



CURRICULUM VITAE



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Education

1. PhD. Chemical Engineering, 1995, Universiti Teknologi Malaysia
2. M.S. Plant and Process Design, 1986, University of Strathclyde (UK)

Areas of Interest

Process Safety and Technical Risk, Fire Retardants and Coatings, Energy Conservation, Separation and Process Engineering

Professional Qualification/ Membership/ Affiliation

1. Eur Ing. The European Federation of National Engineering Associates Corporate member (no.30051).
2. CEng. Engineering Council (UK). Corporate member (no. 47419).
3. CEnv. Society for Environment (UK). Corporate member (no.302).
4. MIChemE. Institution of Chemical Engineer (UK). Corporate member (no. 20090854),
5. MIWA. International Water Association. (IWA). Corporate member (no. 00995638).
6. MACS. American Chemical Society (ACS). Member (30069581).
7. AMIC. Malaysian Institute of Chemistry. Corporate member (no.A/1450/2643/96).
8. Fellow. RAMSP (Reliability, Availability, Maintainability and Safety) professional Society. http://www.ramss.org/index_files/Page320.htm

Appointments

Position	Duration
1. Head of Field in Engineering Process	2012-2015
2. Coordination Committee of MS ERP	2012-2015

Publications

Journals (30 recent journals)

1. S. Mustapha and M. El-Harbawi. Determination Safety Integrity Level (SIL) by Using Layer of Protection Analysis (LOPA) for Flood Emergency Risk Management. American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS) ISSN (Print) 2313-4410, ISSN (Online) 2313-4402. 2016. Multidisciplinary peer reviewed Journal. Calculated IF 0.3,
2. Sa'ari Mustapha, Mohanad El-Harbawi. Capability of GIS in the Analysis of Explosion Hazard from BLEVE Event in LPG Terminal. American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS) ISSN (Print) 2313-4410, 2016 .ISSN (Online) 2313-4402. Multidisciplinary peer reviewed Journal. Calculated IF 0.3,
3. Sa'ari Mustapha, Using Geographic Information Systems For Construction of LPG Installation : Case 1 Assessment Effects of Fire on Humans, onal Journal of Engineering Research and Technology, Vol 6 No1 , pp129-143, 2011. International IF=1.9586(Q1 SJR).
4. Mohanad El-Harbawi, Zatil Azhani Bt. Razali, Sy M Faiz B Sy M Fuzi2 and Sa'ari Mustapha Development Layer Protection Analysis Tool to Determine Safety Integrity Level In Proce3ss Industries. Journal of Applied Science.10 (24) 3319-3324, 2010.. IF=0.16 (Q4 SJR).
5. Mohanad El-Harbawi, Sa'ari Mustapha, Z A Rashid, S. A. Rashid. A A Sharif, T S Y Chong, Chemical process accident; Mathematical models; Visual Basic; GIS. Practice Periodical of

