Peeyush SONI

Citizenship: Indian | Date of birth: 26 August 1979

Contact

Tel: (66) 89498 2680

e-mail: soni@ait.asia,soni.ait@gmail.com

I (A) Bibliographical Data

Male; Married with one daughter

I (B) Education

Aug 2003 - Dec 2006

AIT (Thailand)

Doctor of Engineering (Agriculture)

Asian Institute of Technology, Bangkok (Thailand)

Cumulative GPA: 4.0/4.0

Jan 2002 - Aug 2003

AIT (Thailand)

Master of Engineering (Agriculture)

Asian Institute of Technology, Bangkok (Thailand)

Cumulative GPA: 4.0/4.0 with 'Excellent' grade in thesis

Y.Y.Kishida Award; AIT Alumnit Association Prize

Aug 1997 – June 2001 MPUAT (India)

Bachelor of Engineering (Agriculture)

College of Technology and Engineering, Udaipur (India)

Maharana Pratap University of Agriculture and Technology (MPUAT), Rajasthan

75.46% score in the university examinations

University Certificate of Merit; Bhamashah Award for State Level Academic Excellence

1995 - 1996 Bikaner (India)

Senior Secondary School Examination

Physics, Chemistry and Mathematics

Rajasthan Board of Secondary Education, India

67.07% score in the board examinations

1993 –1994 Bikaner (India)

Secondary School Examination

Rajasthan Board of Secondary Education, India

77.82% score in the board examinations

Merit certificate from the Ministry of Human Resources & Development, Govt. of India

I (C) Positions held

June 2012 -

Asian Institute of Technology

Assistant Professor

Teaching graduate/post-graduate level courses at two fields of study, namely, Agricultural Systems and Engineering, Agribusiness Management, and Aquacultural and Aquatic Resources Management; Supervise as Chair to students' theses/dissertation committees

Sept 2010 - May 2012

Asian Institute of Technology

Senior/Instructor

Teaching graduate/post-graduate level courses at two fields of study, namely, Agricultural Systems and Engineering, Agribusiness Management, and Aquacultural and Aquatic Resources Management; Supervise as Chair of students' theses/dissertation committees

Apr 2010 - Dec 2011

Asian Institute of Technology

Coordinator: ABM

Assuming administrative responsibilities for Agribusiness Management (ABM); Representing FoS at school and institute level meetings; FoS promotion; Students recruitment; Brochure and website preparation and maintenance

Dec 2009 – Jan 2010 Asian Institute of Technology

Coordinator: ASE, ABM

Assuming administrative responsibilities for two fields of study, namely, Agricultural Systems and Engineering (ASE), and Agribusiness Management (ABM); Representing FoS at school and institute level meetings

Sept 2009 – Aug 2010 Asian Institute of Technology

Adjunct Faculty

Teaching graduate/post-graduate level courses at two fields of study, namely, Agricultural Systems and Engineering, Agribusiness Management, and Aquacultural and Aquatic Resources Management; Serve as Chairman of students' theses/dissertation committees

Apr 2007 – Aug 2009 Asian Institute of Technology

Affiliated Faculty

Teaching graduate/post-graduate level courses at two fields of study, namely, Agricultural Systems and Engineering, Agribusiness Management, and Aquacultural and Aquatic Resources Management; Serve as member of students' theses/dissertation committees

Apr 2007 – Aug 2009 Asian Institute of Technology

Research Laboratory Supervisor

Farm Power & Machinery; Design & Testing; Precision Agriculture; Ergonomics; Greenhouse Control; Soil Mechanics; Instrumentation & Measurement Systems

Jan 2007 – Apr 2007 Asian Institute of Technology

Research Scientist

To coordinate research and manage Greenhouse facility at the Asian Institute of Technology

I (D) Special Honors and Awards

ScienceDirect Top 25

Ranked 9th on the Top 25 for *Journal of Terramechanics* – January- March 2013. ScienceDirect Top 25 List of Most Downloaded Paper, by Elsevier B.V., Amsterdam, The Netherlands

ScienceDirect Top 25 2013

Ranked 24th on the Top 25 for *Agricultural Systems* – January- March 2013. ScienceDirect Top 25 List of Most Downloaded Paper, by Elsevier B.V., Amsterdam, The Netherlands

Best Paper Award Sept 2011

The best technical paper presented at the 2011 ISTVS Conference; The International society for Terrain-Vehicle Systems; Sept. 18-22, 2011, Blacksburg, Virginia, USA

AMA-ShinNorinsha-AAAE Young Researcher Award

Sept 2010

In recognition of his outstanding contributions to the advancement of Agricultural Engineering profession; Asian Association for Agricultural Engineering (AAAE); conferred in 20 Sept, 2010 at 11th IAEC, Shanghai (China) http://www.ait.ac.th/news-and-events/2010/news/ase-faculty-receives-the-young-researcher-award/view

ScienceDirect Top 25 2005

Ranked 4th on the Top 25 *for Biosystems Engineering* – October to December 2005. ScienceDirect Top 25 List of Most Downloaded Paper, by Elsevier B.V., Amsterdam, The Netherlands

The Reddy Award 2003 – 2004

For the best graduate thesis; Indian Society of Agricultural Engineers (ISAE); conferred in January, 2006 at 40th Annual convention, Coimbatore (India)

The AIT Alumni Association Prize

August 2003

In recognition of the *most outstanding academic performance* in the School of Environment, Resources and Development, 98th Batch, Asian Institute of Technology

The Y. Y. Kishida Prize August 2003

In recognition of the *most outstanding academic performance* among students in Agricultural Engineering, Asian Institute of Technology

Government of the Netherlands Scholarship

Recipient of scholarship for M.Eng.

The Maharana Mewar Foundation Bhamashah Award

2001 - 2002

2002

For state level academic excellence in Agricultural Engineering, Rajasthan state, India http://www.mmcfindia.org/Bhamashah_Award.asp

University Certificate of Merit

2001

For B.Eng. (Agri.); Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan state, India

Certificate of Merit 1994

For secondary school examination, by Ministry of Human Resources & Development, Department of Education, Government of India

II (A) Experience as a Teacher

Course title	FoS*	Students	Load	AvgGrade
January 2014				
ED70.01: Farm Production Engineering 3(2-3)	ASE	10	50%	
ED80.01 Analytical Techniques and Decision Tools in Agribusiness 3(2-3)	ABM	9	100%	
ED71.27 Aquaculture Engineering and Water Quality Management 2(2-0)	AARM	6	50%	
August 2013				
ED70.03: Agricultural Systems Analysis 3(3-0)	ASE	11	100%	3.45
ED80.03: Agribusiness Management- Principles and Practice 3(3-0)	ABM	7	100%	3.57
January 2013				
ED70.13: Agricultural Soil Mechanics 3(2-3)	ASE	5	50%	3.5
ED70.12: Precision Agriculture 3(3-0)	ASE	7	50%	3.57
ED80.01 Analytical Techniques and Decision Tools in Agribusiness 3(2-3)	ABM	13	100%	3.54
ED71.27 Aquaculture Engineering and Water Quality Management 2(2-0)	AARM	4	50%	3.25
August 2012				
ED70.03: Agricultural Systems Analysis 3(3-0)	ASE	14	100%	3.5
ED80.03: Agribusiness Management- Principles and Practice 3(3-0)	ABM	14	50%	3.64
ED70.01: Farm Production Engineering 3(2-3)		5	50%	3.8
January 2012				
ED70.12: Precision Agriculture 3(3-0)	ASE	6	50%	3.67
ED70.13: Agricultural Soil Mechanics 3(2-3)	ASE	6	50%	3.5
ED80.01 Analytical Techniques and Decision Tools in Agribusiness 3(2-3)	ABM	12	100%	3.54
ED71.27 Aquaculture Engineering and Water Quality Management 2(2-0)	AARM	5	50%	3.3
August 2011				
ED70.03: Agricultural Systems Analysis (3-0)	ASE	19	100%	3.39
ED80.03: Agribusiness Management- Principles and Practice 3(3-0)	ABM	13	50%	3.50

