hewitt, G. F., Water-Oil Flow Transition from Stratified to Inter-Dispersed in Horizontal Pipeline System, *PERTANIKAJournal of Science and Technology*, Vol. 16, No 1, pp 31-39, 2008.
85. **Siti Aslina H.**, Xiao Y. Xu, Geoffrey F. Hewitt, Water Local Volume Fraction on Oil in Water Dispersion, *Journal of Applied Fluid Mechanics*, Vol.1 No 2, pp 57-63, 2008.

86. Siti Mazlina M. K., **Siti Aslina H.**, Fakhrol-Razi A., Improvement on Sago Flour Processing, International Journal of Engineering and Technology, Vol. 4, No 1, pp 7-14, 2007.
87. **Siti Aslina H.**, Siti Mazlina M. K., Wan Hassan M. J., Yun Xu X., Hewitt G. F., Simulation on Oil-Water Horizontal Flows: MUSIG Model, International Journal of Engineering and Technology, Vol. 4, No 1, pp 1-7, 2007.
88. El-Herbawi M., Luqman Chuah A., Thomas Choong S. Y., Sa'ari M., **Siti Aslina H.**, Azni I., Linear Stability of Thin Liquid Film on Solid Surface under Effect of Apolar and Electrostatics Forces, Jurnal Teknologi, 46(F), pp 37-46, 2007.
89. M. K. Siti Mazlina, C. Webb, **H. Siti Aslina**, A. Abdul Ghani Liew, Effect of Roll Differential on Recycle Grinding System in Flour Milling Process: At Second Break, International Journal of Engineering and Technology, Vol. 3, No 2, pp 238-247, 2006.
90. **Siti Aslina Hussain**, Siti Mazlina Mustapa Kamal, Wan Hassan Mohd Jamil, In-Situ Phase Fractions for Oil and Water occupied in Pipe Channel, International Journal of Engineering and Technology, Vol. 3, No 2, pp 248-256, 2006.

Conference Proceedings (Recent Conference Proceedings)

1. **Siti Aslina Hussain**, Haziq Isyraf Rosdi, Synergizing Mesh Strategy and Ventilation Design for Enhanced Greenhouse Drying, 2nd International Conference on Innovation in Chemical Engineering and Technology (ICICET2023), 4-5 September 2023, Universiti Putra Malaysia, Malaysia.
2. A. Rizal Mohamed, **Siti Aslina Hussain**, Novel Method for Analysis of Loss Events in Complex Sociotechnical Systems, International Conference and Exhibition Loss Prevention Asia (LPA2023), 21-22 August 2023, Kuala Lumpur, Malaysia.
3. Nor Izliana Mohd Nizan, **Siti Aslina Hussain**, Nina Fatma Ali, Managing Ergonomic Risk Assessment Among Assembly Operator in Small-Scale Fabrication Sector, International Conference and Exhibition Loss Prevention Asia (LPA2023), 21-22 August 2023, Kuala Lumpur, Malaysia.
4. Hamzah R. M. Hajiyat, **Siti Aslina Hussain**, Mohd Yusof Harun, Inlet Size and Location Impact on Greenhouse Dryer Process Dynamics, 1st International Conference on Sustainable Chemical Energy & Environmental Engineering (SCE3 2023), 8-9 March 2023, Kuala Lumpur, Malaysia.
5. Akmalarifin, Rukijan and **Siti Aslina Hussain**, Risk Assessment on the Centrifugal Pump Operation Regime at Power Plant X, MSKK Postgraduate Symposium, February 21, 2022, Universiti Putra Malaysia, Selangor.
6. Ariff Asraf Rajeli, **Siti Aslina Hussain**, Pipeline Management Control as Strategy of Plant Process Safety in Oil And Gas Industry, MSKK Postgraduate Symposium, February 21, 2022, Universiti Putra Malaysia, Selangor.
7. Mohamad Azmi Juhaili, **Siti Aslina Hussain**, Employee Awareness towards Risk Assessment of Chemical Hazards in the Manufacturing Process Plant Y, MSKK Postgraduate Symposium, February 21, 2022, Universiti Putra Malaysia, Selangor.
8. Abdelkader Hassani, **Siti Aslina Hussain**, Mohamed Lakhder Belfar, Zenkhri Louiza, Hakim Belkhalifa, Abdullah Hajar, Samiullah Saeed, Preparation, Cytotoxicity and Apoptotic properties of Gallic Acid Nanoparticles Against Human HepG2 Cell lines, International Symposium on Advanced Materials and Nanotechnology (ISAMN2021) Nanoscale Green Synthesis and Applications, December 9-10, 2021, Universiti Putra Malaysia, Selangor.
9. **Siti Aslina Hussain**, Nur Khairunnisa Abd Halim, Mus'ab Abd. Razak and Mohd Amirul Syafiq Mohd Yunos, Population Balance Modelling of Biphase Bubble Column for Bubble Size Distribution and Flow Fields, 14th AUN/Seed-Net Regional Conference on Chemical Engineering 2021 (RCChE2021) in conjunction with the 1st International Conference on Innovation in Chemical Engineering and Technology 2021 (ICICET2021), 30 Nov- 1 Dec 2021, Universiti Putra Malaysia, Selangor.
10. **Siti Aslina Hussain**, Anbarasan a/l Mades and Mohamad Rezi Abdul Hamid, Modification of Polymer-based Sealant in Hydrophilic Dispersion for Oil and Gas Industry, 14th AUN/Seed-Net Regional Conference on Chemical Engineering 2021 (RCChE2021) in conjunction with the 1st International Conference on Innovation in Chemical Engineering and Technology 2021 (ICICET2021), 30 Nov – 1 Dec 2021, Universiti Putra Malaysia, Selangor.
11. Hassani Abdelkader, **Siti Aslina Hussain**, Nur Khairunnisa Abd Halim, M. L. Belfar, L. Zenkhri, Y. Moussaoui, Thymoquinone Alginate Beads Based on Three-Dimensional System of HepG2 Cells for Cancer Treatment, 14th AUN/Seed-Net Regional Conference on Chemical Engineering 2021 (RCChE2021) in conjunction with the 1st International Conference on Innovation in Chemical Engineering and Technology 2021 (ICICET2021), 30 Nov – 1 Dec 2021, Universiti Putra Malaysia, Selangor.
12. Ahmad Rizal Mohamed and **Siti Aslina Hussain**, Novel Accident Causation Model and Investigation Technique for Complex Sociotechnical Systems, Loss Prevention Asia, 22 – 23 November 2021, Kuala Lumpur.

