

CURRICULUM VITAE

PERSONAL INFORMATION

DR. FATEHAH BINTI MOHD OMAR

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Email : fatehahomar@yahoo.com
D.O.B/Place : 27th February 1981, United States
Nationality : Malaysian
Status : Married

PROFESSIONAL EXPERIENCE

Sept 2015 - current	Organization : School of Civil Engineering, Engineering Campus, Universiti Sains Malaysia, Malaysia Position: Lecturer
2012	Organization: Permanent Mission of Malaysia, Geneva, Switzerland Position: French Teacher (part-time/personal tutoring) <ul style="list-style-type: none">• Engaged in teaching French lessons for Malaysians• 3 months
2007 – 2009	Company: WNA Consultant Sdn Bhd Position: Assistant Resident Engineer (ARE) for Environmental, Safety and Traffic Management Project: Highway Construction PLPT2: Package 3 CH26100 (Ladang Ketengah) to CH40038 (Ladang Penyelidikan MARDI) (3 months) <ul style="list-style-type: none">• Supervised contractor relevant to EHS and traffic issues, checked technical reports before submission to JKR• Supervised audit relevant to EHS Promoted: Project Coordinator Project: Stormwater Management and Drainage Master Plan Study on the town of Seri Kembangan, Selangor and Sungai Besi, Kuala Lumpur <ul style="list-style-type: none">• Team management, delegation of tasks, networking, data collection & documentation, technical report analysis, report write-up and compilation.
2006	Company: Advanced Micro Devices Export Sdn Bhd Position: Environmental Engineer <ul style="list-style-type: none">• Research & development on semiconductor wastewater treatment, wastewater monitoring & analysis• Preparation and submission of contravention license to DOE
2006 (weekends)	Organization: Universiti Sains Malaysia Position : Environmental Trainer Client : KOMAG-USA Program : EMS & RA

2005 – 2006	<p>Organization : Universiti Sains Malaysia Position: Research Officer Projects:</p> <ul style="list-style-type: none"> • Elicitors Precursors Enhanced Production of Limonene • Water Monitoring & Analysis on Water Quality for Pinang River Basin • Treatment of Silica Wastewater • Environmental, Health & Safety Audit for Beris Dam
2002 – 2005	<p>Company : Universiti Sains Malaysia Position: Tutor</p> <ul style="list-style-type: none"> • Basic Calculations in Chemical Engineering (1st year) • Design in Industrial Water Treatment (2nd year) • Unit Operation I : Fluid Mechanics (1st year) • Unit Operation II : Heat Transfer (2nd year)
<p>Consultation (Co-Researcher)</p>	<p>Projects:</p> <p>2007 Environmental Impact Assessment for the Proposed Limestone Quarry at Gunung Inas, Kedah Darul Aman, for ERAPAC Sdn Bhd</p> <p>2007 Study on Chemical and surface runoff wastewater composition and treatment for Kualiti Alam, Bukit Nenas, Negri Sembilan</p> <p>2006 Due Diligence Audit on soil and groundwater contamination for Advanced Micro Devices Export Sdn. Bhd., Bayan Lepas Industrial Zone, Penang</p> <p>2005 Study on Water and sediment contamination from Sungai Pinang for the Sungai Pinang Rehabilitation and Conservation project under Department of Irrigation and Drainage and Jurutera Perunding Zaaba</p> <p>2005 Environmental Impact Assessment On The Proposed Sand Sourcing off the coast of Tanjung Dawai, Kedah Darul Aman, under Agsonics Sdn Bhd</p> <p>2004 Environmental Impact Assessment On The Proposed Sand Sourcing off the coast of Tanjung Tokong, Penang, under Selat Adabi Sdn Bhd, Penang</p> <p>2004 Environmental Impact Assessment On The Proposed Development Of Marine Infrastructure To Encourage Boating And Marina Industry At Church Street Pier, Pengkalan Weld, Penang Port. For Stracap Holdings Sdn Bhd, Penang</p> <p>2004 Due diligence audit on a decommissioned textile industry in Bayan Lepas Industrial Zone, Penang. For Eastern Garments Sdn Bhd, Bayan Lepas Industrial Zone, Penang</p> <p>2003 Due Diligence Audit on a decommissioned semi conductor industry in Bayan Lepas, on environmental management, soil and groundwater contamination, for Advanced Micro Devices, Bayan Lepas Industrial Zone, Penang</p> <p>2002 Environmental Audit of Soil Contamination at Malaysian Circuit</p>