- Hazardous, Toxic, and Radioactive Waste Management Journal. Vol. 14, Issue 2, 2010.
6. Mohanad el-Harbawi, Saari Mustapha, T S Y Chong. SCIA. A GIS-Based Software for Assessing the Impact from Chemical Industrial Accident, Practice Periodical of Hazardous, Toxic, and Radioactive Waste, Vol 4, Issue 2, 2009, IF=0, H index=13.
 7. M. El Harbawi, S. Mustapha, TSY Chong, S Abdul Rashid, SA Kadir, Z. Abdul Rashid. Rapid Analysis of risk assessment using developed simulation of chemical industrial accident software package. International Journal of Environmental Science and Technology. Vol 5, No. 1, 53-64, 2008. IF=0.11 (Q4 SJR).
 8. L C Abdullah, L I Wong, M. Sa'ari, A Salmiaton, M S Abdul Rashid, Particulate matter dispersion haze occurrence potential studies at a local palm oil mill, International Journal of Environmental Science and Technology. Vol. 4, 271-278, 2007. IF=2.46 (Q1 SJR).
 9. Mustapha, S. El_Harbawai, M. SMAH: a new software package for evaluating major accident hazard, IEEE International Conference on Systems Man and Cybernetics. (1), Vol.3. 2260- 2267 2005. IF=3.28 (Q1 SJR).
 10. M El- Harbawi, Sa'ari Mustapha, S. Abdul Rashid, Thomas S. Y. Chong, Mohamed Al-Shalabi. Using geographic information systems in assessment of major hazards of liquefied petroleum gas. Disaster Prevention and Management. Vol.13 No.2, 117-129, 2004.
 11. Sa'ari Mustapha, Tan Chye Hee, Mohanad El-Harbawi, Abdul rashid sheriff, Thomas S.Y. Chong, Abdul Aziz Zakariaz, Razali Mispan. Chlorine Incident and Its Toxic Hazardous Chemical Release Impact in the Area Surrounding a Swimming-Pool Using GIS. Disaster Prevention and Management: An International Journal. Vol.13 No.5. 387-398, 2004. IF=0.37 (Q2 SJR).
 12. El-Harbawi M. Sa'ari, Thomas Choong S. Y. M., Chuah T. G., Abdul Rashid M. S.. Hazards Analysis of LPG Storage Installation in Universiti Putra Malaysia: A Preliminary Study. Journal The Institution of Engineers, Malaysia. Vol. 65, No.1/2, 43-49, 2004. IF=0.
 13. I M Shaluf, F. Ahmadun, R. Sheriff, S. Mustafa, A M Said. Fire and Explosion at mutual major hazard Installations: review of a case history. Journal of Loss Prevention in the Process Industries 16. 149-155. 2003. IF=0.827 (Q1 SJR).
 14. Ibrahim M. Shaluf, Fakhrul-razi Ahmadun and Sa'ari Mustapha. Techno305-311 logical disaster/s criteria and models. Disaster Prevention and Management: An International Journal. Vol. 12, No4. 305-311, 2003. IF=0.37(Q2 SJR).
 15. I M Shaluf, F. Ahmadun, S. Mustafa, R. Sheriff, A M Said. Technological man-made precondition phase model for major accidents. Disaster Prevention and Management: An International Journal. Vol.11, No. 5. 380-288.2002. IF=0.37 (Q2 SJR).
 16. I M Shaluf, F. Ahmadun, S. Mustafa, R. Sheriff, A M Said. Bright Spaklers fire and explosions: the lesson learned. Disaster Prevention and Management: An International Journal. Vol.11, No 3, 214-221.2002, IF=0.37 (Q2 SJR).
 17. T. Rihayat, M. Sa'ari, A.R. Suraya, M. Hilmi Mahmood, K Z H M Dahlan W M Z Wan Yunus, S.M. Sapuan, Synthesis and Thermal Characterization of Polyurethane/clay Nanocomposites Based on Palm Oil Polyol, Polymer-Plastic Technology and Engineering Publisher Taylor & Francis Vol.45, No.10-12, 1323-1326, 2006, IF=0.64(Q2 SJR).
 18. Rozanna, T G Chuah A Salmiah S Y Thomas Chong and M Sa'ari, Fatty Acids as Phase Change Materials (PCMs) for Thermal Energy Storage: A Review, International Journal of Green Energy, Vol. 1, No.4, 495-513, 2005.
 19. Omid Rowshanaie, Saari bin Mustapha and Hooman Rowshanaie, Generating Electricity from Flue gas Produced by Boilers through a Thermodynamic ORC (Organic Rankine Cycle) Driven by R245fa, Chemical Engineering & Process Technology, Vol 5, Issue 1000184, 2014. IF=0.811 (Q1 SJR).
 20. Omid Rowshanaie, Saari bin Mustapha, Kamarul Arifin Ahmad, Hooman Rowshanaie, Investigation of Thermodynamic Parameters of Organic Rankine Cycle (ORC) Designed Exclusively to Improve Generating Large-Scale Electricity Purpose, Open Journal of Chemical Engineering and Science (OJCES), Vol 1, Issue 3, pg18-, 2014. Google Scholar
 21. Omid Rowshanaie, Saari bin Mustapha, Kamarul Arifin Ahmad, Hooman Rowshanaie, Increasing Electricity Generation By Using Organic Rankine Cycle (ORC) Through the Fluegas of Boilers as a Heat Source, Journal of Multidisciplinary Engineering Science and Technology, Vol 1, Issue 4, 161-170, 2014. Research Gate google Scholar.
 22. Saari Mustapha, Review of Affinity Precipitation Methods, International Journal of Applied Chemistry (IJAC), Vol. 14, Issue 2, 2010. Scopus.
 23. S. Mustapha, B. Ahhuby, M. Rashid and I. Azni, Start-up Strategy of Thermophilic Upflow Anaerobic Filter For treating Palm Oil Mill Effluent, Trans IChemE : Process Safety and Environmental Protection, Vol.81, Part B, 2003. IF=0.955(Q1 SJR).