13. Mohd Shazman Zulkiply and **Siti Aslina Hussain**, Assessment of PSM and HSEMS Compliance for P&A Activities in Malaysian Oil and Gas Industry, Loss Prevention Asia, 22 – 23 November 2021, Kuala Lumpur.
14. **Siti Aslina Hussain**, Nur Khairunnisa Abd Halim, Mus'ab Abd. Razak and Mohd Amirul Syafiq Mohd Yunos, Population Balance Modelling for Characteristics of Bubble Breakup and Coalescence Dispersions, 9th Jordan International Chemical Engineering Conference (JICHEC9), 12-14 Oct. 2021, Amman, Jordan.
15. Abdelkader Hassani, **Siti Aslina Hussain**, Hamid Hammad Enezei, Samiullah Saeed, Wisam Nabeel Ibrahim, Hamid Zentou, Rozita Rosli, Abd Almonen Doolaanea, Formulation and Antioxidant Properties of Curcumin Gum Arabic Nanoparticles for Delivery to Cancer Cells, 5th International Conference of Chemical Engineering & Industrial Biotechnology (ICCEIB2020) Conference Virtual, 9-11 August 2020, Kuala Lumpur.
16. Nur Khairunnisa Abd Halim, **Siti Aslina Hussain**, Mus'ab Abd. Razak and Mohd Amirul Syafiq Mohd Yunos, Eulerian-Eulerian Approach to CFD Simulation of Two-Phase Bubble Column, International Conference on Advanced Engineering and Technology, 13-15 December 2019, Incheon, South Korea.
17. Sulaiha Ali, **Siti Aslina Hussain**, Mohd. Zahirasri Mohd Tohir, Thermogravimetric Analysis and Pyrolysis Kinetics of Malaysian Wood Species, International Conference on Advanced Engineering and Technology, 13-15 December 2019, Incheon, South Korea.
18. Shiva Rezaei Motlagh, Razif Harun, Dayang Radiah Awang Biak, **Siti Aslina Hussain** and Amal A. Elgharbawy, Microwave assisted extraction of lipid from Nannochloropsis gaditana microalgae using [EMIM]Cl, 26th Regional Symposium on Chemical Engineering, 29 October – 1 November 2019. University of Malaya.
19. Sulaiha Ali, **Siti Aslina Hussain**, Mohd. Zahirasri Mohd Tohir, Statistical Analysis of Malaysian's Timber Combustion Data from the Con Calorimeter Test, Loss Prevention Asia 2019, 25-26 November 2019, Kuala Lumpur.
20. Nora'in Mohd Ramli, **Siti Aslina Hussain**, Risk Assessment on Horizontal Wet Etching Equipment's System in Manufacturing Plant Industry, 5th Scientific Conference on Occupational Safety and Health (SciCOSH), 28-29 November, 2018, Putrajaya.
21. Hassani Abdelkader, **Siti Aslina Hussain**, Suryani Kamarudind Norhafizah Abdullah, Characterization of the Inclusion Complex of Magnesium Orotate-Loaded Chitosan Polymer Nanoparticles for Drug Delivery System, 4th International Conference of Chemical Engineering & Industrial Biotechnology, 1-2 August, 2018, Universiti Malaya, Kuala Lumpur.