	Industries Sdn. Bhd., Bayan Lepas Industrial Zone, Penang.
	2002 Chemical and Environmental Risk Assessment on a Chemical Resin Plant for Merbok MDf Plant in Merbok, Kedah Darul Aman.
Freelance	Interpreting and translating Chemical Safety Data Sheet Previous Clients: <ul style="list-style-type: none"> • Mattel (M) Sdn. Bhd, • Mattel Tools (M) Sdn. Bhd. • AIC Semiconductor Sdn. Bhd. • The Pheonix Press Sdn. Bhd. • Advanced Micro Devices Export Sdn. Bhd.

EDUCATION

- 2010 - 2015** Ph.D (Environmental Science), University of Geneva / Universiti Sains Malaysia *distinction *summa cum laude*
- 2004 - 2007** M.Sc.(Wastewater Treatment), Universiti Sains Malaysia
*distinction No. 2
- 2000 - 2004** B.Tech (Environmental Technology), Universiti Sains Malaysia
- 1999** Science Matriculation, Universiti Sains Malaysia
- 1994 - 1998** St. George's Girls School
- **Assistant Consultant DOE Registration no. :** AC0819
(Water Quality, Scheduled Waste Management, General Environmental Management)

PUBLICATIONS

N.A. Nik Norulaini, Anees Ahmad, **Fatehah Mohd Omar**, Adel Ashur S. Banana, I.S. Md. Zaidul, Mohd. Omar Ab. Kadir, 2008, *Sterilization and extraction of palm oil from screw pressed palm fruit fiber using supercritical carbon dioxide*, Separation and Purification Technology, Vol. 60(3), pg. 223-352.

Fatehah Mohd Omar, Nik Norulaini Nik Abdul Rahman and Anees Ahmad, 2008, *COD Reduction in Semiconductor Wastewater by Natural and Commercialized Coagulants Using Response Surface Methodology*, Water, Air, & Soil Pollution, Vol. 195, pg. 345 -352.

Norulaini N.A.N., Anuar O., Abbas F.M.A, **Fatehah M.O.**, Omar A.K.M., Sahena F., Zaidul I.S.M., 2009, *Optimization of supercritical CO2 extraction of Anastatica Hierochuntica*, Food and Bioproducts Processing, Vol. 87, pg. 152-158.

Norulaini N.A.N., Anuar O., Omar A.K.M., Abbas F.M.A, Setianto W.B., **Fatehah M.O.**, Sahena F., Zaidul I.S.M., 2009, *Optimization of SC-CO2 extraction of zerumbone from Zingiber zerumbet (L) Smith*, Food Chemistry, Vol. 114 (2), pg. 702-705.

Fatehah Mohd Omar, Md. Sohrab Hossain, Tjoon Tow Teng, 2013, *Comparative Study on Natural and Commercial Coagulants: Treatment of Semiconductor Wastewater in Sludge Production and Removal of Heavy Metals*, International Journal of Innovative Science and Modern Engineering, Vol. 1/7, pg. 1-8.

Fatehah Mohd Omar, Hamidi Abdul Aziz, Serge Stoll, 2014, *Aggregation and Disaggregation of ZnO Nanoparticles: Influence of pH and Adsorption of Suwannee River Humic Acid*, *Science of the Total Environment*, Vol. 468-469, pg. 195-201.

Fatehah Mohd Omar, Md. Sohrab Hossain, Tjoon Tow Teng, 2013, *Semiconductor Wastewater Treatment using Tapioca Starch as a Natural Coagulant*, *Journal of Water Resource and Protection*, Vol. 5, pg. 1018-1026.

Fatehah Mohd Omar, Hamidi Abdul Aziz, Serge Stoll, 2014, *Nanoparticle Particles, Behavior, Fate in Aquatic Systems and Characterization Methods*, *Journal of Colloid Science and Biotechnology*, Vol. 3 (2), pg. 1-30.

Fatehah Mohd Omar, Hamidi Abdul Aziz, Serge Stoll, 2014, *Stability of ZnO Nanoparticles in Solution. Influence of pH, Dissolution, Aggregation and Disaggregation Effects*, *Journal of Colloid Science and Biotechnology*, Vol. 3 (1), pg. 1-10.

