

## Curriculum Vitae

### Dr. Hemanatha P W Jayasuriya

Associate Professor of Agricultural Engineering  
Department of Soils, Water and agricultural Engineering  
College of Agricultural and Marine Sciences  
Sultan Qaboos University, PO Box 34, Al-Khod 123, Oman

**Tel:** 2414 1223; **GSM:** +968 99898734; Email: [esmaily@squ.edu.om](mailto:esmaily@squ.edu.om)



### 1. PERSONAL DETAILS

<b>Full name</b>	Dr. Hemanatha P W Jayasuriya
<b>Present position</b>	Associate Professor in Agricultural Engineering, Department of Soils Water and Agricultural Engineering (SWAE), College of Agricultural and Marine Sciences (CAMS), Sultan Qaboos University (SQU)
<b>Address</b>	College of Agricultural and Marine Sciences, Sultan Qaboos University, Al-Khoud 123, PO Box 34, Sultanate of Oman
<b>Date of birth</b>	17/07/1958
<b>Nationality</b>	Sri Lankan
<b>Date of appointment</b>	2009
<b>Degrees awarded (years)</b>	<b>PhD</b> in Agricultural Engineering, Asian Institute of Technology (AIT), Thailand (1997 - 1999)
	<b>MSc.</b> in Agricultural Engineering, Asian Institute of Technology (AIT), Thailand (1988 - 1989)
	<b>BSc.</b> in Mechanical-Production Engineering, University of Peradeniya, Sri Lanka (1979 - 1983)
<b>Work experience (Position and Dates)</b>	2021- to date - Associate Professor of Agricultural Engineering, Dept. of Soils, Water & Agricultural Engineering, Sultan Qaboos University, Oman
	2014-2021 - Associate Professor and Head, Dept. of Soils, Water & Agricultural Engineering, Sultan Qaboos University, Oman
	2009-2014 - Asst. Professor, Agricultural Engineering Program at SWAE, Sultan Qaboos University, Oman
	2008-2009 - Associate Professor, Agric. Systems and Engineering (ASE) program at Asian Institute of Technology (AIT), Bangkok, Thailand (Post graduate Institute)
	2003-2008 - Asst. Professor, Agric. Systems and Engineering (ASE) program at Asian Institute of Technology (AIT), Bangkok, Thailand (Post graduate Institute)
	2000-2002 - Senior Lecturer-1, Acting Dean, Faculty of Engineering, and Head, Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, University of Ruhuna, Sri Lanka.
	1990-2000 - Lecturer/Senior Lecturer, Department of Mechanical Engineering, Faculty of Engineering, University of Peradeniya, Sri Lanka
	1985-1990 – Senior Mechanical Engineer - Sri Lanka Sugar Corporation, Mechanical Engineer, Kantale and Sevanagala sugar factories.
	1984-1985 – Mechanical Engineer - Perinco Engineering Consultant Co. Ltd. Peradeniya, Sri Lanka