22. Nur Khairunnisa Abd Halim, **Siti Aslina Hussain**, Mus'ab Abd. Razak and Mohd Amirul Syafiq Mohd Yunos, Impact of Sparger Design on Air-Sparged Quadrilateral Bubble Column, 31st Symposium of Malaysia Chemical Engineerings (SOMCHE), 6-7 August 2018, Kuala Lumpur.
23. Sulaiha Ali, **Siti Aslina Hussain**, Mohd Zahir Mohd Tohir, Combustions Properties and Toxic Emissions of Three Commercially Utilized Wood Species in Malaysia, 31st Symposium of Malaysia Chemical Engineerings (SOMCHE), 6-7 August 2018, Kuala Lumpur.
24. Murtada M. A., **Siti Aslina Hussain**, Luqman Chuah Abdullah, Application Design Expert in Demulsification Water in Oil Emulsion using Non-Ionic Emulsifier, (SOMCHE), 31st Symposium of Malaysia Chemical Engineerings (SOMCHE), 6-7 August 2018, Kuala Lumpur.
25. Sepehr Azizkhani, **Siti Aslina Hussain**, Norhafizah Abdullah, Mohd Halim Shah Ismail, Isotherm and Kinetic Model Study of Graphene Oxide – Chitosan Adsorbent for Eliminating PB (II) from Aqueous Solution, 31st Symposium of Malaysia Chemical Engineerings (SOMCHE), 6-7 August 2018, Kuala Lumpur.
26. Mohammed Ngabura, **Siti Aslina Hussain** and Mohammed Saedi Jami, Activation and Optimization of Renewable Durian (Durio Zabethenus Murray) Shell for Zinc Biosorption from Aqueous Medium, 5th International Conference on Biotechnology Engineering (ICBioE 2018), 5th International Conference on Biotechnology Engineering (ICBioE 2018), 19-20 September, 2018, Universiti Islam Antarabangsa Malaysia, Kuala Lumpur.
27. Hassani Abdelkader, **Siti Aslina Hussain**, Suryani Kamarudin and Norhafizah Abdullah, Characterization of the Inclusion Complex of Magnesium Orotate-Loaded Chitosan Polymer Nanoparticles for Drug Delivery System, 4th International Conference of Chemical Engineering & Industrial Biotechnology, 1-2 August, 2018, Kuala Lumpur.
28. Mohammed Ngabura, **Siti Aslina Hussain**, Wan Azlina WA Ghani, Mohammed Saedi Jami and Yen Ping Tan, Optimization and Activation of Renewable Durian Husk for Pb(II) from Wastewater, 4th International Conference of Chemical Engineering & Industrial Biotechnology, 1-2 August, 2018, Kuala Lumpur.
29. Sepehr Azizkhani, **Siti Aslina Hussain**, Norhafizah Abdullah, Mohd Halim Shah Ismail and Abdul Wahab Mohammad, Removal of Cadmium (II) by New Graphene Oxide-Chitosan Absorbent from Aqueous Solution, International Conference on Chemical and Process Plant Engineering, 26 July, 2018, Kuala Lumpur.
30. Nur Khairunnisa Abd Halim, **Siti Aslina Hussain**, Mus'ab Abd. Razak and Mohd Amirul Syafiq Mohd Yunos, Numerical Study of Flow Pattern and Local Holdup using Two-fluid Eulerian Simulation of Bubble Column