Frédéric Loosli, **Fatehah Mohd Omar**, Fabrice Carnal, Olena Oriekhova, Arnaud Clavier, Zhi Chai, Serge Stoll, 2014, *Manufactured Nanoparticle Transformations in Aquatic Systems. Importance of Natural Organic Matter*, *Chimia*, Vol. 68, pg. 783-787.

Nik Norulaini Nik Abd. Rahman, Mohammad Shahadat, Chew Ann Won, **Fatehah Mohd Omar**, 2014, *FTIR study and bioadsorption kinetics of bioadsorbent for the analysis of metal pollutants*, *RSC Advances*, Vol. 4 (102)

Fatehah Mohd Omar, Hamidi Abdul Aziz, Serge Stoll, *Agglomeration, Disagglomeration and Stabilization of ZnO Nanoparticles in Aquatic Systems: Influence of pH, Natural Organic Matter and Ionic Strength*, *Submitted to Science of the Total Environment*, 2015.

CONFERENCES/PROCEEDINGS

F.N.M. Saad, N.N.N.R. Rahman, M.O.A. Kadir, **F.M. Omar**, 2006, *Identification of pollution sources within the Sungai Pinang river basin*, in : H. Mokhlis (Ed.), *Proceeding of the Malaysian Research Group International Conference*, Manchester, United Kingdom, pp. 478-485.

Fatehah Mohd Omar, Hamidi Abdul Aziz, Serge Stoll, 2014, *Behavior of ZnO Nanoparticles in Aqueous Environments: Influence of pH and Adsorption of Humic Acid*, *Advanced Material Research*, Vol. 832, pg. 728-733.

Fatehah Mohd Omar, Hamidi Abdul Aziz, Serge Stoll, 2014, *Aggregation and Disaggregation of ZnO Nanoparticles: Influence of pH and Alginate Concentration*, *International Journal of Chemical & Environmental Engineering*, Vol. 5 (3), pg. 172 -175.

Fatehah M.O., Stoll S.S., Hamidi A. A., 2012, *Humic Acid Influence on the Stability and Surface Charge Properties of ZnO Nanoparticles*, 9th International Symposium on Polyelectrolytes – ISP 2012, 9th-12th July 2012, University of Lausanne, Switzerland.

REVIEWED ARTICLES

Manuscript Title: Bio-treatment of high phenol concentrations with low-strength phenol-acclimated activated sludge

Journal : The Korean Journal of Chemical Engineering

Date : 9 September 2012

Manuscript Title: Treatment of sugar beet extraction juice stillage by natural coagulant extracted from common bean

Journal : Ecological Engineering

Date : 16 July 2012

Manuscript Title: Optimization of the coagulation-flocculation process for treatment of wastewater using Polymeric Ferric Sulfate (PFS) - Poly-diallyldimethyl ammonium Chloride (PDADMAC) composite coagulant

Journal : The Korean Journal of Chemical Engineering

Date : 8 February 2012

RESEARCH GRANT

Sponsor	:	International Foundation for Science (IFS), Sweden
Project Title	:	Importance of Flocculation Processes on the Fate and Transport of Nanoparticles in Natural and Water Treatment Processes
Amount	:	USD 10533
Duration	:	May 2013 – April 2015
Sponsor	:	Swiss State Secretariat for Education, Research and Innovation (SERI), Switzerland - Conference and workshop grants
Project Title	:	Workshop on Principles of (Nano)particle Aggregation and Removal in Water Treatment
Amount	:	CHF 4000
Duration	:	16 th Dec 2014 – 15 th Dec 2015
Duration	:	1 day

TRAINING

Certificate in **River Basin Modelling for NAHRIM Professionals**, Institute of Water Modelling (IWM), Bangladesh, 19th – 23rd January 2015

Certificate in **Dynamic Light Scattering : In-depth understanding of Nano Particle Size and Zeta Potential Analysis** by DKSH, USM-IPPT, 16th December 2014

Attendance certificate in **Certified Environmental Professional In The Operation of Industrial Effluent Treatment Systems – Biological Processes (CePIETSO-BP)**, INSTEP, Terengganu, 16th – 21st October 2011