ED70.01: Farm Production Engineering 3(2-3)	ASE	6	50%	3.42
Intersemester June 2011 (Off-campus at SHIATS)				
ED80.03: Agribusiness Management- Principles and Practice 3(3-0)	ABM	9	100%	3.22
January 2011				
ED80.01 Analytical Techniques and Decision Tools in Agribusiness 3(2-3)	ABM	18	100%	3.47
ED80.03: Agribusiness Management- Principles and Practice 3(3-0)	ABM	17	50%	3.50
August 2010				
ED70.01: Farm Production Engineering 3(2-3)	ASE	4	100%	3.88
ED70.03: Agricultural Systems Analysis (3-0)		21	100%	3.43
January 2010				
ED80.03: Agribusiness Management- Principles and Practice 3(3-0)	ABM	13	100%	3.73
ED70.13: Agricultural Soil Mechanics 3(2-3)	ASE	8	100%	3.5
ED71.9008: Analytical Techniques in Aquaculture & Aquatic Resources Assessment 3(1-6)		9	33%	3.4
August 2009				
ED70.14 Instrumentation and Measurement Techniques 3(2-3)	ASE	7	100%	3.71
ED80.01 Analytical Techniques and Decision Tools in Agribusiness 3(2-3)		15	100%	3.47
January 2009				
ED70.03 Agricultural Systems Analysis 3(3-0)	ASE	13	50%	3.46
ED71.9003 Aquacultural Engineering and Water Quality Management 3(3-0)		14	50%	3.54
August 2008				
ED70.05 Design and Testing of Agricultural Equipment 3(3-0)		6	50%	3.42
ED70.16 Controlled Environment Agriculture 3(3-0)		19	50%	3.58
January 2008				
ED71.9003 Aquacultural Engineering and Water Quality Management 3(3-0)	AARM	7	50%	3.43
August 2007				
ED70.16 Controlled Environment Agriculture 3(3-0)		12	100%	3.54
January 2007				
ED71.9003 Aquacultural Engineering and Water Quality Management 3(3-0)	AARM	10	50%	3.45

^{*}ASE: Agricultural Systems & Engineering;

ABM: Agribusiness Management;

AARM: Aquaculture and Aquatic Resources Management

I have taught to **349** students **33** courses in last **14** semesters with average teaching load of **72.2%.** (until Dec 2013) This makes **1.70** full course equivalents per semester teaching responsibility continuously since January 2007.

II (B) Evaluation of Teaching

Copy of student teaching evaluation reports (January 2007 – January 2013) -

ATTACHED

Copy of student research supervision evaluation reports (January 2010-January 2013) -

ATTACHED

II (C) Pedagogical Development

1) Publications

- 1. **Peeyush Soni** and Yinggang Ou (2010). "Agricultural Mechanization at a Glance: Selected Country Studies in Asia on Agricultural Machinery Development". Study Report prepared for the United Nations Asian and Pacific Centre for Agricultural Engineering and Machinery (UN-APCAEM). Pp-142
- Peeyush Soni and V.M. Salokhe (2009). "Options for Sustainable Agriculture in the Tropics: An Overview". Invited Paper for online journal. Special issue on: Sustainable Agricultural Practices and Technologies. UN-APCTT Asia Pacific Tech Monitor, Jan-Feb. 2009. pp.13-20. ISSN: 0256-9957 http://www.techmonitor.net/techmon/09jan_feb/tm/tm_home.htm
- 3. **Peeyush Soni** (2009). Review on Conservation Tillage CDM Project Development. For. Dong Hongmin and Li Yue (2010) "Feasibility Study: Rural Household Biogas and Conservation Tillage CDM Project Development". Institute of Environmental and Sustainable Development in Agriculture, and Chinese Academy of Agricultural Sciences, under China-United Nations Climate Change Partnership Framework Project. http://www.un-csam.org/publication/CDMFinalReport.pdf
- 4. **Peeyush Soni**, V.M. Salokhe and H. Nakashima (2008). "Traction and Trafficability of Off-road Operations in Soft Terrains". Chapter-15. In Book "ADVANCES IN SOIL AND TILLAGE RESEARCH (2008)" Andrea Formato (Ed.), Transworld Research Network Publisher. *ISBN:* 978-81-7895-353-3. pp. 219-267.
- V.M. Salokhe, M.D. Gholkar, Peeyush Soni and H. Nakashima (2008). "Vibration Characteristics of Tractors and Power-tillers: An Ergonomics Perspective". Book chapter no. 13 in: Scott, P. A. (Editor) "ERGONOMICS IN DEVELOPING REGIONS: NEEDS AND APPLICATIONS", section four: Application in Specific Industries. Published by Taylor & Francis Group LLC, USA. ISBN: 978-1-4200-7911-1. pp. 203-233.
- 6. **Peeyush Soni** and V.M. Salokhe (2007). "Addressing Poverty Through Agricultural Advancements: Agricultural Engineering R&D in Developing Asia". UN-APCAEM Proceedings of International Seminar on Restructuring and Strengthening Research and Development for Agricultural Engineering 27-28 April. Asia-Pacific Center for Agricultural Engineering & Machinery of the United Nations, Beijing, China. pp. 5–100.
- 7. V.M. Salokhe and **Peeyush Soni** (2005). "Physics of Soil-tool Adhesion: A Review of Principles Involved in Reducing Adhesive Forces". Book chapter in: G. Jozefaciuk, C. Slawinski and R. T. Walczak (Editors), "REVIEW OF CURRENT PROBLEMS IN AGROPHYSICS", Institute of Agrophysics PAS, Lublin, Poland, 83-117 pp. *ISBN:* 83-89969-15-7
- 8. **Peeyush Soni** (2009). "Asian Cities and Agriculture?". From the Editor's Desk. AAAE Newsletter, 18(3-4). ISSN: 0858-706X
- 9. **Peeyush Soni** (2009). "Agrifood Chain: Where is the Broken Link?". From the Editor's Desk. AAAE Newsletter, 18(1-2). ISSN: 0858-706X
- 10. **Peeyush Soni** (2008). "Challenges to Agricultural Engineering for a Sustainable Future". From the Editor's Desk. AAAE Newsletter, 17(3-4). ISSN: 0858-706X
- 11. **Peeyush Soni** (2008). "Food and Fuel: Supporting or Competing?". From the Editor's Desk. AAAE Newsletter, 17(2). ISSN: 0858-706X
- 12. **Peeyush Soni** (2007). "Physics, Agriculture and Technology: Thriving with Sustainability". From the Editor's Desk. AAAE Newsletter, 16(4). ISSN: 0858-706X
- 13. **Peeyush Soni** (2007). "Agricultural Engineers and MDGs". From the Editor's Desk. AAAE Newsletter, 16(3). ISSN: 0858-706X

2) GRANTS RELATED TO PEDAGOGY AND CURRICULUM DEVELOPMENT

Jan 2013 – Dec 2013 Donor: FAO-RAP

Principal Investigator

Preparation of an Analytical Publication on the 'Status and Future of Sustainable Agricultural Mechanization in Asia and the Pacific' (THB 1,381,000)