- Reactors with Varied Design of Spargers, International UNIMAS STEM Engineering Conference 2018, "Realizing The 4th Industrial Revolution In Engineering And Built Environment" 12 – 13 September 2018, Kuching, Sarawak.
31. Sulaiha Ali, **Siti Aslina Hussain**, Mohd Zahirasri Mohd Tohir, Method to Test Fire Behaviour of Wood and Ways to Reduce Its Severity, Process Safety and Loss Prevention Postgraduate Symposium, 16 January, 2018, Universiti Putra Malaysia.
 32. Hassani Abdelkader, **Siti Aslina Hussain**, Suryani Kamarudin and Norhafizah Abdullah, Potential Aspects of Chitosan for Pharmaceutical Chemistry Applications, Fundamental Science Congress, 21- 22 November 2017, Universiti Putra Malaysia.
 33. Sepehr Azizkhani, **Siti Aslina Hussain**, Norhafizah Abdullah, Mohd Halim Shah Ismail and Abdul Wahab Mohammad, Removal of Cadmium (II) from Aqueous Solution by Graphene Oxide, Symposium on Applied Engineering and Sciences (SAES2017), 14–15 November 2017, UPM Selangor.
 34. Nur Khairunnisa Abd Halim and **Siti Aslina Hussain**, Hydrodynamics Study of Gas Hold-Up and Bubble Rise Velocity in Quadrilateral Bubble Column at Different Superficial Gas Velocity and Sparger Design, Symposium on Applied Engineering and Sciences (SAES2017), 14–15 November 2017, UPM Selangor.
 35. Hassani Abdelkader, **Siti Aslina Hussain**, Suryani Kamarudin and Norhafizah Abdullah, Chitosan Potential Aspects for Drug Delivery and Pharmaceutical Applications using Microencapsulation Techniques, Symposium on Applied Engineering and Sciences (SAES2017), 14–15 November 2017, UPM Selangor.
 36. Mohd Amirul Syafiq Mohd Yunos, **Siti Aslina Hussain**, Hamdan Mohamed Yusof, Susan Sapain, Industrial Radiotracer Application for Flow Rate Measurement, Symposium on Applied Engineering and Sciences (SAES2017), 14–15 November 2017, UPM Selangor.
 37. Hong Boon Tan, Wan Azlina W.A.K. Ghani, **Siti Aslina, H.**, Denny K.S.Ng, Feasibility Study of Napier Grass and Oil Palm Frond Blend Pellets for Syngas Production, The 9th Regional Conference on Chemical Engineering (RCCChE) in conjunction with Postgraduate International Symposium on Chemical and Energy Engineering (POISChE), 21-22 November 2016, Kuala Lumpur.
 38. **Siti Aslina Hussain** and Azni Idris, Spiral Motion of Air Bubbles in Multiphase Mixing for Wastewater Treatment, 2016 International Conference on Process Engineering and Advanced Materials (ICPEAM2016): World Engineering, Science and Technology Congress, 15-17 August, 2016.
 39. **Siti Aslina Hussain**, Siti Nadimah Muhammad and Azni Idriss, Numerical Studies of Cosmic Media II in Wastewater Treatment Plant using Computational Fluid Dynamic, 28th Symposium of Malaysian Chemical Engineers 2015 (SOMChE2015), Putrajaya, 21 – 22 October, 2015.
 40. Ezaideen Ahmad Lokman, **Siti Aslina Hussain**, Hamdan Mohamed Yusoff and Syafiee Syam, Dynamic Model for a Heat Exchanger Tube Rupture Discharging High-Pressure Natural Gas Vapor into Low Pressure Liquid-Filled Shell in LNG Processing Industry, 2nd CCPS Global Summit on Process Safety, Kuala Lumpur, 3-5 November, 2015.
 41. E.A. Lokman, **S. A. Hussain**, S. Syam and H. M. Yusoff, Loss of Primary Containment: A Structured LOPC Control Framework in Managing Process Safety Hydrocarbon Leakages, APCChE 2015 Congress incorporating Chemeca 2015, Melbourne, Australia, 27 Sept – 1 Oct, 2015.
 42. A.Z. Nur Sofuwani, **H. Siti Aslina** & M. K. Siti Mazlina, Separation of Lactose from Raw Goat's Milk by Cross-Flow Hollow Fiber Ultrafiltration Membrane, The 7th International Conference on Sustainable Agriculture for Food, Energy and Industry in Regional and Global Context (ICSAFEI2015), Selangor, 25-27 August, 2015.
 43. **Siti Aslina Hussain**, Tan Sze Leng, Azni Idris, Vortex Flow in a Vertical Aeration Reactor by Numerical Simulation, 8th International Conferences on Advanced Computational Engineering and Experimenting (ACE-X 2014), Paris, France, 30 June – 3 July, 2014.
 44. Mohd Amirul Syafiq Mohd Yunos, **Siti Aslina Hussain**, Hamdan Mohamed Yusof, Jaafar Abdullah, Preparation and Quantitative of Radioactive Particle for Tracking Hydrodynamic Behaviour in Multiphase Reactors, 2014 International Conference on Process Engineering and Advanced Materials (ICPEAM2014) A Conference of World Engineering, Science & Technology Congress (ESCTON), Kuala Lumpur, 3-5 June, 2014.
 45. Nur Sofuwani Zainul Abidin, **Siti Aslina Hussain**, Removal of Lactose from Highly Goat's Milk Concentration through Ultrafiltration Membrane, 2014 International Conference on Process Engineering and Advanced Materials (ICPEAM2014) A Conference of World Engineering, Science & Technology Congress (ESCTON), Kuala Lumpur, 3-5 June, 2014.
 46. **Siti Aslina Hussain**, Tan Hong Tat, Mohd Ismail Abdul Hamid, Norhafizah Abdullah, Azni Idris, Experimental Validation of CFD Result on Pressure Drop in Artificial Blood Conduit, 9th World Congress of Chemical Engineering incorporating 15th Asian Pacific Confederation of Chemical Engineering Congress (WCCE9 & APCChE 2013), Seoul, Korea 18-23 August 2013.