24. Mustapha, S. Ashhub, B. Zurina, Z., Characterisation Biomass Upflow Filters in Treatment of Palm Oil Mill Effluent, *Journal of Environmental Research and development*, Vol 8, No. 2 738-, 2012. IF=0.63(Q2 SJR).
25. Saari Mustapha, Haris, C. Semi-refined carrageenan (SRC), *Eucheuma Cottonii*, extraction, potassium hydroxide (KOH), *Journal of scientific and industrial research*. Vol 7, 2011, 53-58, 2010. IF=0.24 (Q3 SJR).
26. Syaubari, M.Saari, T G Chuah, G. Zulkifli, M. Ishak, and M. Sapuan, Preparation of Conjugated p-Aminobenzamidine on Thermosensitive Poly(NIPAM) by Irradiation Grafted Process, *Polymer and Plastic Technology and Engineering*, 47, 692-696, 2008. IF=0.64 (Q3 SJR).
27. Saari Mustapha, S T Zaufikar, M Kamil Yusof and M Firuz Ramli. Treatment of Phenol using Using Anolyte Solution generated from the Stel System. *Asian Journal of Microbiology, Biotechnology and Environmental Sciences*. Vol. 10, Issue 2, 379-384,2008. IF=0.11 (Q4 SJR)
28. Seyed Reza Saghravani, Ismail, Yusoff Sa'ari Mustapha, Seyed Fazlollah Saghravani. Estimating Groundwater Recharge Using Empirical Method: A Case Study in the Tropical Zone. *Sains Malaysia*. 42(5), 553, 2013. Scopus.
29. Seyed Reza Saghravani, Saari Mustapha, Mohamed Azwan Mohamed Zawawi. Shaharin Ibrahim. Simulation of Phosphorus Movement in Unconfined Aquifer by Means of Visual MODFLOW. *Journal of Computer Science*, Vol. 6, Issue 4, 2010. IF=0.34 (Q2 SJR).
30. Richard Adeolu Adesiji, Thamer, Nik Norsyahariati Daud, Sa'ari Mustapha. Impacts of oil palm cultivation on soil chemistry in a Malaysian tropical peatland. *Journal Advances in Environmental Biology*. Vol. 8 No. 21 pp. 369-373. 2014, SF=0.706 (Q1 SJR).

Conference Proceedings (30 recent Conference Proceedings)