Agency: FAO of the United Nations (Regional Office for Asia and the Pacific)

3) INITIATIONS

Actively involved in the development and promotion of <u>Unified Bachelor-Masters Degree program</u> in Agribusiness Management (ABM) with Sam Higginbottom Institute of Agriculture, Technology and Science (SHIATS), India

Course Catalogue development for Biosystems Engineering Undergraduate Program with South Asian Institute of Technology and Medicine (SAITM), Sri Lanka. [October 2012]

- i. AE 401: Instrumentation & Measurement 3 (2-3)
- ii. AE 402: Farm Power, Machinery and Renewable Energy Systems 3 (2-3)
- iii. AE 403: Irrigation and Drainage Engineering 3 (3-0)
- iv. AE 405: Theory of Machines 3 (2-3)
- v. AE 406: Precision Agriculture 3 (3-0)
- vi. AE 407: Soil and Water Conservation Engineering 3 (2-3)
- vii. AE 408: Workshop Techniques and Practices 3 (2-3)
- viii. BS 302: Aquaculture Engineering 3 (2-3)
- ix. CIE 201: Soil Science & Mechanics 3 (2-3)
- x. EL 101: Electrical Engineering and Electronics 4 (3-1)
- xi. UG 105: Engineering Physics 3 (2-3)

4) PARTICIPATION IN WORKSHOPS, SHORT COURSES RELATING TO PEDAGOGY

6-9 Sept 2013 Duration: 3 days

Curriculum Development Workshop on M.Sc (Sustainable Agriculture)

Organized by Dutch funded (NICHE-BGD-156) project for Interdisciplinary Centre for Food Security at the Bangladesh Agricultural University, Mymensingh

21 June 2013 Duration: 1 session

Workshop on MOODLE Learning Management System (LMS)

Organized by Center for Learning Innovation and Quality (CLIQ), Asian Institute of Technology

3 Apr 2013 Duration: 1 day

Workshop on Precision Farming and Information Technology

9th NSTDA Annual Conference (NAC2013), organized by National Science and Technology Development Agency (NSTDA), Thailand. NECTEC Building NT-106-03

9 Mar 2012 Duration: 1 day

Workshop on Jatropha Bio-diesel-Fuel and Its Utilization Technology

Organized by New Energy and Industrial Technology Department (NEDO), MOST, National Science and Technology Development Agency (NSTDA), National Metal and Materials Technology (MTEC) at Century Park Hotel, Thailand

15 Feb 2012 –16 Feb 2012 Duration: 2 days

LCA Agrifood Asia Initiation - Regional Workshop

Organized by AIT, French Ministry of Foreign Affairs, NSTDA, Kasetsart University, Tokyo University for selected researchers at Sofitel Centara Grand Hotel, Bangkok

3 Mar 2009 – 5 Mar 2009 Duration: 3 days

Sustainable Research Networks Workshop

Organized by British Council for Prime Minister's Initiative (PMI) selected project award grantee researchers at Hotel Maya, Kuala Lumpur, Malaysia

1 Aug 2006 –12 Aug 2006 Duration: 12 days

Intensive Program on Sustainability (IPoS): Food & Energy

Organized by University of Tokyo and Asian Institute of Technology at KhaoYai National Park, Thailand

June 2000 Duration: 1 month

Summer training in Soil and Water Conservation Engineering

PRADAN (Professional Assistance for Development Action); A non-governmental organization in Alwar district of Rajasthan state, India

June 1999 Duration: 1 month

Summer training in Farm Power and Machinery

CFMTTI (Central Farm Machinery Testing and Training Institute): A central government institute dedicated to farm machinery testing and related trainings, Budni, Madhya Pradesh state, India

III. Student Research Supervision

A. Summary of student research supervision at AIT (August 2008 - Dec 2013)

	COMPLETED		IN-PROGRESS		
STUDENTS	Chair of the Committee	Co-Chair of the Committee	Chair of the Committee	Co-Chair of the Committee	
Doctoral	5 + 1 ^A	3 ^A	4 ^B	2 ^C	
Master's	35 ^D	-	8 ^E	-	

Yearish (India), Prinya (Thailand), Grianggai (Thailand), Chakkrapong (Thailand), Bambang (Indonesian), Nita (Indonesian), Adisak (Thailand), Yuwadee (Thailand); After successful final defense in May 2013, the student (Makky) has deferred his graduation for attending the PANACEA Erasmus-Mundus Exchange Program at Greece

B. Doctoral student graduated under my supervision:

1. Mr. Parish Prakash Nalavade, [105534] - Graduated in August 2010

Years to graduation: 3 years [Aug 2007- Aug 2010]

Dissertation title: "Modeling Soil and Powered-Disc Interactions for Development of a Disc Harrow". Recipient of Giuseppe Pellizzi International Best PhD Prize, Club of Bolonga Dec. 2012

Resulting publications:

Nalavade, P., Peeyush Soni, Salokhe, V.M., and Tanya Niyamapa (2013). "Development of a Powered Disc Harrow for on-farm Crop Residue Management". International Agricultural Engineering Journal, 22(1):49-60. Publisher: Asian Association for Agricultural Engineering. ISSN: 0858-2114

Nalavade, P., Peeyush Soni, Salokhe, V.M., and Tanya Niyamapa (2011). "Application of Powered Disc Implements for Efficient on-Farm Residue Management: A Review". International Agricultural Engineering Journal, 20(3):1-7. Publisher: Asian Association for Agricultural Engineering. ISSN: 0858-2114

Nalavade, P., Peeyush Soni, V.M. Salokhe and Tanya Niyamapa (2011). "Comparative Performance of Standard, Notched and Spiral-notched Tillage Discs." International Agricultural Engineering Journal, 20(4): 18-26. Publisher: Asian Association for Agricultural Engineering. ISSN: 0858-2114

Nalavade, P. Salokhe, V.M., Niyamapa, T., and Peeyush Soni (2010). "Performance of Free Rolling and Powered Tillage Discs." Soil & Tillage Research, 109(2):87-93 [IF: 2.91] Publisher: Elsevier. ISSN: 01671987. SCOPUS citations = 1

Parish P. Nalavade, Vilas M. Salokhe and Peeyush Soni (2009). "*Investigations into tractor mounted spray boom*". In: International student symposium on Agricultural Engineering, Faculty of agricultural international symposium#4, Utsunomiya University, 13-14 March 2009.

2. Mr. Grianggai Samseemoung, [105277] - Graduated in December 2011

Years to graduation: 5 years [Aug 2006– Dec 2011]

B Warit, Koekoeh, Warinthon, Sahapat

C Bunjerd, Pheesphan

⁽²⁰¹⁰⁾ Jayathilaka, Vikram, Bharat, Suvischar, Vatinee, Chanerin, Justin; (2011) Jannatul, Khagendra, Thanaphop, Pattarapol, Supawan, Weerachai, Krai, Paleerat, Jeerajit; (2012) Badrul, Hieu, Nishant, Hena, Anintita, Pensuda, Jintana, Yezaho; (2013) Bayu, Farid, Jane, Anuchit, Rajeev, May, Thanan, Pareerat, Ruangyot, Abhinav, Ujair

E (2014) Natsuda, Yupawan, Mitesh, Kiki, Hong, Kritsana, Abasi, Tran

Dissertation title: "Low-Altitude Remote Sensing and Image Processing for Weed and Disease Monitoring by an Unmanned Radio-Controlled Helicopter".