47. **S. A. Hussain**, Tan Hong Tat, Azni Idris, Numerical Studies of Fluid Flow across Multiple Cosmo Ball using Computational Fluid Dynamics, 6th International Conferences on Advanced Computational Engineering and Experimenting (ACE-X 2012), Istanbul, Turkey, 1-4 July, 2012.
48. **Siti Aslina Hussain**, Sze Leng Tan, Azni Idris, Simulation on Vortex Flow in Aeration Tank for Wastewater Treatment, 2012 International Conference on Process Engineering and Advanced Materials (ICPEAM2010), Kuala Lumpur, 12-14 June, 2012.
49. **Siti Aslina Hussain**, Tan Hong Tat, Azni Idris, Simulation of Cosmo Balls in Wastewater Treatment, 14th Asia Pacific Confederation of Chemical Engineering Congress, Singapore, pp 763-764, 21-24 February 2012. (doi: 10.38501/978-981-07-1445-1-508)
50. **S. A. Hussain**, T. H. Tan, M. I. Abdul Hamid, N. Abdullah, A. Idris, Numerical Method on Blood Flow Pressure Drop in Aorta Coronary Sinus Conduit, 4th International Conferences on Advanced Computational Engineering and Experimenting (ACE-X 2010), Paris, France, pp 170-171, 8-9 July, 2010.
51. **Siti Aslina Hussain**, Nor Maizatul Akhmar, Tan Kah Shin, Rozita Omar, Temperature Distribution of temperature Distribution of Empty Fruit Bunch in Vertical Reactor during Heating using CFD Simulation, 15th Regional Symposium on Chemical Engineering (RSCE) in conjunction with the 22th Symposium of Malaysia Chemical Engineers (SOMChE), Kuala Lumpur, pp 423-430, 2-3 December, 2008.
52. **Siti Aslina Hussain**, Tan Hong Tat, Ismail Hamid, Norhafizah Abdullah, Azni Idris, Pressure Drop of Vein in Blood Flow System using Advanced Computational Fluid Dynamics Simulation, 15th Regional Symposium on Chemical Engineering (RSCE) in conjunction with the 22th Symposium of Malaysia Chemical Engineers (SOMChE), Kuala Lumpur, pp 303-309, 2-3 December, 2008.
53. **Siti Aslina, Hussain**, Nor Maizatul Akhmar Khirudin , Tan Kah Shin, Rozita Omar. (2008). Temperature Distribution of Temperature Distribution of Empty Fruit Bunch in Vertical Reactor during Heating using CFD Simulation. 15th Regional Symposium on Chemical Engineering (RSCE) in conjunction with the 22nd Symposium of Malaysian Chemical Engineers (SOMChE). Kuala Lumpur. pg. 423-430. 2-3 December 2008
54. **S. A. Hussain**, Mohd Imran Rosly, Norhafizah Abdullah, Numerical Method on Drug Release from Micro Particles using CFD, 6th International Conference on Diffusion in Solids and Liquids (DSL-2010), Paris, France, pp 120-121, 5-7 July, 2010.
55. **Siti Aslina Hussain**, Tan Hong Tat, Azni Idris, Numerical Studies of Fluid flow Across a Cosmo Ball by using CFD, 2010 International Conference on Process Engineering and Advanced Materials (ICPEAM2010), Kuala Lumpur, 15-17 June, 2010.
56. **Siti Aslina Hussain**, Tan Hong Tat, Mohd Ismail Abdul Hamid, Norhafizah Abdullah, Azni Idris, Pressure Reduction on Blood Flow in Aorta Coronary Sinus Conduit, World Engineering Congress 2010 (WEC2010), Sarawak, pp 526-530, 2-5 August, 2010.
57. **Siti Aslina Hussain**, Soo Mee Khuan, CFD Model for Determining Hold Up Oil-Water Dispersion in Turbulent Flow, AIChE Annual Meeting, Philadelphia, USA, 16-21 November, 2008.
58. **Siti Aslina Hussain**, Tan Hong Tat, Norhafizah Abdullah, Azni Idris, A Rapid Method for Determining the Pressure Distribution of Blood Flow System in Vein using Advanced Computational Fluid Dynamics Simulation, Computational Fluid Dynamics in Chemical Reaction Engineering IV, Whistler, British Columbia, Canada, pp 15-20, 15-20 June, 2008.
59. **Siti Aslina H.**, Siti Mazlina M. K., Wan Hassan, M. J., Yun Xu X., Hewitt G. F., Simulation on Oil-Water Horizontal Flows: MUSIG model, World Engineering Congress 2007, Penang, pp 130-136, 5-9 August, 27-30 August, 2007.
60. **Siti Aslina H.**, Experimental Investigation of Two-Phase Volume Fraction using Gamma Densitometer System Technique on Liquid-liquid Dispersion, 11th Asian Pacific Confederation of Chemical Engineering (APChE Congress 2006), Kuala Lumpur, Paper ID 5, 27-30 August, 2006.
61. **Siti Aslina H.**, Local Volume Fraction on Liquid-liquid Dispersion, The Eleventh Asian Congress of Fluid Mechanics, Kuala Lumpur, pp 434-443, 22-25 May, 2006.
62. **Siti Aslina Hussain**, Tan Hong Tat, Mohd Ismail Abdul Hamid, Norhafizah Abdullah, Azni Idris, Blood Flow in Aorta Coronary Sinus Conduit Simulation using CFD, 2nd National Symposium on Fermentation Technology (NSFT 2009), pp 29, 14-15 December, 2009.
63. **Siti Aslina Hussain**, Tan Hong Tat, Ismail Hamid, Norhafizah Abdullah, Azni Idris, Numerical Studies of Blood Flow Velocity in Aorta Coronary Sinus Conduit using Ansys™ CFD Simulation, Regional Engineering Postgraduate Conference 2009, Universiti Kebangsaan Malaysia, 20-21 October, 2009.
64. **Siti Aslina Hussain**, Nor Maizatul Akhmar, Rozita Omar, Temperature Distribution of Empty Fruit Bunch in a Vertical Reactor 3D Model Simulated by Computational Fluid Dynamics, Symposium on Engineering and Technology 2008, (SET 2008), Kuala Lumpur, pp 4, 2008.