1. Sa'ari Mustapha. Determination Safety Integrity Level (SIL) by Using Layer of Protection Analysis (LOPA) for Flood Emergency Risk Management. *Persidangan Kajian Bencana Banjir* ,. UTM-Kementerian Pengajian Tinggi. Putrajaya. 4-8 April, 2016.
2. Sa'ari Mustapha. Catastrophic Release of Diesel and Fuel Oil From Their Storage Tanks and Effect to Surrounding,. 1st International Kelantan Health Conference- Disaster: Managing the Unexpected. Kota Bharu, Kelantan. Kelantan Public Health Association. 28-30 July, 2015.
3. Sa'ari Mustapha. The Development of Industrial Safety in Malaysia for New Century. *International Conference on Emergency Response and Disaster Prevention*. National Yulin University of Science Technology. Taiwan. 1 October 2009.
4. Mustapha S, El-Harbawi, M. Thomas, Abdul Rashid, Sharifah. Assessment of Major Accident in Process Using SCIA Software. *Proceeding of the 20th Symposium of Malaysian Chemical Engineers*. The Malaysian Chemical Engineer & UiTM. 19-21 December, 2006.
5. Syaubari, Sa'ari, Chuah TG, Zulkafli and Ishak. Modeling and Kinetic Determination in Affinity Precipitation of Trypsin. *Konferensi Kebangsaan Biologi Bermatematik*. Uniten, Bangi, 22-23 August 2006.
6. Sa'ari Mustapha, Izani Mohd Zain. Safety Report: Maintaining Standard and Reviewing. *Hazards XVII Process Safety-Fulfilling Our Responsibilities*, UMIST, Manchester, UK. Institution of Chemical Engineer (IChemE). 25-27 March 2003. Manchester,
7. El-Harbawi M., Mustapha S., Idris A., Chuah T. G., and Jameel A. T: Nonlinear Stability, Rupture and Morphology of Thin Liquid Films on Solid Surface. *Malaysian Science and Technology Congress (MSTC)*,2002, Johor Bahru.
8. Sa'ari Mustapha, Fakhrol Razi Ahmadun, Mohd Halim Shah Ismail. Prospect of Safety Program in Malaysia. *The 2nd International Conference, Disaster Management: Preparing and Planning For the Future*. May 3-5, 2001. Surabaya, Indonesia.
9. Sa'ari Mustapha & Robert Mc Donnel. On-site and Off-site Emergency Response Plan. *Seminar on Quality, Safety and Environment Management*. IKM. 1996. Ipoh.
10. Sa'ari Mustapha & Yahya Sukirman. Mathematical Modelling of Coupling Flow and Cake Formation in Filtration Process. *11th. Symposium Malaysian Chemical Engineer*. The Malaysian Chemical Engineer & UTM. 18-19 June, 1995. Kuala Terengganu.
11. Sa'ari Mustapha and Hamdani Saidi. Filtration Behaviour of Different Phase of Slurry,



Proceeding Vol II-New Products & Processes. Kongres Sains dan Teknologi Malaysi, 1994. 195-203. Kuala Lumpur.

12. Sa'ari bin Mustapha & Radzuan Junin. Particle Size Analysis and Its Application in Chemical and Petroleum Engineering. Seminar on Modern Method of Particle Characterisation. Faculty of Chemical and Natural Resources Engineering, Universiti Teknologi Malaysia (UTM). UTM, Kuala Lumpur. 1986.

Books (If any)

1. Mohanad El_Harbawi, Sa'ari Mustapha. Process Safety and Loss Prevention: *Design and Development of an Integrated Chemical Accident System for Monitoring Risk Potential of Hazard Installation*. 2010. LAMBERT Academic Publishing ISBN: 978-3-8383-3820-0

Chapter in Books (If any)

1. Sa'ari Mustapha, Mohd Kamil Yusoff and Mohammad Firuz Ramli. "Ecological Risk". Selected Essay in Environmental Sciences and Management Toward a Sustainable Tropical Environment. 2006. Universiti Putra Malaysia. ISBN: 983-3455-48-4.
2. Mohd Kamil Yusoff , Sa'ari Mustapha, and Mohammad Firuz Ramli ". "Water Quality Status of Malaysia Rivers" Selected Essay in Environmental Sciences and Management Toward a Sustainable Tropical Environment. 2006. Universiti Putra Malaysia. ISBN: 983-3455-48-4.
3. Mohammad Firuz Ramli Mohd Kamil Yusoff Sa'ari Mustapha. "Water Quality Status of Malaysia Rivers" Selected Essay in Environmental Sciences and Management Toward a Sustainable Tropical Environment. 2006. Universiti Putra Putra Malaysia. ISBN: 983-3455-48-4.
4. Sa'ari Mustapha and Izani Mohd Zain. Safety Report Maintaining Standard and Reviewing. "Hazards XVII. Process Safety-Fulfilling Our Responsibilities Result". A Google Books. 2003. North Western Branch, Institution of Chemical ISBN 0 85295 459 X.