Resulting publications:

Grianggai Samseemoung, Peeyush Soni, Hemantha P. W. Jayasuriya, and V.M. Salokhe (2012). "Application of Low Altitude Remote Sensing (LARS) Platform for Monitoring Crop Growth and Weed Infestation in a Soybean Plantation". Precision Agriculture, 13(6): 611-627. Publisher: Springer. ISSN: 1385-2256. [IF: 1.728]

Grianggai Samseemoung, Hemantha P. W. Jayasuriya, and Peeyush Soni (2011). "Oil Palm Pest Infestation Monitoring and Evaluation by Helicopter-mounted, Low Altitude Remote Sensing Platform." Journal of Applied Remote Sensing, 5(1): Article no. 053540. Publisher: SPIE (International Society for Optics and Photonics). ISSN: 1931-3195. [IF: 0.876] GoogleScholar citations = 1

Grianggai Samseemoung, H.P.W. Jayasuriya and Peeyush Soni (2010). "Detection and Analysis of Oil Palm Pest Infestation by Radio-Controlled Helicopter-Mounted Low- Altitude Remote Sensing Platform: Methodology Using Image Processing and Vegetation Indices Analyses". In: Proceedings of the 11th International Agricultural Engineering Conference, Great Tang Hotel, Shanghai (CHINA), 17-20 September, 2010

3. Mr. Prinya Kamolsin, [101289] - Graduated in June 2012

Years to graduation: 8 years [Aug 2004– Jun 2012]

Dissertation title: "Development of a Submerged Aquatic-Weed Harvester for Irrigation Canals in Thailand".

Resulting publications:

Prinya Kamolsin, Peeyush Soni, V.M. Salokhe, M.S. Babel and Huynh Trung Luong (2010). "Physico-Mechanical Properties of Hydrilla (<u>Hydrilla verticillata</u>) and Pondweed (<u>Potamogeton malaianus</u>)." International Agricultural Engineering Journal, 19(4): 1-7. Publisher: Asian Association for Agricultural Engineering (SNIP=0.416). ISSN: 0858-2114

4. Mr. Chakkrapong Taewichit, [104371] - Graduated in July 2012

Years to graduation: 6 years [Aug 2006– Jul 2012]

Dissertation title: "Multicriteria Decision Making in Integrated Agriculture Production Systems under Thai Rainfed Condition".

Resulting publications:

Peeyush Soni. Chakkrapong Taewichit, and Vilas M. Salokhe (2013). "Energy Consumption and CO₂ Emissions in Rainfed Diversified Agricultural Production Systems of Thailand". Agricultural Systems, 116(1):25-36. Publisher: Elsevier. [IF=2.899]: DOI j.agsy.2012.12.006. ISSN: 0308-521X Top25 Most Downloaded Article rank 24 during Jan-Mar 2013

Chakkrapong Taewichit, Peeyush Soni, Vilas M. Salokhe, and H.P.W. Jayasuriya (2013). "Optimal Stochastic Multi-States First-Order Markov Chain Parameters for Synthesizing Daily Rainfall Data using Multi-Objective Differential Evolution in Thailand." Meteorological Applications, 20(1):20-31. Publisher: John Wiley & Sons. ISSN: 1350-4827. [IF: 1.411] GoogleScholar citations = 1

Chakkrapong Taewichit, Dolores Mae N. Gicana and Peeyush Soni (2009). "Alternative Optimal Integrated Agriculture with Ponds using Multi-Objective Linear Programming". IAEC Ref. CTA-261. In: Proceedings of the 10th International Agricultural Engineering Conference, Hotel Manhattan, Bangkok (THAILAND), 7-10 December, 2009

5. Mr. Muhammad Makky, [109614] - Defended his dissertation successfully in May 2013

Years to graduation: 4 years [Aug 2009– May 2013] + 10 months exchange program under PANACEA Dissertation title: "Design and Development of an Automatic Grading Machine for Palm Oil (Elaeis guineensis) Fresh Fruit Bunches (FFB) using Non-Destructive Examination".

Selected for the Alexander Technological Educational Institution of Thessaloniki (GREECE) as an Exchange Student for 10 months; May 2013

Resulting publications:

Muhammad Makky and Peeyush Soni (2014). "In-situ Quality Assessment of Intact Oil Palm Fresh Fruit Bunches using Rapid Portable Non-contact and Non-destructive Approach". Journal of Food Engineering, 120: 248-259. *Publisher*: Elsevier [IF: 2.276]. ISSN: 0260-8774.

Muhammad Makky and Peeyush Soni (2013). "Towards Sustainable Green Production: Exploring Automated Grading for Oil Palm Fresh Fruit Bunches (FFB) Using Machine Vision and Spectral Analysis". International Journal on Advanced Science, Engineering and Information Technology. Vol. 3(1):1-6. Publisher: Indonesian Society for Knowledge and Human Development. ISSN: 2088-5334

Muhammad Makky and Peeyush Soni (2013). "Development of an Automatic Grading Machine for Oil Palm Fresh Fruits Bunches (FFBs) based on Machine Vision." Computers and Electronics in Agriculture, 93:129-139. Publisher: Elsevier [IF: 1.766]. ISSN: 0168-1699

Muhammad Makky, Peeyush Soni, V.M. Salokhe (2012). *'Machine Vision Application in Indonesian Oil Palm Industry'*. In: Proceedings of the "International Agricultural Engineering Conference of AAAE 2012". Huangzhou, CHINA, Oct 27-30, 2012

6. Mr. Bambang Marhaenanto, [109615] - Graduated in Intersemester 2013

Years to graduation: 4 years [Aug 2009– May 2013]

Dissertation title: "Design and Evaluation of a Smart Greenhouse Control System with Remote Interface Over the Internet".

Resulting publications:

Bambang Marhaenanto, Peeyush Soni, and Vilas M. Salokhe (2013). "Development of an Internet Based Greenhouse Control System." International Agricultural Engineering Journal, 22(2): 72-83. Publisher: Asian Association for Agricultural Engineering. ISSN: 0858-2114.

7. Ms. Nita Kuswardhani, [107593] - Graduating in Aug 2013

Years to graduation: 5 years [Aug 2008– Aug 2013]

Dissertation title: "Potential and Constraints for Protected Cultivation of Selected Vegetables in West Java Province, Indonesia".

Resulting publications:

Nita Kuswardhani, **Peeyush Soni,** and Ganesh P. Shivakoti (2013). *"Energy Input-Output and Financial Analyses of Selected Vegetables Production in West Java, Indonesia"* Energy, 53: 83-92. *Publisher*: Eslevier. *ISSN: 0360-5442*. [IF: 3.651] GoogleScholar citations = 1 http://dx.doi.org/10.1016/j.energy.2013.02.032

Nita Kuswardhani, **Peeyush Soni,** and Ganesh P. Shivakoti (xxxx). "Cluster Analysis for Classification of Farm Households Based on Socio-Economic Characteristics for Greenhouse Technology Adoption: A Case Study of West-Java Province, Indonesia" Journal of Food, Agriculture and Environment. Publisher: WFL [IF: 0.517] Date accepted: 20 July 2013

8. Mr. Adisak Suvittawat , [105353] - Graduated in Dec 2013

Years to graduation: 7 years [Jan 2007– Dec 2013]

Dissertation title: "Cassava Root Sourcing Strategies for Sustainable Cassava Supply to Starch Mills: A Case Study of Corn Products Thailand (CPT)".

