



CURRICULUM VITAE



Dr. Muhammad Razif bin Mahadi

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Education

1. Ph.D. Mechatronics, University of Southern Queensland, Australia, 2012
2. MSc. Biosystems Engineering, University of Manitoba, Canada, 2005
3. BSc. Mechanical Engineering, California State University, Sacramento, USA, 2000

Area of Interest

1. Design of agricultural machinery
2. Control and automation

Professional Qualification/ Membership/ Affiliation

1. Member (Professional), Malaysian Society of Agricultural Engineers, MSAE, 2010 – present
2. Member, Association of Academic Staffs 'Persatuan Pegawai Akademik' (PPA), UPM, 2015 - present
3. Graduate Engineer, Mechanical Engineering, Board of Engineers Malaysia, 85487A

Appointments

Employment:

No	Position	Year	Organization
1	Senior Lecturer	Feb, 2012 - present	Universiti Putra Malaysia (UPM)
2	Tutor	Mar, 2002 – Jan, 2012	Universiti Putra Malaysia (UPM)
3	Mechanical Engineer	July, 2001 – Feb, 2002	Crystal Clear Technology Sdn. Bhd

4	Process Engineer	Mar, 2000 – June, 2001	Acqutek Electronics Sdn. Bhd
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Committee and Administration:

No	Position	Year	Organization
1	Vice President (Technical)	Term: 2015-2017 (current)	Malaysian Society of Agricultural Engineers (MSAE)
2	Vice President (Administration)	Term: 2013-2015	Malaysian Society of Agricultural Engineers (MSAE)
3	Coordinator for Research	Jan, 2013 – Dec, 2014; Jan, 2015 – Dec, 2016	Department of Biological and Agricultural Engineering (UPM)
4	Director for Logistic, 3 rd International Conference of Agricultural and Food Engineering	2015-2016 (current)	Department of Biological and Agricultural Engineering (UPM)
5	2 nd Tresurer, PAWEES-INWEP Joint International Conference, 2015	2015	Department of Biological and Agricultural Engineering (UPM) & Malaysian Society of Agricultural Engineers (MSAE)
5	Deputy Director for Logistic, 2 nd International Conference of Agricultural and Food Engineering	2013-2014	Department of Biological and Agricultural Engineering (UPM)
6	Webmaster, 1 st International Conference of Agricultural and Food Engineering	2011-2012	Department of Biological and Agricultural Engineering (UPM)

Publications

Journals:

1. Rosli, M. R. M., **Mahadi, M. R.**, Misri, M. A. & Wayayok, A. (2016). Initial Design of an Automated System for Paddy Seedling Placement in a Germination Tray. Jurnal Teknologi 78 (1-2): 119-123.

2. Bashar, Z. U., Wayayok, A., Amin, M. S. M., **Mahadi, M. R.** & Bande, Y. M. (2016). SRI-TRAY: Breakthrough in Nursery Management for the System of Rice Intensification. *Jurnal Teknologi* 78 (1-2): 65-71.
3. Bashar, Z. U., Wayayok, A., Amin, M. S. M., **Mahadi, M. R.** (2015). Single Seedling Nursery Tray: An Innovative to Quality Seedling Raising Technique for SRI Transplanting Machine. *Research Journal of Applied Sciences, Engineering and Technology* 10 (11): 1258-1265.
4. Alsayed, A., **Mahadi, M. R.**, Wayayok, A. & Wan Ismail, W. A. (2015). Development of a Hybrid Ultrasonic and Optical Sensing for Precision Linear Displacement Measurement. *Journal of Applied Sciences* 15 (8): 1059-1072.
5. Chatta, S. H., Hasfalina, C. M., Lee, T. S., Mirani, B. N. & **Mahadi, M. R.** (2015). Effective and Economic Storage of Wheat Seed in Stray-Clay Bin. *International Journal of Bioscience*, 6(3), p83.
6. Chatta, S.H., Hasfalina, C.M., **Mahadi, M.R.**, Mirani, B.N. & Lee, T.S. (2015). Quality Change of Wheat Grain During Storage in a Ferrocement Bin. *ARPN Journal of Agricultural and Biological Science*, 10(8), p313.
7. Alsayed, A., & **Mahadi, M.R.** (2014). Precise Positioning Based on Pixel Differential in Linear Optical Sensor Array. *Agriculture and Agricultural Science Procedia*, 2, 10-17.
8. Bashar, Z. U., Wayayok, A., Amin, M. S. M., & **Mahadi, M.R.** (2014). Quality Seed: An Innovative Sorting Technique to Sustainable, Uniform and Effective Seedling Establishment in Nursery for System of Rice Intensification. *Journal of Agricultural Science*, 6(7), p185.
9. Chatta, S.H., Hasfalina, C.M., Lee, T.S., Mirani, B.N. & **Mahadi, M.R.** (2014). Impact of Concrete Block Bin on Wheat Storage Losses and Food Security. *Journal of Biodiversity and Environmental Science*, 5(6), p248.