<b>Research Interests and Professional Expertise</b>	<ul style="list-style-type: none"><li>• Design, Development and Testing of Agricultural Machinery</li><li>• Precision and Controlled Environment Agriculture</li><li>• Terramechanics, soil-tool and -wheel interactions,</li><li>• Systems analysis and modeling</li><li>• Power, Energy use in Agriculture and Bio energy</li><li>• Ergonomics application in Agriculture</li><li>• Pedagogical practices and innovative techniques for teaching project type courses</li></ul>		
<b>Websites</b>  ORCID G.Scholar ResearchGate WoS/Publons Scopus Detailed CV	<a href="https://www.squ.edu.om/agr/Departments/Soils-Water-and-Agricultural-Engineering/Faculties/Dr-Hemanatha-Jayasuriya">https://www.squ.edu.om/agr/Departments/Soils-Water-and-Agricultural-Engineering/Faculties/Dr-Hemanatha-Jayasuriya</a> <a href="https://orcid.org/0000-0003-2177-2344">https://orcid.org/0000-0003-2177-2344</a> <a href="https://scholar.google.com/citations?user=tD34wgcAAAAJ&amp;hl=en">https://scholar.google.com/citations?user=tD34wgcAAAAJ&amp;hl=en</a> <a href="https://www.researchgate.net/profile/Hemantha_Jayasuriya">https://www.researchgate.net/profile/Hemantha_Jayasuriya</a> WoS ID ABA-3081-2020, <a href="https://publons.com/dashboard/summary/">https://publons.com/dashboard/summary/</a> <a href="https://www.scopus.com/authid/detail.uri?authorId=6701715909">https://www.scopus.com/authid/detail.uri?authorId=6701715909</a> <a href="https://www.squ.edu.om/Portals/10/SWAE%20Faculties/CV%20Hemanatha%20Jayasuriya%20July%202020%20-%20Short.pdf?ver=2020-08-18-213948-870">https://www.squ.edu.om/Portals/10/SWAE%20Faculties/CV%20Hemanatha%20Jayasuriya%20July%202020%20-%20Short.pdf?ver=2020-08-18-213948-870</a>		
<b>2. Awards, Honors, Recognition and Achievements</b>			
<b>#</b>	<b>Year</b>	<b>Award, achievement, recognition</b>	<b>Source</b>
<b>1</b>	<b>2019</b>	Member of Editorial board, Journal of Agricultural and marine sciences (JAMS)	CAMS, SQU
<b>2</b>	<b>2015</b>	Corporate Editor, Journal of Agricultural Mechanization in Asia, Africa and Latin America (AMA)	AMA, Japan
<b>3</b>	<b>2010</b>	Member of Editorial Board, Agricultural Engineering International: The CIGR Journal.	CIGR -Ejournal
<b>4</b>	<b>2014</b>	Head, Dept. of Soils, Water & Agricultural Engineering, Sultan Qaboos University, Oman	SQU, Oman
<b>5</b>	<b>2010</b>	Vice President (Energy, Environment and Emerging Technologies), Asian Association for Agricultural Engineers (AAAE)	AAAE
<b>6</b>	<b>2007</b>	Treasurer, Asian Association of Agricultural Engineers (AAAE)	AAAE
<b>7</b>	<b>2000</b>	Head, Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, University of Ruhuna, Sri Lanka.	University of Ruhuna, Sri Lanka
<b>8</b>	<b>1997</b>	Government of the Netherlands full scholarship (TCDC) to pursue PhD in Agricultural Engineering at AIT, Thailand	Asian Institute of Technology (AIT), Thailand
	<b>1992</b>	Chartered Mechanical Engineer (C. Eng.), Member of Institute of Engineers (MIE)	Institute of Engineers Sri Lanka
	<b>1988</b>	Government of Switzerland full scholarship to pursue MSc in Agricultural Engineering at AIT, Thailand	Asian Institute of Technology (AIT), Thailand
	<b>1983</b>	Top student in Mechanical-Production Engineering	Faculty of Engineering, University of Peradniya, Sri Lanka
<b>3. Teaching</b>			
<b>Teaching courses at SQU</b>			
<b>Undergraduate courses</b>		<b>Postgraduate courses</b>	