Research Grants

No	Project Title	Amount (RM)	Year	Source of Fund
1.	Determine Safety Integrity Level (SIL) by Using Layer of Protection Analysis (LOPA) for Flood Emergency Risk Management	RM50,000	2014-2015	PGRS
2.	Fundamental Study of Temperature and Heat Flux Measurements made in Aeronautical-Certified Propane-Air Burner	RM86,500	2011-2013	FGRS
3.	In Situ Treatment Using Green Polymers to Enhance Sweep Efficiency of Groundwater Contaminants	RM15000	2009-2010	RUGS-Initiative 4
4.	Thermosetting Behavior of Nanoclay Aerogel Polymer Composite From Malaysia's Bentonite Clay	RM32,000	2007-2008	RUGS
5.	Electron Beam Irradiated thermal resistance polyurethane-clay nanocomposite	RM219,194	2004-2006	Esciencefund
6.	Developing a GIS for monitoring risk potential hazard installation	RM166,500	2003-2004	IRPA
7.	Electro-chemical activation process for destruction of toxic and hazardous waste	RM179,000	2001-2003	IRPA
	Development of Equipment for removal of solids and emulsion in palm oil mill effluent	RM237,000	1998-2000	IRPA

Awards/Recognition (Current)

Num	Name of awards	Title	Award Authority	Award Type	Year
1.	Highly Commended Award under category Bio-processing	Title of the project 'Synthesized Poly (NIPAM) by Electron Beam Irradiation for Affinity Precipitation etc".	The IChemE awards 2009 awards recognise and reward chemical engineering innovation and excellence.	International	2009
2.	Gold Medal	New Prospective Polyurethane/ clay Nano-composites for Fire Retardant To Complying Sustainable Development	37 th International Exhibition of Inventions New Techniques and Products (geneve) 2009 Switzerland	International	2009
3,	Best Assignment Speaker	A Club Meeting	Putra Toastmaster Club	University	2012
4.	Highly Commended Award for Published Article	Bright Sparkler Fire and Explosions: the lessons learned	Literi Club	International	2003
5.	Invited speaker and traveling Award	Participating the Hazards XVII Process Safety-Fulfilling Our Responsibilities, UMIST, M	Institution of Chemical Engineer (IChemE) Manchester, UK.	International	2003
6.	Invited speaker and traveling Award: International Conference on Disaster Prevention and Emergency Response	The Development of Industrial Safety in Malaysia For New Century.	National Taiwan University Science and Technology	Regional	2009
7.	Traveling award	Visit to UMIST and Health and Safety Laboratory (HSE).	CICHE : Higher Education Link(HEL) , British Council	International	2002
8.	Traveling award:	Visit to Kyoto University, Kyoto	JSPS-VCC	Regional	2001



and Otsu cities

Professional Services/Consultation

No	Year	Title	Authority	Amount
1.	2009	Decarbonisation plant, F&G Oleochemical Sdn Bhd. Pelabuhan Kuantan, Pahang	AMR Environmental Sdn Bhd	RM11,000
2.	2008	Kualiti Alam Modularize Incinerator (KAMI) Plant. Seremban, Negeri Sembilan	AMR Environmental Sdn Bhd	RM8,000
3.	2008	Urea Formadehyde Project. Bentung, Pahang	LanKenV Environment Sdn Bhd	RM17,000
4.	2006	Kelana Jaya landfill project. Selangor	UPUM	RM5,000
5.	2007	Investigation on the impact of LNG dispersion. MLNG. Bintulu, Sarawak	MLNG, Bintulu, Sarawak	RM21,000
6.	2007	EIA Jalan Baru Kuala Krai-Kota Bharu. Field of solid waste management	Padang Maju Bina Sdn Bhd. PES, UPM	RM3,000
7.	2006	Development of a Coastal Resources Risk Index (CORRI) For Assessing the impact of water pollution on the productivity of natural coastal resources'. Field of Risk Development Index	Institut Penyelidikan Hidraulik Kebangsaan Malaysia (NAHRIM)	RM9,000
8.	2005	Naddi Hot Installation Management System Databases, MACREAS	MACREAS to the Cilix Corporation Sdn Bhd	RM5,000