Conferences Proceedings:

1. Shamsi, S. M., **Mahadi, M. R.**, Wayayok, A and Abdullah, A. F., "Development and Integration of Global Positioning System (GPS) for Fertilizer Application," 2nd International Conference on Agricultural and Food Engineering, 1-3 December, Berjaya Times Square Hotel Malaysia, Kuala Lumpur Malaysia 2014.
2. **Mahadi, R.** and Billingsley, J. Precise Measurement of Displacement using Pixels. *Proceedings of World Academy of Science, Engineering and Technology*, Bangkok Thailand, Volume 29, 29 May 2008, pp307-309.

Research Grants

Project Leader:

No.	Project Title	Amount (RM)	Year	Source of Fund
1	Ingenious Mechanization and Automation in Rice Production Based on Single Seedling Transplanting Practice	225,000	Jan, 2015-Jan, 2017	Putra Grant-IPB (UPM)
2	Robust Absolute Position Encoding and Velocity Deduction for Remote Monitoring in Precision Farming	88,000	May, 2013-Oct, 2015	FRGS (Ministry of Higher Education)
3	Development of a Small Scale Semiautonomous Boat for Water Resource Studies	22,000	July, 2012 – June 2013	RUGS (UPM)

Awards/ Recognitions

No	Name of Awards	Title	Award Authority	Award Type	Year
1	Bronze Medal, Invention and Innovation Awards 2014	Single Seedling Nursery tray for SRI Planting Machine; Aimrun Wayayok, Usma Bashar Zubairu, Mohd Amin Mohd Soom, Mohd Razif Mahadi	Malaysian Association of Research Scientists	National	20-22 February 2014

Student Supervisions

Doctor of Philosophy (Main Supervisor)

No	Name	Title	Status
1	Tukur Daiyabu Abdulkadir	Design and Development of a Mechanized Paddy Transplanter based on System of Rice Intensification	In Progress

Doctor of Philosophy (Co-Supervisor)

No	Name	Title	Status
1	Shakeel Hussain Chatta	Effect of storage methods on grain quality of wheat in Sindh, Pakistan	Graduated (2015)
2	Sharance a/I Nai Sawat	Monitoring of plantation field using mobile robot with integrated inertial navigation system and internet	In Progress

		based system	
3	Haider Fawzi Mahmood Al-Shakarchi	Harvesting Energy from the Vibration of Disc Plow	In Progress
4	Hairul Nazmin bin Nasruddin	Simulation of Building Fire and Smoke Propagation Through Computational Fluid Dynamics	In Progress
5	Momtaz Isaak Hommod	'To be decided'	In Progress
6	Smaila Suleiman	Design, Development and Evaluation of a high clearance Rotavator for the System of Rice Intensification (SRI)	In Progress
6	Farkad Morteda Hameed Almusawi	Traction Mechanics of Low Bearing Pressure Agricultural Tyre on Soft Terrain	In Progress

Master by Research (Main Supervisor)

No	Name	Title	Status
1	Abdallah Al-Sayed	Robust Absolute Position Encoding and Velocity Deduction for Remote Monitoring in Precision Farming	Graduated (2015)
2	Siti Mariam binti Shamsi	Design and Development of Variable Rate Application (VRA) Knapsack Sprayer for Smart Farming	In Progress
3	Muhammad Afiq bin Misri	Design and Development of an Applicator for the Optimized Nanocarrier Embedded with Nanosensor in Actual Plantation	In Progress

Master by Coursework (Main Supervisor)

No	Name	Project Title	Status
1	Natasha Noorazrin binti Mohd Basir	Emergency preparedness for industrial incident involving HAZMAT [MS Emergency Response and Planning]	Graduated (2014)
2	Mohd Noor faizal Bin Mohd Nadzir	Development of a Comprehensive Audit on Safety at Residential College [MS Emergency Response and Planning]	Graduated (2015)