65. **H. Siti Aslina**, M. K. Siti Mazlina, In-Situ Phase Fraction for Oil and Water occupied in Pipe Channel, Seminar on Engineering and Technology 2006 (SET 2006), Kuala Lumpur, pp 374-382, 4-5 September, 2006.
66. **Siti Aslina Hussain**, Multiple-Size-Group Model in Liquid-liquid Horizontal Flows, 2nd International Conference on Chemical and Bioprocess Engineering (SOMCHE 2005), Kota Kinabalu Sabah, pp 366-373, 2005.

Chapter in Books

1. **Siti Aslina Hussain**, Mohammed Ngabura. Status Terkini dan Hala Tuju Industri Durian di Malaysia – Bab 10 Potensi dan Pengurusan Sisa Durian, 2023, 121 – 132, Universiti Putra Malaysia.
2. **Siti Aslina Hussain**, Tan Hong Tat, Mohd Ismail Abdul Hamid, Norhafizah Abdullah, Azni Idris. Numerical Study of Blood Flow Pressure Drop in Aorta Coronary Sinus Conduit, Analysis and Design of Biological Materials and Structures, Vol 14, pp. 135-150, 2012, Springer-Verlag Berlin. Heidelberg.

Awards/Recognition (Current)

No	Name of awards	Title	Award Authority	Award Type	Year
1	Finalist, 4 HFEM Biennial Ergonomics Design & Intervention Competition, ErgoLlympic	WMSDS Woes in The Fabrication Industry: How Can We Help?	The Human Factors and Ergonomics Society Malaysia (HFEM)	National	2023
2	Silver Medal	Structural Design Effect on Greenhouse Dryer Efficiently	Faculty of Engineering, Universiti Putra Malaysia	Faculty	2022
3	Distinguished Woman in Engineering	Distinguished Woman in Engineering	VIWA	International	2018
4	Special Award	<i>Anugerah Kecemerlangan Perkhidmatan Profesional</i>	Faculty of Engineering, Universiti Putra Malaysia	Faculty	2018
5	Third Place	Risk Assessment on Horizontal Wet Etching Equipment's System in Manufacturing Plant Industry	Best Paper	National	2018
6	Bronze Medal	Radioactive Particle Tracking: Advance Non- Invasive Radiation based Techniques for 3D Hydrodynamics Visualization in Opaque Multiphase Flow System	Hari Inovasi Nuklear Malaysia	National	2017

7	Gold Medal	NanoTracer	i-Inova14 Ekspo Inovasi Islam 1436H	National	2014
8	Silver Medal	Anugerah Pengajaran Putra 2011	Universiti Putra Malaysia	University	2011
9	Gold Medal	Artificial Conduit for Coronary Heart Diseases	PECIPTA	National	2011
10	Bronze Medal	Cosmo Ball in Wastewater Treatment	PECIPTA	National	2011
11	Gold Medal	Cosmo Ball in Wastewater Treatment	22 st International Invention, Innovation & Technology Exhibition 2011	International	2011
12	Gold Medal	Artificial Conduit for Coronary Heart Diseases	Malaysia Technology Expo 2011	National	2011
13	Gold Medal	Cosmo Ball in Wastewater Treatment	Pameran Reka Cipta, Penyelidikan dan Inovasi 2010	University	2010
14	Silver Medal	Artificial Conduit for Coronary Heart Diseases	Pameran Reka Cipta, Penyelidikan dan Inovasi 2010	University	2010
15	Bronze Medal	Transition Inter- Dispersed from Stratified in Water- Oil-Flows	Malaysia Technology Expo 2009	National	2009
16	Bronze Medal	Transition Inter- Dispersed from Stratified in Water- Oil-Flows	Pameran Reka Cipta, Penyelidikan dan Inovasi 2007	University	2007
17	Awards of Merit	Bintang Khidmat Cemerlang (BKT)	Kerajaan Negeri Melaka	National	2010
18	Anugerah Perkhidmatan Cemerlang	-	Universiti Putra Malaysia	University	2004
19	Anugerah Perkhidmatan Cemerlang	-	Universiti Putra Malaysia	University	2014
20	Anugerah Perkhidmatan Cemerlang	-	Universiti Putra Malaysia	University	2018

Patent

No	Year	Title	Number
1.	2010	Artificial Blood Conduit for Coronary Heart Diseases	PI20097028
2.	2014	Artificial Blood Conduit for Coronary Heart Diseases	MY-147988-A
3.	2012	A Radioactive Silica-Coated Gold Nanoparticle and a Method for Producing Thereof	PI2014702548

Professional Services/Consultation

No	Year	Title	Authority	Amount
1	2015	Simulation Study on Power and Energy Intensity Distribution on High Power Microwave heating for Biomass (PPRN)	PPRN-KTP	RM25,000

Student Supervision

PhD (Main Supervisor)

No.	Name	Title	Status
1.	Mohd Amirul Syafiq Mohd Yunos (GS34760)	Advanced Industrial Radioisotope for Numerical Study on Hydrodynamics Behaviour in Quadrilateral Slurry Bubble Column	Graduated
2.	Mohamad Ngabura (GS33914)	Fluoride Absorption from Malaysian Industrial Effluent using Modified Durian Peels	Graduated
3.	Hassani Abdelkader (GS42669)	Preparation and Characterization of Magnesium Orotate contained Poly(lactic-co-glycolic acid) PLGA/Chitosan Microspheres	Graduated
4.	Sepehr Azizkhani (GS44080)	Adsorption of Congo Red Dye and Lead from Aqueous Solution by Chitosan-Graphene Oxide	Graduated
5.	Sulaiha Ali (GS48325)	Fire Performance and Toxic Gas Emissions of Commonly Used Timber in Malaysian Construction Industry	Graduated

MS with thesis (Main Supervisor)

No.	Name	Title	Status
1.	Rashmi G. Welkafar	Modeling and Simulation of Two-Phase Flow Using Computational Fluid Dynamics (CFD)	Graduated
2.	Tan Hong Tat	Computational Fluid Dynamics Simulation and Experimental Studies of Blood Flow in Artificial Coronary Sinus Conduit	Graduated
3.	Nur Sofuwani Zainul Abidin (GS35087)	Process of Highly Goat's Milk Concentration through Ultrafiltration Membrane	Graduated
4.	Murtada Mohammed Abdulredha (GS48253)	Extraction Brine from Crude Oil by using Chemical Solutions	Graduated

