

## CURRICULUM VITAE



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### Education

1. Ph.D. Biochemical and Process Engineering, 2017, Universiti Kebangsaan Malaysia
2. B. S. Chemical and Sustainable Engineering, 2013, Universiti Malaysia Sarawak.

### Areas of Interest

1. Renewable Energy
2. Anaerobic Digestion/Biogas (Biohydrogen and Biomethane)
3. Fermentation Technology
4. Membrane Technology
5. Hydrodynamic and Fluidization Reactor
6. Biofilm and Immobilization

### Professional Qualification/ Membership/ Affiliation

1. Associate Member, Institute of Chemical Engineers (AMIChemE) (Membership No: 100190991)
2. Associate Member, Institute of Engineers Malaysia (IEM)
3. Associate Member, Board of Engineers Malaysia (BEM)
4. Competent Person - Certified Environmental Professionals in Sewage Treatment Plant Operation (CePSTPO)

### Appointments

Position	Duration
1. Students Affair Coordinator, Department of Chemical and Environmental Engineering, Faculty of Engineering, UPM	June 2018 to date
2. Senior Lecturer, Department of Chemical and Environmental Engineering, Faculty of Engineering, UPM	January 2018 to date
3. Tenaga Akademik Muda (TAM), Department of Chemical and Environmental Engineering, Faculty of Engineering, UPM	May 2014 – August 2017

### Publications

#### Journals (Recent journals)

1. **Jamali, N. S.**, Dzul Rashidi, N. F., J. M. Jahim, Sompong O. T, Aminee. J., Engliman, N. S. 2019. Thermophilic biohydrogen production from palm oil mill effluent: Effect of immobilized cells on granular activated carbon in fluidized bed reactor. Food and Bioproducts Processing. (IF=2.744).
2. **Jamali, N. S.**, J. M. Jahim, Sompong O. T, Aminee. J. 2019. Hydrodynamic Characteristics and Model of Fluidized Bed Reactor with Immobilized Cells on Activated Carbon for Biohydrogen Production. International Journal of Hydrogen Energy 44:9256-9271. (IF=4.229)
3. Tan A. W., **Jamali, N. S.**, Winnie H., Tien T. 2019. Phytoremediation of Palm Oil Mill Effluent (POME) Using Eichhornia crassipes. Journal of Applied Science & Process Engineering 6 (1), 340-354.



4. **Jamali, N. S.**, J. M. Jahim, W. N. R. W. Isahak & P. M. Abdul 2017. Particle size variations of activated carbon on biofilm formation in thermophilic biohydrogen production from palm oil mill effluent. *Energy Conversion and Management* 141: 354-366. (IF=6.377)
5. **Jamali, N. S.**, J. Md Jahim & W. N. R. Wan Isahak 2016. Biofilm formation on granular activated carbon in xylose and glucose mixture for thermophilic biohydrogen production. *International Journal of Hydrogen Energy* 41(46): 21617-21627. (IF=4.229)
6. **Jamali, N. S.**, J. M. Jahim 2016. Optimization of Thermophilic Biohydrogen Production by Microflora of Palm Oil Mill Effluent: Cell Attachment on Granular Activated Carbon as Support Media. *Malaysian Journal of Analytical Sciences* 20(6): 1437 – 1446.

#### Conference Proceedings (Recent Conference Proceedings)

1. **Jamali, N.S.**, J. M. Jahim, Sompong, Aminee. 2018. Thermophilic biohydrogen production from palm oil mill effluent: Effect of immobilized culture on activated carbon in fluidized bed reactor (FBR). *Biomass-Environment-Food-Energy-Water (BEFEW NEXUS)*. Hotel Bangi Putrajaya.
2. **Jamali, N. S.**, J. M. Jahim, 2018. Microbial specific growth rate of an attached-biofilm mixed culture of hydrogen-producing bacteria by Monod kinetic model. 31st Symposium of Malaysian Chemical Engineers (SOMChE 2018).
3. Fauzi, N., **Jamali, N. S.**, Izhar, S., Yoshida, H. 2018. Study of Eco-Cleaner Production from Pineapple Waste Fermentation Using Subcritical Water. *International Conference Biotechnology Engineering, ICBioE. Harnessing Biotechnology For Sustainable and Green Future*: 76 – 79.
4. **Jamali, N. S.**, J. M. Jahim. 2016. Optimization of Thermophilic Biohydrogen Production by Microflora of Palm Oil Mill Effluent: Cell Attachment on Granular Activated Carbon as Support Media. 28th Symposium of Chemical Engineering (SomChE).
5. **Jamali, N. S.**, J. M. Jahim, W. N. R. Wan Isahak. (2014). Utilization of Palm Oil Mill Effluent (POME) in thermophilic biohydrogen production by *Caldicellulosiruptor saccharolyticus* DSM 8903. *Asia Biohydrogen and Biorefinery (ABB) Symposium*.
6. Tan, I.A.W., I. Yakub., **N.S. Jamali.**, Y.C Ong. 2014. Review of Palm Oil Mill Effluent Treatment Methods: Phytoremediation using *E. Crassipes* and *P. Stratiotes* as a Sustainable Alternative. *Proceedings of the International Engineering Conference*.

#### Books (If any)

#### Chapter in Books (If any)

#### Research Grants

No	Project Title	Amount (RM)	Year	Source of Fund
1.	Demonstration and application of food waste composting fertilizer for sustainable organic farming industry in Jenderam Hilir	10,000	2019-2020	KTGS
2.	Renewable and sustainable biohydrogen production from attached-biofilm mixed anaerobic cultures with biomass as fermentation feedstocks	60,000	2018-2020	GP-IPM

#### Awards/Recognition (Current)

Num	Name of awards	Title	Award Authority	Award Type	Year
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#### Professional Services/Consultation

No	Year	Title	Authority	Amount
1.	2019	Compost production from solid fraction of FOG-removed Restaurant Grease Trap: Enhancement by biochar and the effect on plant growth.	Sirim Sdn Bhd	RM5,000

## Student Supervision

### PhD (Main Supervisor)

No.	Name	Title	Status
1.	Fatimah bt Ismail (GS53467)	Methane production using fouling mechanism on activated carbon with chitosan and alginate as carrier	Ongoing

### MS with thesis (Main Supervisor)

No.	Name	Title	Status
1.	Nur Farahana Dzul Rashidi (GS52860)	Biohydrogen production using entrapment mechanism in activated carbon: Effect of chitosan impregnated calcium alginate as carrier.	Ongoing

### MS without Thesis (Main Supervisor)

No.	Name	Title	Status
1.	Rubaneshmani Subramaniam (2017/2018)	Thermophilic Biohydrogen Production using Attached-Anaerobic Culture from Palm Oil Mill Effluent	Graduated
2.	Siti Syazwani Mahamad (2018/2019)	Production of Biohydrogen From Food Waste Using Chitosan - Coated Calcium Alginate Beads Immobilized Cells Via Dark Fermentation	Ongoing
3.	Khairul Hadyyan (2019/2020)	Compost production from solid fraction of FOG-removed Restaurant Grease Trap: Enhancement by biochar and the effect on plant growth.	Ongoing