SWAE2307 Workshop Practice I (current)		SWAE6301 Advance Controlled Environment Agriculture	
SWAE3307 Workshop Practice II (current)		SWAE6302 Precision Agriculture	
SWAE4300 Design Projects I (current)		SWAE6009 Advanced Topics in Soils, Water and Agricultural Engineering	
SWAE4301 Design Projects II (current)			
SWAE4902 SWAE Research Projects (Coordinator)			
4. Scholarly Activities			
Selected Refereed Journal Publications			
1	Alaa Al Hinai, <b>Hemanatha Jayasuriya</b> , (2021). Enhancing economic productivity of irrigation water by product value addition: Case of dates. Journal of the Saudi Society of Agricultural Sciences, Available online 29 June 2021, <a href="https://doi.org/10.1016/j.jssas.2021.06.007">https://doi.org/10.1016/j.jssas.2021.06.007</a>		
2	AM Al-Ismaili, MA Fadel, <b>H Jayasuriya</b> , LHJ Jeewantha, A Al-Mahdouri, (2021). Potential reduction in water consumption of greenhouse evaporative coolers in arid areas via earth-tube heat exchangers. Journal of Arid Land 13 (4), 388-396.		
3	<b>Jayasuriya, H P W</b> , (2021). Effect of COVID-19 pandemic situation on the teaching of Graduation Projects and Internship type courses in undergraduate degree programs, Journal of Agricultural and Marine Sciences, 21 (1), 62-65.		
4	AA Hinai, <b>H Jayasuriya</b> , H Kotagama, (2020). Agritourism Potentials in Oman: An Overview with Visionary for Adoption, International Journal of Social and Business Sciences, World Academy of Science, Engineering and Technology, 14 (12), 1172-1175.		
5	Alaa Al-Waleed Mohammed Al-Hinai, <b>Hemanatha Jayasuriya</b> , (2020). Development of a stripper machine for Al-Mabsili dates and evaluation of human interactions and performances, Advances in Intelligent Systems and Computing, Springer book series (AISC), Volume 1018, pp. 737-742.		
6	Al-Rahbi, S., YA Al-Mulla, <b>H Jayasuriya</b> , B Choudri, (2019). Analysis of true-color images from unmanned aerial vehicle to assess salinity stress on date palm Journal of Applied Remote Sensing 13 (3), 034514, <a href="https://doi.org/10.1117/1.JRS.13.034514">https://doi.org/10.1117/1.JRS.13.034514</a> .		
7	<b>Jayasuriya H. P. W.</b> , Ahmed Al-Busaidi, and Mushtaque Ahmed, (2018) Development of a Decision Support System for Precision Management of Conjunctive Use of Treated Wastewater for Irrigation in Oman. Journal of Agricultural and Marine Sciences (JAMS), 22 (1), 58-62.		
8	<b>Jayasuriya H P W</b> , AM Al-Ismaili, T Al-Shukaili (2017) Farming Systems in Oman and Mechanization Potentials. Journal of Agricultural Mechanization in Asia, Africa and Latin America, 48 (2), 66-74.		
9	<b>Jayasuriya, H.P.W.</b> , and K Sangpradit. (2014). Dynamic performance and ride comfort evaluation of the seat suspension system in a small agricultural tractor to attenuate low-frequency vibration transmission, Agricultural Engineering International: CIGR Journal 16 (1), 207-216.		
10	Md. Rokunuzzaman and <b>H. P. W. Jayasuriya</b> , (2013). Development of a low cost machine vision system for sorting of tomatoes. Agricultural Engineering International: The CIGR Journal. Vol. 15(1), pages 173-180.		
Refereed Conference Papers/ Proceedings			
1	Alaa Al-Waleed Mohammed Al-Hinai and <b>Hemanatha Jayasuriya</b> , (2021). Evaluating the Benefits of Value Addition on Land, Water and Labor Productivities under Arid Agriculture in Oman. 5th International Conference of the International Commission of Agricultural and Biosystems Engineering (CIGR), Québec City, Canada – May 11-14, 2021.		
2	<b>Hemanatha PW Jayasuriya</b> , Alaa Al-Hinai, Seif Al-Adawi, Adel Al-Mahdouri, (2018). Comparison of ergonomic performance evaluation in mechanized and traditional date stripping processes, Oral presentation at ASABE Annual International Meeting July 29-Aug 1, Michigan, USA. (ASABE Library paper)		