9.	2005	DEIA Proposed Paper Recycling Plant at Bentong, Pahang. Field of Risk assessment & solid waste	EnviroLift FT Services Sdn Bhd.	RM3,000
10.	2004	EIA report for Gas Bottling Project at Bukit Kayu Hitam, Kedah. Field of Quantitative Risk Assessment(QRA)	Keloil PTT LPG Sdn Bhd	RM3,000
11.	2004	CIMAH Safety Reports and Emergency Response Plant(ERP), For Gas Bottling project at Bukit Kayu Hitam, Kedah	Keloil PTT LPG Sdn Bhd	RM3,000
12.	2004	EIA project of Industrial Solvent Recycle at Port Kelang. Field of Quantitative Risk Assessment(QRA)	Nature Energy Products Sdn. Bhd.	RM2,000
13.	2004	DEIA of the Proposed Resources of the proposed Resources Recovery Center /waste Energy (RRC/WTC) Plant Mukim Semenyit Daerah Ulu Langat. Field of Quantitative Risk Assessment(QRA)	RRC/WtE Lots 3041& 3042, Mukim Ulu Semenyih. Recycle Energy Sdn. Bhd.	RM5,000
14.	2004	Simulation of Phosphate Concentration in the Lake Due to the Excavation Activity. DEIA for Rehabilitation of Ringlet Reservoir	TNB Research Sdn. Bhd.	RM6,000
15.	2004	CIMAH Safety Report and On Site Emergency Response Plans (ERP) for the Lambir Water Treatment Plant (Miri), and CIMAH Safety Report and On Site Emergency Response Plan (ERP) for the Nyabau Water Treatment Plant (Bintulu).	LAKU Management Sdn Bhd.	RM44,000

Student Supervision

PhD (Main Supervisor)

No.	Name	Title	Status
1.	Mohanad M.A.A. El-Harbawi	Development of A GIS Tools for Monitoring Risk Potential of Hazard Installation	Graduated
2.	Syaubari	Preparation of Conjugated Thermo-Sensitive Poly (NIPAM) and Evaluation of Its Affinity Precipitation Towards Selected Enzyme	Graduated
3.	Teuku Rihayat	Development of Polyurethane/Clay Nano composite Based on Palm Oil Polyol	Graduated
4.	Bashir Ali Ashhuby	Studies on The Mesophilic and Thermophilic	Graduated



Student Supervision

PhD (Main Supervisor)

No.	Name	Title	Status
		Upflow Anaerobic Biofiltration of Palm Oil Mill Effluent	

MS with thesis (Main Supervisor)

No.	Name	Title	Status
1.	Omid Rowshanaie	Generating Electricity From Flue Gas Produced by Boilers through ORC	Graduated
2.	Seyed Reza Saghravani	Study on Barrier Properties to Control Mobility of Contaminant into Ground Water	Graduated
3.	Abdul Hamid N Elghemi	Kinetic Study on the Thermal Degredation of Polyvinyl Pyrrolidone (pvp)	Graduated
4.	Mohanad M.A.A. El-Harbawi	Stability of Thin Liquid Film Under Effect of Apolar and Electrostatic Forces on a Horizontal Plane	Graduated
5.	Zulfikar St	Determination The Effect of Chlorine Ion on Degradation of Phenol from Wastewater Treatment Using Electrochemical Activation Process	Graduated
6.	Wong Lee Ing	The Dispersion particulate Matter from Palm Processing Plant	Graduated

MS without Thesis (Main Supervisor)

No.	Name	Title	Status
1.	Abdul Rahman Mahmud	Risk Assessment Study For Storage Explosive	Graduated
2.	Nur Syuhaida Mohd Shamsudin	Sanitary Landfill Leachate Treatment Using Chemical Treatment	Graduated
3.	Balavmani nV Thevar	Streamlined Life Cycle Assessment of Natural Rubber Latex Examination Gloves To Study Latex Allergy Effect Among Healthcare Personnel and Measures To Reduce Water Extractable Proteins in Globe Factories	Graduated
4.	Mahadi Ngah	Chemical Health Risk Assessment and thermal Comfort At Banbury Mixing Area at DMBB Berhad	Graduated
5.	Morad Farhat Elfantazi	Determination of Trace Metals (pb, Cu, and NI)	Graduated





No.	Name	Title	Status
		In (UMP Lake Water) by Co-Precipitation Using (Gallium Hydroxide)	