Resulting publications:

Adisak Suvittawat, **Peeyush Soni**, Do Ba Khang and Barbara Igel (xxxx). "Cassava Root Supply Chain in Nakhornratchasima Province: Challenges and Opportunities for Local Starch Mills" Journal of Food, Agriculture and Environment. Publisher: WFL [IF: 0.517] ISSN: 1459-0255. Accepted for publication on: 15 March 2013. RF 9524358

9. Ms. Yuwadee Leeben, [108189] - Graduated in Dec 2013

Years to graduation: 5 years [Aug 2008– Dec 2013]

Dissertation title: "Development Potential of Pineapple Canning Industries in Thailand: A Case Study of Canned Pineapple Industries in Prachuap Kirikhan Province, Thailand".

Resulting publications:

Yuwadee Leeven, **Peeyush Soni**, and Ganesh P. Shivakoti (2013). "Indicators of Sustainable Development for Assessing Performance of Pineapple Canneries: Conceptual Framework and Application" Journal of Food, Agriculture and Environment, 11(2):100-109. Publisher: WFL [IF: 0.517]. ISSN: 1459-0255

IV. Research

A. Publications

1. BOOKS AND MONOGRAPHS

- Peeyush Soni and Yinggang Ou (2010). "AGRICULTURAL MECHANIZATION AT A GLANCE: SELECTED COUNTRY STUDIES IN ASIA ON AGRICULTURAL MACHINERY DEVELOPMENT". Study Report prepared for the United Nations Asian and Pacific Centre for Agricultural Engineering and Machinery (UN-APCAEM). Pp-142
- 2. V.M. Salokhe and **Peeyush Soni** (Editors) (2009). "<u>BOOK OF ABSTRACTS</u>". International Agricultural Engineering Conference, December 7-10, Bangkok, Thailand. Published by Asian Association for Agricultural Engineering. ISBN: 978-974-8257-70-9
- 3. V. M. Salokhe, H.P.W. Jayasuriya and **Peeyush Soni** (Editors) (2007). "<u>BOOK OF ABSTRACTS</u>". International Agricultural Engineering Conference, December 3-6, Bangkok, Thailand. Published by Asian Association for Agricultural Engineering. ISBN: 978-974-8257-48-8

2. BOOK CHAPTERS

- 1. **Peeyush Soni** and V.M. Salokhe (xxxx). "Strategic Analysis of Urban/Peri-urban Agriculture in Asia: Issues, Potential and Challenges". In Book "SUSTAINABLE LANDSCAPE PLANNING IN SELECTED URBAN REGIONS" edited by Yokohari M., Murakami A., Hara Y., and K. Tsuchiya. Published by Springer Forthcoming
- 2. **Peeyush Soni,** V.M. Salokhe and H. Nakashima (2008). "Traction and Trafficability of Off-road Operations in Soft Terrains". Chapter-15. In Book "ADVANCES IN SOIL AND TILLAGE RESEARCH (2008)" Andrea Formato (Ed.), Transworld Research Network Publisher. ISBN: 978-81-7895-353-3. pp. 219-267.
- 3. V.M. Salokhe, M.D. Gholkar, **Peeyush Soni** and H. Nakashima (2008). "Vibration Characteristics of Tractors and Power-tillers: An Ergonomics Perspective". Chapter no. 13 in: Scott, P. A. (Editor) "ERGONOMICS IN DEVELOPING REGIONS: NEEDS AND APPLICATIONS", section four: Application in Specific Industries. Published by Taylor & Francis Group LLC, USA. ISBN: 978-1-4200-7911-1, pp. 203-233.
- 4. V.M. Salokhe and **Peeyush Soni** (2005). "Physics of Soil-tool Adhesion: A Review of Principles Involved in Reducing Adhesive Forces". Book chapter in: G. Jozefaciuk, C. Slawinski and R. T. Walczak (Editors), "REVIEW OF CURRENT PROBLEMS IN AGROPHYSICS", Institute of Agrophysics PAS, Lublin, Poland, ISBN: 83-89969-15-7, pp. 83-117.

3. REFEREED INTERNATIONAL JOURNAL ARTICLES

3A. Summary of journal articles published (up to Dec 2013)

Refereed International Journals	Refereed Regional Journals	Refereed National Journals
34		-

IN-PROGRESS		
Refereed International Journals	Refereed Regional Journals	Refereed National Journals

6	
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3B. Articles in Refereed International Journals [33 published/accepted + 6 under review]

- 1. Sahapat Chalachai, **Peeyush Soni**, Anuchit Chamsing, Vilas M. Salokhe (xxxx). "A Critical Review of Mechanization in Cassava Harvesting in Thailand". International Agricultural Engineering Journal. Publisher. AAAE. ISSN: 0858-2114. Date accepted: 2 Dec, 2013
- 2. Adisak Suvittawat, **Peeyush Soni**, Do Ba Khang and Barbara Igel (xxxx). "Cassava Root Supply Chain in Nakhornratchasima Province: Challenges and Opportunities for Local Starch Mills" Journal of Food, Agriculture and Environment. Publisher: WFL [IF: 0.517] ISSN: 1459-0255. Accepted for publication on: 15 March 2013. RF 9524358
- 3. Warinthon Yimyong and **Peeyush Soni** (xxxx). "Effects of Modified Atmosphere Packaging on Quality of Cut Dendrobium Orchid". Journal of Food, Agriculture and Environment. Publisher. WFL [IF: 0.517] Date accepted: 20 July 2013. ISSN: 1459-0255
- 4. Nita Kuswardhani, **Peeyush Soni**, and Ganesh P. Shivakoti (xxxx). "Cluster Analysis for Classification of Farm Households Based on Socio-Economic Characteristics for Greenhouse Technology Adoption: A Case Study of West-Java Province, Indonesia" Journal of Food, Agriculture and Environment. Publisher: WFL [IF: 0.517] Date accepted: 20 July 2013 ISSN: 1459-0255
- 5. Muhammad Makky and **Peeyush Soni** (2014). "In-situ Quality Assessment of Intact Oil Palm Fresh Fruit Bunches using Rapid Portable Non-contact and Non-destructive Approach". Journal of Food Engineering, 120: 248-259. *Publisher*. Elsevier [IF: 2.276]. ISSN: 0260-8774.
- 6. Abbadi Girmay Reda, Nitin K. Tripathi, **Peeyush Soni**, Taravudh Tipdecho, and Aparna Phalke (2013). "Temporal climate trend of Ping Basin of Thailand and implications for Mekong Region". Journal of Earth Sciences and Climatic Change, 4(4): 1-8. Publisher: OMICS Group. [IF: 1.0]. ISSN: 2157-7617 doi:10.4172/2157-7617.1000146 GoogleScholar citations = 1
- 7. Makky, M., and Peeyush Soni (2013). "Towards Sustainable Green Production: Exploring Automated Grading for Oil Palm Fresh Fruit Bunches (FFB) Using Machine Vision and Spectral Analysis". International Journal on Advanced Science, Engineering and Information Technology. Vol. 3(1):1-6. Publisher: Indonesian Society for Knowledge and Human Development. ISSN: 2088-5334 GoogleScholar citations = 1
- 8. Robertoes Koekoeh K. Wibowo, **Peeyush Soni**, and Vilas M. Salokhe (2013). "Anthropometric Dimensions, Hand and Isometric Strength of Farmers in the East Java, Indonesia." International Agricultural Engineering Journal, 22(2): 54-64. Publisher: AAAE. ISSN: 0858-2114.
- 9. Bambang Marhaenanto, **Peeyush Soni**, and Vilas M. Salokhe (2013). "Development of an Internet Based Greenhouse Control System." International Agricultural Engineering Journal. Publisher. Asian Association for Agricultural Engineering, 22(2): 72-83. ISSN: 0858-2114.
- 10. Nalavade, P., **Peeyush Soni**, Salokhe, V.M., and Tanya Niyamapa (2013). "Development of a Powered Disc Harrow for on-farm Crop Residue Management". International Agricultural Engineering Journal, 22(1):49-60. Publisher: Asian Association for Agricultural Engineering. ISSN: 0858-2114
- 11. Yuwadee Leeven, **Peeyush Soni,** and Ganesh P. Shivakoti (2013). "Indicators of Sustainable Development for Assessing Performance of Pineapple Canneries: Conceptual Framework and Application" Journal of Food, Agriculture and Environment, 11(2):100-109. Publisher: WFL [IF: 0.517]. ISSN: 1459-0255
- 12. Muhammad Makky and **Peeyush Soni** (2013). "Development of an Automatic Grading Machine for Oil Palm Fresh Fruits Bunches (FFBs) based on Machine Vision." Computers and Electronics in Agriculture, 93:129-139. Publisher: Elsevier [IF: 1.766]. ISSN: 0168-1699 SCOPUS citations = 1, GoogleScholar citations = 3
- 13. Nita Kuswardhani, **Peeyush Soni**, and Ganesh P. Shivakoti (2013). "Energy Input-Output and Financial Analyses of Selected Vegetables Production in West Java, Indonesia" Energy, 53: 83-92. Publisher. Eslevier. **ISSN:** 0360-5442. [IF: 3.651] SCOPUS citations = 2, GoogleScholar citations = 5
- 14. Peeyush Soni. Chakkrapong Taewichit, and Vilas M. Salokhe (2013). "Energy Consumption and CO2"