MS without Thesis (Main Supervisor)

No.	Name	Title	Status
1.	Nurul Ain Zulhaimi	Evaluating the Effectiveness of Grease	Graduated
2.	Tuan Suraya Tuan Hamzah (GS32530)	Study of Accident Factors at Blow Fill-Seal Machine	Graduated
3.	Mohd Nabil Muhaimin Mohammad Yusuf (GS34582)	QRA for Transport Accident in Oil and Gas	Graduated
4.	Anis Nabila Abdul Rahim (GS35823)	QRA for Safety Behaviour at Green Field	Graduated
5.	Polycarp Jeffery Jok (GS36476)	Human Factor Analysis and Impact on Inherent Safety for Industries Process	Graduated
6.	Harun Sani (GS36932)	Human Error Probabilities in Confined Space Activity using Human Error Assessment and Reduction Technique (HEART)	Graduated
7.	Jsudass a/l Kasi Nathan (GS37003)	High Pressure High Temperature Well Drilling HSE Case Study	Graduated
8.	Uduak Monday Isoke (GS38797)	Hazard Identification in a Customer Care Center and Its Effects on Performance of Customer Care Agents	Graduated
9.	Afina binti Afandi (GS41317)	Prevalence Of Musculoskeletal Disorder and Its Associated Factors Among Workers In Syringe Manufacturing Factory	Graduated
10.	Nurul Waheeda Kamarudin (GS41397)	Computational Fluid Dynamics Simulation Study for Explosion Mitigation at Existing Offshore Platform in Malaysia	Graduated
11.	Mohd Atiff Bin Sholehuddin (GS42251)	Consequences Modelling towards Loss of Containment in Float Glass Facility in <i>Sungai Gadut</i> using Phast Software of Hazardous Chemicals Release Using Phast Software	Graduated
12.	Muhamad Fidzrey bin Shamsul (GS44409)	Safety Awareness and Risk Assessment of Spray-Painting Operation in Manufacturing Factory	Graduated
13.	Nurul Afifah binti Abd Aziz (GS43804)	Body Ergonomics Assessment for Wards Nurses in Hospital Serdang	Graduated
14.	Mohamad Aliff Farhan bin Bustani (GS45257)	Quantitative Risk Assessment (QRA) for Onshore Gas Terminal Plant using PhastRisk 6.7 Software combining Limiting Flowrate Modelling Technique	Graduated
15.	Mohd Amir Fitrie Bin Mohd Rosdi (GS47525)	Ergonomic Analysis of Haulage Truck Drivers in Kontena Nasional Berhad	Graduated
16.	Nor'ain Bt Mohd Ramli (GS48331)	Investigation on Failure Mechanism of Piping on Horizontal Wet Etching	Graduated
17.	Toh Jia Lin (GS48777)	Gaseous Oxygen (GOX) System Upgrade for Mitigation to Process Safety Risk of Brownfield Unit	Graduated
18.	Ahmad Rizal Mohamed (GS48783)	Enhancement of Tripod-Beta Methodology in Loss Incident Investigation using Simplified Failure Causation Model and Logic Rules	Graduated
19.	Mohd Shazman Bin Zulkipli (GS51193)	Evaluation of Process Safety Management (PSM) for Slickline Activity in Oil & Gas Service Company Assessment on HSE Culture Among Lab	Graduated
20.	Michelle Anne Dison (GS52571)	Technicians/Assistant Engineer in the Faculty of Engineering at Universiti Putra Malaysia (UPM)	Graduated
21.	Ariff Asraf Rajeki (GS58076)	Pipeline Management Control as Strategy of Plant Process Safety in Oil and Gas Industry	Graduated
22.	Akmaariffin Rujikan (GS58079)	Risk Assessment on The Centrifugal Pump Operation Regime at Power Plant X	Graduated

No.	Name	Title	Status
23.	Mohamad Azmi Bin Juhaili (GS57970)	Employee Awareness Toward Risk Assessment of Chemical Hazards in The Manufacturing Process Plant A	Graduated

PhD (Co-Supervisor)

No.	Name	Title	Status
1.	Raheleh Samawati (GS27420)	Cassava-Water Based Drilling Fluids	Graduated
2.	Yaser Talib Hameed (GS37584)	Enhancement of Primary Treatment Process for Domestic Wastewater Using Tannin-Based Coagulant	Graduated
3.	Nurul Lina Mohamad (GS31011)	Fermentation Modelling of Sago Trunk Hydrolysate for Xylitol Production using Computational Fluid Dynamics	Graduated
4.	Shiva Rezaei Motlagh (GS47748)	Extraction of omega-3 poly unsaturated fatty acid (PUFA) compounds from microalgae using Microwave assisted extraction (MAE) with Ionic Liquids	Graduated
5.	Li XiaoJu (GS56006)	Source Apportionment, Spatiotemporal Distribution and Pollution Evolution of Air Pollutants based on Multi-source Data in Sichuan Basin	Graduated

MS with thesis (Co-Supervisor)