3	<b>Hemanatha Jayasuriya</b> , Ahmed Al-Busaidi, Mushtaque Ahmed, (2018). Precision irrigation management through conjunctive use of treated wastewater and groundwater in Oman. 14th International Conference on Precision Agriculture (ICPA 2018), June 24-27, Le Centre Sheraton, Montreal Canada.
4	<b>Hemanatha P W Jayasuriya</b> , Malik Mohammed Al-Wardy, Seif Salim Al-Adawi, and Khalifa AlHinai, (2014). GIS Mapping of Soil Compaction and Moisture Distribution for Precision Tillage and Irrigation Management. Oral presentation and in proceedings of the 12th International Conference on Precision Agriculture, Sacramento, California (USA) July 21-23.
<b>Book Chapters</b>	
1	Alaa Al-Waleed Mohammed Al-Hinai, <b>Hemanatha Jayasuriya</b> , (2020). Development of a stripper machine for Al-Mabsili dates and evaluation of human interactions and performances, Advances in Intelligent Systems and Computing, Springer book series (AISC), Volume 1018, pp. 737-742. <a href="https://link.springer.com/chapter/10.1007/978-3-030-25629-6_115">https://link.springer.com/chapter/10.1007/978-3-030-25629-6_115</a>
2	Al-Hinai, A., <b>Jayasuriya, H.</b> , Al-Adawi, S., Al-Mahdouri, A., (2019). Ergonomic Performance Evaluation of Date Stripping Process, Advances in Physical Ergonomics & Human Factors, Springer book series (AISC), volume 789, pp. 74-84. <a href="https://link.springer.com/chapter/10.1007/978-3319-94484-5_8">https://link.springer.com/chapter/10.1007/978-3319-94484-5_8</a>
<b>Books</b>	
1	Manickavasagan, A., <b>H. P. W. Jayasuriya</b> (Editors), 2014. "Imaging with Electromagnetic Spectrum: Applications in Food and Agriculture", Springer. <a href="https://link.springer.com/content/pdf/10.1007/978-3-64254888-8.pdf">https://link.springer.com/content/pdf/10.1007/978-3-64254888-8.pdf</a>
2	AL-Mulla Y.A., M. Ahmed, <b>H. Jayasuriya</b> , (Editors) 2013. Proceedings of International Conference on Agricultural Engineering. ACTA Horticulture 1054. Publisher: International Society for Horticultural Science (ISHS).
3	V. M. Salokhe, <b>H. P. W. Jayasuriya</b> , and P. Soni, (Editors), 2007. Proceedings of the International Agricultural Engineering Conference, Dec 3-6 2007, Bangkok, Thailand., "Cutting Edge Technologies and Innovations on Sustainable Resource for World of Food Sufficiency", ISBN 978-974-8257-49-5, 2007.
<b>Keynote / Invited Presentations</b>	
1	<b>Hemanatha P W Jayasuriya</b> (2015): Keynote. "Engineering Education: Trends and Necessity for Accreditation", Program assisting Washington Accord Accreditation Process, Faculty of Engineering, University of Ruhuna, Sri Lanka. July 20, 2015.
2	<b>Hemanatha P W Jayasuriya</b> (2014): Keynote. "Innovative Farming Technologies and Research to Meet Challenges of Agricultural Production", International Conference on Agriculture and Engineering. Organized by Thai Society of Agricultural Engineers (TSAE-2014) April 2-4, 2014 in Phra Nakhon, Si Ayutthaya, Thailand
3	<b>Hemanatha P W Jayasuriya</b> (2013): Invited. "Precision Farming: Traditional and modern techniques and what is appropriate?", in the Seminar series organized by Faculty of Engineering, Raja Mangala University of Technology Thanyaburi (RMUTT), Thailand July 26, 2013.
4	<b>Hemanatha P W Jayasuriya</b> (2012): Keynote. "Research to Meet Global Challenges: Innovative Farming Technologies" International Research Symposium on Agriculture and Environment, November 28-29, 2012, Faculty of Agriculture, University of Ruhuna, Kamburupitiya, Sri Lanka.
5	<b>Hemanatha P W Jayasuriya</b> (2012). Guest Speaker "Areal Imaging for Farming applications". workshop on "Imaging applications in Biological and Agricultural Sciences". Organized by (SWAE), CAMS, SQU.

Research projects - Selected						
#	Role	Year/ Completion	Project title	Fund by	Fund value	
					OMR	USD

1	PI	2021-2022	Use of Mesquite weed plant for making BBQ briquettes and charcoal	DRF	3000	7740
2	PI	2020-2022	Development and testing of low-cost indirect solar dryer for locally available curry leaves: A case study on dissemination and commercialization of technology	IG	7900	20,382
3	Co-PI	2015-2019	Development of controlled environment agriculture in Oman	TRC	249,810	644,510
4	Co-PI	2015-2019	Development of a Novel Vegetable Farming Chamber Utilizing Zero-Water Cooling and Natural Lighting	SQU-UAEU	40,000	103,200
5	PI	2012-2014	Evaluation of the effect of soil compaction and tillage management on growth and yield of crops by GIS techniques (IG/AGR/SWAE/12/01)	IG	8,550	22,060

### Collaborations and Consultancies

Collaborators	Institute/University/Organization	Country
1- Dr. Lav R Khot (Associate professor)	Washington State University	USA
2- Dr. Steven J. Thomson (National Program Leader)	National Institute of Food and Agriculture, US Department of Agriculture	USA
3- Ganesh P Bora (Associate Professor and National Program Leader)	Mississippi States University, and National Program Leader at U.S. Department of Agriculture	USA
4- Dr. Eiji Morimoto (Associate Professor)	School of Agriculture, Tottori University	Japan
5- Prof. Animesh Dutta (Professor of Renewable and Cleaner Energy, Director of BioRenewable Innovation Lab (BRIL))	School of Engineering, University of Guelph	Canada

### Postgraduate/Undergraduate student supervisions as Main supervisor

	Before SQU	At SQU
Undergraduate Projects		More than 45
MSc / MEng Students	34 completed at AIT, Thailand	3 completed, 1 in progress
PhD students	5 completed at AIT, Thailand	1 in progress