- Emissions in Rainfed Diversified Agricultural Production Systems of Thailand". Agricultural Systems, 116(1):25-36. Publisher: Elsevier. [IF=2.899]: DOI j.agsy.2012.12.006. ISSN: 0308-521X SCOPUS citations = 4, GoogleScholar citations = 7 Top25 Most Downloaded Article rank 24 during Jan-Mar 2013
- 15. Chakkrapong Taewichit, **Peeyush Soni,** Vilas M. Salokhe, and H.P.W. Jayasuriya (2013). "Optimal Stochastic Multi-States First-Order Markov Chain Parameters for Synthesizing Daily Rainfall Data using Multi-Objective Differential Evolution in Thailand." Meteorological Applications, 20(1):20-31. Publisher: John Wiley & Sons. ISSN: 1350-4827. [IF: 1.411] GoogleScholar citations = 2
- 16. Hena Imtiyaz and **Peeyush Soni** (2013). Supply Chain Analysis of Fresh Guvava (A Case Study). International Journal of Management and Business Research, 3(4): 373-382. *ISSN* 2228-7019
- 17. Robertoes Koekoeh K. Wibowo, **Peeyush Soni,** and Vilas M. Salokhe (2012). "Anthropometry of Javanese and Madurese Farmers in East Java, Indonesia." International Agricultural Engineering Journal, 21(3-4): 15-32. Publisher: AAAE. ISSN: 0858-2114 SCOPUS citations = 1
- 18. Alexendar Keen, Nigel Hall, **Peeyush Soni**, Madhav D. Gholkar, Simon Cooper, Jannatul Ferdous (2012). "A Review of the Tractive Performance of Wheeled Tractors and Soil Management in Lowland Intensive Rice Production". Journal of Terramechanics, 50(1):45-62. Publisher. Elsevier. ISSN: 0022-4898 [IF: 0.935] GoogleScholar citations = 1 **Top25 Most Downloaded Article rank 9 during Jan-Mar 2013**
- 19. Grianggai Samseemoung, **Peeyush Soni**, Hemantha P. W. Jayasuriya, and V.M. Salokhe (2012). "Application of Low Altitude Remote Sensing (LARS) Platform for Monitoring Crop Growth and Weed Infestation in a Soybean Plantation". Precision Agriculture, 13(6): 611-627. Publisher: Springer. ISSN: 1385-2256. [IF: 1.728] SCOPUS citations = 3, GoogleScholar citations = 3
- 20. Naruemon Phongaksorn, Nitin K. Tripathi, Sivanappan Kumar and **Peeyush Soni** (2012). "Inter-Sensor Comparison between THEOS and LANDSAT 5 TM Data in a Study of Two Crops Related to Biofuel in Thailand." Remote Sensing Special Issue on Remote Sensing for Sustainable Energy Systems, 4(2):354-376. Publisher: MDPI. ISSN: 2072-4292. [IF: 2.101]
- 21. P.M.S. Jayathilaka, **Peeyush Soni**, Sylvain R. Perret, H.P. W. Jayasuriya and Vilas M. Salokhe (2012). "Spatial Assessment of Climate Change Effects on Crop Suitability for Major Plantation Crops in Sri Lanka." Regional Environmental Change, 12(1):55-68. Publisher: Springer. ISSN: 1436-3798. [IF=3.0] SCOPUS citations = 1
- 22. Nalavade, P., **Peeyush Soni**, Salokhe, V.M., and Tanya Niyamapa (2011). "Application of Powered Disc Implements for Efficient on-Farm Residue Management: A Review". International Agricultural Engineering Journal, 20(3):1-7. Publisher. Asian Association for Agricultural Engineering. ISSN: 0858-2114_SCOPUS citations = 1
- 23. Nalavade, P., **Peeyush Soni**, V.M. Salokhe and Tanya Niyamapa (2011). "Comparative Performance of Standard, Notched and Spiral-notched Tillage Discs." International Agricultural Engineering Journal, 20(4): 18-26. Publisher: Asian Association for Agricultural Engineering. ISSN: 0858-2114
- 24. Grianggai Samseemoung, Hemantha P. W. Jayasuriya, and **Peeyush Soni** (2011). "Oil Palm Pest Infestation Monitoring and Evaluation by Helicopter-mounted, Low Altitude Remote Sensing Platform." Journal of Applied Remote Sensing, 5(1): Article no. 053540. Publisher: SPIE (International Society for Optics and Photonics). ISSN: 1931-3195. [IF: 0.876] GoogleScholar citations = 3
- 25. Nalavade, P. Salokhe, V.M., Niyamapa, T., and **Peeyush Soni** (2010). "Performance of Free Rolling and Powered Tillage Discs." Soil & Tillage Research, 109(2):87-93 [IF: 2.91] Publisher. Elsevier. ISSN: 01671987. SCOPUS citations = 3
- 26. Prinya Kamolsin, Peeyush Soni, V.M. Salokhe, M.S. Babel and Huynh Trung Luong (2010). "Physico-Mechanical Properties of Hydrilla (<u>Hydrilla verticillata</u>) and Pondweed (<u>Potamogeton malaianus</u>)." International Agricultural Engineering Journal, 19(4): 1-7. Publisher: Asian Association for Agricultural Engineering (SNIP=0.416). ISSN: 0858-2114
- 27. Chimchana, D., Salokhe, V.M., and **Peeyush Soni** (2008). "Development of an Unequal Speed Co-axial Split-Rotor Thresher for Rice." Manuscript BC 08 017. Vol. X. October, 2008. Agricultural Engineering International: CIGR Journal of Scientific Research and Development. ISSN: 1682-1130. Available online at URL: http://cigr-ejournal.tamu.edu/ pp.1-11. GoogleScholar citations = 1