No.	Name	Title	Status
1.	Syedehsara Masoomi Dezfooli (GS29790)	Expression and Purification of Nipah Virus Matrix Protein in Insect Cells	Graduated
2.	Heri Purwanto (GS23631)	Comparison of Vertical and Continuous Sterilizes in Palm Oil Mill	Graduated
3.	Siew Fong Wah (GS14130)	Prediction of Onset Time of Instability in Liquid Fluidised Bed	Graduated
4.	Surendran a/l Kuranadan (GS30427)	The Application of CFD Simulation in Prediction of Emission from Solid Fuel Boiler Operation	Graduated
5.	Tan Hong Boon	Evaluation of Napier Grass as Potential Renewable Energy Resource in Malaysia	Graduated

Grants/Funding

NO	PROJECT TITLE	POSITION	YEAR
1	Skim Lantikan Pensyarah Baru Title: Multiple-Size-Group Project in Liquid-liquid Horizontal Flows Total: RM 10,000	Project Leader	2006-2007
2	Science Fund Title: Fluid Evolutions in Water and Oil Dispersed Flow System Total: RM 197,800	Project Leader	2007-2009
3	RUGS	Project Leader	2007-2009

No.	Name	Title	Status
		Title: Computational Fluid Dynamics Studies on Dispersion of Oily Water Separation Total: RM 20,000	
4	FRGS	Project Leader	2007-2009
		Title: Computational Fluid Dynamics Studies on Dispersion of Oily Water Separation Total: RM 100,000	
5	RUGS	Project Leader	2009-2011
		Title: 3D Blood Conduit Haemodynamic Simulation using CFD Total: RM 165,000	
6	FRGS	Project Leader	2009-2011
		Title: Mathematical Analysis in 3D Coronary Sinus using CFD Total: RM40,000	
7	ERGS	Project Leader	2012-2015
		Title: Use of Artificial Blood Conduit for Coronary Sinus Heart Disease Total: RM 76,000	
8	GP-IPS	Project Leader	2013-2015
		Title: Removal of Lactose from Highly Goat's Milk Concentration Through Ultrafiltration Membrane Total: RM 15,000	
9	GP-IPS	Project Leader	2013-2016
		Title: Numerical Studies of Heat Exchanger Tuber Rupture in Gas Processing Industry Total: RM 15,000	
10	GP-IPS	Project Leader	2017-2021
		Title: Hydrodynamics Studies for Two-Phase Flow Systems in Quadrilateral Bubble Column using CFD Total: RM 25,000	
11	GP-Putra	Project Leader	2017-2021
		Title: Thermal Behaviour and Toxic Emission of Commonly Use Timber in Malaysia Housing Industry Total: RM 50,000	
12	Inisiatif Pemerkasaan Penerbitan Journal	Project Leader	2020
		Total: RM4,211.91	
12	RUGS	Member	2012

No.	Name	Title	Status
		Title: Removal of Ammonia in College 17th Sewage Treatment Plant, UPM to meet Putrajaya Lake Effluent Standard	
		Total: RM 290,00	
13	eScience	Member	2014-2016
		Title: Development of Quadrilateral Slurry Bubble Column Test Rig for Radioactive Particle Tracking Applications	
		Total: RM 92,500	
14	PPRN/KPT	Member	2015
		Title: Simulation Study on Power and Energy Intensity Distribution on High Power Microwave Heating for Biomass (PPRN)	
		Total: RM 25,000	
15	GP-IPS	Member	2016-2018
		Title: Utilization of Renewable Durian Peels as Potential Biosorbent for Malaysian Industrial Wastewater Treatment	
		Total: RM 20,000	
16	GP-IPS	Member	2016-2018
		Title: Physiochemical Characterization of Magnesium Orotate Contained Poly(lactic-co-Glycolic acid) PLGA / Chitosan Microspheres	
		Total: RM 20,000	
17	GP-IPS	Member	2016-2018
		Title: Adsorption of Red Congo Dye and Lead (Pb ²⁺) from Aqueous Solution by Chitosan-Graphene Oxide	
		Total: RM 20,000	
18	FRGS	Member	2007 - 2009
		Title: Numerical Modeling and Simulation on Temperature Distribution of Empty Fruit Bunch Microwave Pyrolysis	
		Total: RM 70,000	
19	FRGS	Member	2009 - 2011
		Title: Development of Protein Purification Model for Ion Exchange Chromatography Using CFD Simulation	
		Total: RM 38,000	
20	FRGS	Member	2009 - 2011
		Title: Computational Simulation for Vertical Sterilizer Using CFD	
		Total: RM 49,000	
21	FRGS	Member	2006- 2008



No.	Name	Title	Status
		Title: A Hybrid Algorithm for the Simulation of Cyclic Adsorption Processes	
		Total: RM 60,000	
22	eScience	Title: Formulation of Synthetic Engine oil from Biosynthetic Base Oil	Member 2007 - 2009
		Total: RM 235,000	
23	FRGS	Title: Optimization of Water-Based Mud (WBM) Rheology for Oilfield Drilling Operation	Member 2013 - 2015
		Total: RM 103,000	
24	GP-IPS	Title: Fire Performance and Toxic Gas Emissions of Commonly Used Timber in Malaysian Construction Industry	Member 2017-2019
		Total: RM 24,000	