Certificate in **Research Methodology Course Series 1**, 25 Julai 2011 hingga 29 Julai 2011, Universiti Sains Malaysia

Certificate in **“General Translation”**, 25th May – 25 July 2009, National Institute of Translation Malaysia (ITNM)

Certificate in **“Environmental Impact Assessment for Petrochemical Industry Training”**, Environmental Management and Research Association of Malaysia (ENSEARCH), 8th April 2009

Certificate in **“Environmental Impact Assessment for Infrastructure Development Training”**, Environmental Management and Research Association of Malaysia (ENSEARCH), 31st March 2009

Certificate in **“General Principles of Environmental Impact Assessment Training”**, Environmental Management and Research Association of Malaysia (ENSEARCH), 11th March 2009

Certificate in **“Occupational, Safety and Health Officer (CiSHO)”** by Federation of Malaysian Manufacturers (FMM) is association with National Institute of Occupational, Safety & Health (NIOSH) – completed in February 2009

Training on **“Modeling Water Quality in Infoworks River Systems (RS)”**, by Wallingford Software, 25 – 28 November 2008, Department of Irrigation and Drainage, Penang, Malaysia

Training on **“Engineering Risk Assessment Techniques And Tools”**, 27th March 2008, EiCO Educational Researchers & Consultants, Permata Room, Hotel Istana Kuala Lumpur.

Workshop on **“Automation in Water & Wastewater Treatment System”**, 25th & 26th March 2008, Institut Pengurusan Alam Sekitar & Sumber Air, Universiti Teknologi Malaysia, Business and Advanced Technology Centre, UTM City Campus, Kuala Lumpur.

Training on **JKR EMS & Erosion and Sediment Control Plan (ESCP)**, 12 September 2007, Cawangan Alam Sekitar & Tenaga, Ibu Pejabat JKR Malaysia, Bilik Rafflesia, Menara Tun Ismail Mohamed Ali, Jalan Raja Laut, Kuala Lumpur.

Seminar on Variable Pressure Field Emission Scanning Electron Microscope (FESEM) & Energy Dispersive X-Ray Spectrometer (EDS), Universiti Sains Malaysia

Seminar on **“Practical Aspects of Gas Chromatography”**, Agilent Technologies, 29 June 2004, Grand Plaza Parkroyal (Penang)

Seminar on **“Chromatography-Methods Development & Troubleshooting”**, Agilent Technologies, 3rd March 2004, Holiday Villa Subang, Vintage Ballroom, Selangor

Operation And Maintenance of Industrial Wastewater Treatment Plants To Ensure Compliance With Regulatory Standards, Universiti Sains Malaysia and Department of Environment, 14-17 January 2002, Copthorne Orchid Hotel, Penang

Seminar On Sustainable Industrial Management, Department of Environment, 6-7 October 2003, Hotel Equatorial, Pulau Pinang.

ADDITIONAL INFORMATION

INSTRUMENTATION SKILLS

- In-situ analysis (i.e. pH, temp, conductivity etc.)
- BOD analysis
- COD analysis
- Turbidity analysis
- Oil and Grease
- Suspended Solids Analysis
- Heavy metal analysis using Atomic Absorption Spectrometry
- Zetasizer Nano ZS (Dynamic Light Scattering)
- NanoSight (Nanoparticle Tracking Analysis)

LANGUAGE

	Spoken	Written	Remark
• Bahasa Malaysia	Excellent	Excellent	Mother tongue
• English	Excellent	Excellent	Mother tongue
• French	Inter/Adv	Inter/Adv	Defl Dalf, & Univ. of Geneva (B2)
• Mandarin	Beginner	Beginner	Level 2 – USM

HOBBIES

- Reading
- Travelling

REFERENCES

1. **Professor Teng Tjoon Tow**
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School of Industrial Technology
USM, 11800 Penang
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2. **Puan Jariyah Hashim**
Former Director
Environmental, Health & Safety
Advanced Micro Devices Sdn Bhd
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3. **Dato' Ir. Wan Nazari Wan Jusoh**
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WNA Consultant Sdn Bhd
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4. **Professor Dr. Ahmad Farhan Mohd Sadullah**
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5. **Professor Dr. Hamidi Abdul Aziz**
Co-Supervisor
School of Civil Engineering, USM,
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Penang,
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6. **Dr. Serge Stoll**
Supervisor
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