- 28. **Peeyush Soni,** Salokhe, V.M., and H. Nakashima (2007). "Modification of a Mouldboard Plough Surface using Arrays of Polyethylene Protuberances." Journal of Terramechanics, 44(6): 411-422. [IF: 0.935] Publisher: Elsevier. ISSN: 0022-4898. SCOPUS citations = 6, GoogleScholar citations = 6
- 29. **Peeyush Soni** and V.M. Salokhe (2006). 'Influence of Dimensions of UHMW-PE Protuberances on Sliding Resistance and Normal Adhesion of Bangkok Clay Soil to Biomimetic Plates." Journal of Bionic Engineering, 3(2):63-71. [IF: 1.144] Publisher. Elsevier. ISSN: 1672-6529. SCOPUS citations = 4, GoogleScholar citations = 4
- 30. **Peeyush Soni** and V.M. Salokhe (2006). "Theoretical analysis of microscopic forces at soil-tool interfaces: A review." Manuscript PM 06 010. Vol. VIII. June, 2006. Agricultural Engineering International: CIGR Journal of Scientific Research and Development. Available online at URL: http://cigr-ejournal.tamu.edu/ pp.1-25. GoogleScholar citations = 5. ISSN: 1682-1130
- 31. Salokhe, V.M., **Peeyush Soni**, and H.J. Tantau (2005). "Spatial Variability of Air-humidity Inside Naturally Ventilated Tropical Greenhouse Microclimate." International Agrophysics 19(4):329-336. Available online at URL: http://www.international-agrophysics.org/en/issues.html?stan=lista [IF: 1.574] Publisher. Institute of Agrophysics, Polish Academy of Sciences. ISSN: 0236-8722 SCOPUS citations = 1
- 32. Peeyush Soni, Salokhe, V.M., and H.J. Tantau (2005). "Effect of Screen Size on Vertical Temperature Distribution in Naturally-Ventilated Tropical Greenhouses." Biosystems Engineering, 92(4):469-482. [IF: 1.502] Publisher: Elsevier. ISSN: 1537-5110. SCOPUS citations = 32, GoogleScholar citations = 38

 Top25 Most Downloaded Article rank 4 during Oct-Dec 2005
- 33. Salokhe, V.M., **Peeyush Soni**, and H.J. Tantau (2005). "Effect of net size on horizontal temperature gradients in naturally-ventilated tropical greenhouses." Journal of Food, Agriculture and Environment (JFAE), 3(2):316-322. Available online at URL: http://www.world-food.net/scientficjournal/2005/issue2.php [IF: 0.517] Publisher. WFL Publisher, Finland GoogleScholar citations = 1 ISSN: 1459-0255
- 34. **Peeyush Soni,** Salokhe, V.M., and H.J. Tantau (2005). "Effect of Screen Porosity on Selected Microclimatic Parameters of Naturally Ventilated Tropical Greenhouses." Manuscript BC 05 002. Vol. VII. April, 2005. Agricultural Engineering International: CIGR Journal of Scientific Research and Development. Available online at URL: http://cigr-ejournal.tamu.edu/pp.1-14. GoogleScholar citations = 1. ISSN: 1682-1130

4. PAPERS IN REFEREED CONFERENCE PROCEEDINGS

- Robertoes Koekoeh K. Wibowo and Peeyush Soni (2013). "Anthropometry and Agricultural Hand Tool Design for Javanese and Madurese Farmers in East Java, Indonesia." In: CAAS 2013: November 23-24, 2013 Phuket, Thailand. APCBEE Procedia 00 (2013) 000–000, Publisher: Elsevier. ISSN: 2212-6708 http://www.journals.elsevier.com/apcbee-procedia/.
- Alexendar Keen, Nigel Hall, Peeyush Soni, Madhav D. Gholkar, Simon Cooper, Jannatul Ferdous (2011). "A Review of the Tractive Performance of Wheeled Tractors and Soil Management in Lowland Intensive Rice Production". In: 17th International Conference of the International Society for Terrain Vehicle Systems 2011, ISTVS 2011; Blacksburg, VA; United States; 18- 22 November 2011; Code 95423. Pp 63-82. Publisher: ISTVS. ISBN: 978-161839598-6

5. PAPERS IN WORKSHOPS/CONFERENCES (non-refereed)

- 1. Badrul Masood and **Peeyush Soni** (2013). Spatio-temporal changes of climate extremes over North Thailand during 1960-2100. Paper No. 2C2.6; ID: 6412. In: "Joint Scientific Conference 2013: CMOS, CGU, CWRA". Saskatoon, Saskatchewan CANADA, May 26-30, 2013 http://www.cmos.ca/congress2013/en/index.shtml
- 2. Jannatul Ferdous, **Peeyush Soni**, Alex Keen, Madhav D. Gholkar (2013). Performance Evaluation of a Small Agricultural Tractor on Bangkok Clay Soil. Paper No. CSBE13-124. In: CSBE/SCGAB 2013 Annual Conference. The Canadian Society for Bioengineering, University of Saskatechewan, Saskatoon, Saskatchewan, CANADA, 7-10 July 2013. Pp. 1-10.
- 3. Muhammad Makky and **Peeyush Soni** (2013). Towards Sustainable Green Production: Exploring Automated Grading for Oil Palm Fresh Fruit Bunches (FFB) using Machine Vision and Spectral Analysis. Submitted to: "International Conference on Sustainable Agriculture, Food, and Energy (SAFE) 2013".

- Padang, INDONESIA, May 12-14, 2013 http://safetainability.org/
- 4. Muhammad Makky, **Peeyush Soni**, V.M. Salokhe (2012). Machine Vision Application in Indonesian Oil Palm Industry. In: Proceedings of the "International Agricultural Engineering Conference of AAAE 2012". Huangzhou, CHINA, Oct 27-30, 2012
- 5. **Peeyush Soni**, Salokhe, V.M., Krai Noosom (2012). Development of a Precision Sprayer using a Radio-controlled Quad-copter. In: Proceedings of the "International Conference of Agricultural Engineering CIGR-Ageng 2012". Valencia Conference Centre, Valencia, SPAIN, July 8-12, 2012
- Salokhe, V.M., Peeyush Soni, Direk Chimchana (2011). Development and Testing of an uneven Speed Operated Co-axial Rice Thresher with Split-Rotor Mechanism for High Moisture Paddy Threshing. In: Proceedings of the "Forum on Harvester Technologies 2011", Asian Association for Agricultural Engineering (AAAE), Harvesting Machinery Branch of the Chinese Society for Agricultural Machinery (CSAM) and Jiangsu University, CHINA. 2-4 December, 2011.
- 7. Alex Keen, Nigel Hall, **Peeyush Soni**, Madhav D. Gholkar, Simon Cooper, Jannatul Ferdous (2011). A Review of the Tractive Performance of Wheeled Tractors and Soil Management in Lowland Intensive Rice Production. In: Proceedings of the 17th International Conference of the International Society for Terrain-Vehicle Systems (ISTVS), Blacksburg, Virginia, USA, 18-22 September 2011.
- 8. Khagendra Bharambe, R.M. Khan, **Peeyush Soni**, Lalit Sonar, Dipak Behere and Arindam Haldar (2010). Poster presentation "Preparation of Candy from Green Matured Banana." Poster code P3. In: Proceedings of the 5th International Conference on Innovations in Food and Bioprocess Technology (IFBT), Asian Institute of Technology, Bangkok, THAILAND, 7-9 December, 2010.
- 9. Madhav D. Gholkar, **Peeyush Soni** and Vilas M. Salokhe (2010). "A Review of Global Wine Trading: French and Australian Wines Perspectives." Paper code B1-4: 1-10 pp. In: Proceedings of the 5th International Conference on Innovations in Food and Bioprocess Technology (IFBT), Asian Institute of Technology, Bangkok, THAILAND, 7-9 December, 2010.
- 10. Vikramsinh Shinde, Yuwadee Leeben, Suvischar Arsarnok, Sirinan Lasricharn, **Peeyush Soni**, Vilas M. Salokhe and Athapol Noomhorn (2010). "A Feasibility Study and Business Planning for the Establishment of a Winery in Thailand". Paper code B1-3: 1-21 pp. In: Proceedings of the 5th International Conference on Innovations in Food and Bioprocess Technology (IFBT), Asian Institute of Technology, Bangkok, THAILAND, 7-9 December, 2010.
- 11. **Peeyush Soni** and P.M.S. Jayathilaka (2010). <u>Poster presentation</u> "Is Climate Change Affecting Crop Suitability and Yield of Sri Lankan Tea Plantations? An Spatial Assessment". In: Asia-Pacific Climate Change Adaptation Forum 2010, United Nations Conference Center (UNCC) Bangkok, THAILAND, 21-22 October 2010
- 12. Grianggai Samseemoung, H.P.W. Jayasuriya and Peeyush Soni (2010). "Detection and Analysis of Oil Palm Pest Infestation by Radio-Controlled Helicopter-Mounted Low- Altitude Remote Sensing Platform: Methodology Using Image Processing and Vegetation Indices Analyses". In: Proceedings of the 11th International Agricultural Engineering Conference, Great Tang Hotel, Shanghai (CHINA), 17-20 September, 2010
- Alex Keen, Madhav D. Gholkar, James Ward, Vilas M. Salokhe and Peeyush Soni (2009). "Force Measurement between a Tractor and a Three Point Linkage Mounted Cultivation Implement". IAEC Ref. AMM-253. In: Proceedings of the 10th International Agricultural Engineering Conference, Hotel Manhattan, Bangkok (THAILAND), 7-10 December, 2009
- 14. Chakkrapong Taewichit, Dolores Mae N. Gicana and Peeyush Soni (2009). "Alternative Optimal Integrated Agriculture with Ponds using Multi-Objective Linear Programming". IAEC Ref. CTA-261. In: Proceedings of the 10th International Agricultural Engineering Conference, Hotel Manhattan, Bangkok (THAILAND), 7-10 December, 2009
- 15. V.M. Salokhe, T. Laonapakul and **Peeyush Soni** (2009). "Effects of Tyre Inflation Pressure and Surface Conditions on the Vibration Characteristics of Agricultural Tractors". In: Proceedings of the 11th European Regional Conference of the ISTVS 2009. Bremen, GERMANY, 5-8 October, 2009.

- 16. V.M. Salokhe, S. Parvin and **Peeyush Soni** (2009). "Effects of Yield Promoting Inputs on Greenhouse-grown Tomatoes in Humid Tropics". In: Proceedings of the 33rd CIOSTA and CIGR-V Conference 2009. Reggio Calabria, ITALY, 17-19 June, 2009.
- 17. Parish P. Nalavade, Vilas M. Salokhe and **Peeyush Soni** (2009). "Investigations into tractor mounted spray boom". In: International student symposium on Agricultural Engineering, Faculty of agricultural international symposium#4, Utsunomiya University, 13-14 March 2009.
- 18. **Peeyush Soni** and V.M. Salokhe (2009). "Strategic Analysis of Urban/Peri-urban Agriculture in Asia: Issues, Potential and Challenges". In: Proceedings of the International Workshop on Sustainable City Region (IWSCR). Inna Grand Bali Beach Hotel, Denpasar, INDONESIA, 23-24 February, 2009. Pp.65-73. http://www2.ir3s.u-tokyo.ac.jp/scrws2009
- 19. **Peeyush Soni,** V.M. Salokhe and A. Noomhorm (2009). "Green Top, Clean Bottom: Storey for Sustainability". In: Abstracts Book. 'Urban Futures: The Challenge of Sustainability'. The Alliance for Global Sustainability (AGS) Annual Meeting 2009, 26-30 January, Zurich, SWITZERLAND. Pp. 47.
- 20. Peeyush Soni, V.M. Salokhe, A. Noomhorm and H. Nakashima (2007). "The Status of Agricultural Engineering Education in Thailand: An Investigation into the Need for Restructuring for Sustainability". Proceedings of the 11th UNESCO-APEID International Conference, December 12-14, 2007, Bangkok, THAILAND. http://www.unescobkk.org/index.php?id=7001
- 21. H. P. W. Jayasuriya and **Peeyush Soni** (2007). "Does Precision Farming Hold Valid for Developing Countries?". Proceedings of the 2nd Asian Conference on Precision Agriculture (ACPA), Hotel Kabo, August 2-4, 2007, Pyeongtaek, KOREA, http://www.precisionag.or.kr/
- 22. Noomhorm, A. and **Peeyush Soni** (2007). "What Sustainability Means for Food Export and Agricultural Value Addition?". Proceedings of the Alliance for Global Sustainability (AGS) Annual Meeting 2007, 18-21 March, Barcelona, SPAIN. pp.107-108. http://www.agsevent.org/doc/AGS e Proceedings AM07.pdf
- 23. V.M. Salokhe and **Peeyush Soni** (2005). "Microclimatic Response of Naturally Ventilated Tropical Nethouses to Cladding Properties". Invited Paper. In: Book of Abstracts, International Conference on Plasticulture and Precision Farming (ICPPF- 2005), November 17-21, 2005, New Delhi, INDIA, pp. 5.
- 24. V.M. Salokhe and **Peeyush Soni** (2005). "Microclimatic Response to Insect-screen Porosity: Naturally Ventilated Screenhouses under Tropics". Proceedings of 39th ISAE Annual Convention and Symposium, March 9-11, 2005, Hyderabad, INDIA.
- 25. **Peeyush Soni** and V.M. Salokhe (2004). "Greenhouse Automation and Its Viability under Tropical Conditions". Proceedings of Joint Conference of the 4th International Conference of the Asian Federation of Information Technology in Agriculture (AFITA) and the 2nd World Congress of Computers in Agriculture and Natural Resources (WCCA), August 9-12, 2004, Bangkok, THAILAND.
- 26. **Peeyush Soni** and V.M. Salokhe (2004). "Effect of Different Mesh-sized Cladding Materials on A Naturally Ventilated Greenhouse-microclimate". Proceedings of 38th Annual Convention and Symposium of Indian Association of Agricultural Engineers (ISAE), January 16-18, 2004, Dapoli, Maharashtra, INDIA.
- 27. V.M. Salokhe, H.P.W. Jayasuriya and **Peeyush Soni** (2003). "Use of Agro and Agro-Industrial residues as energy resource in rural areas". For presentation at Republican Scientific Practical Conference on "Problems of Effective use of the Energy Resources in the branches of Agriculture", Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (TIIAME), December 19-20, 2003, Tashkent, UZBEKISTAN.
- 28. **Peeyush Soni**, H.P.W. Jayasuriya, and V.M. Salokhe (2003). "Precision Agriculture Adoption: Feasibility under Indian Perspectives". In: Proceedings of 37th ISAE Annual Convention and Symposium, January 29-31, 2003, Udaipur, INDIA.

10. INVITED LECTURES AND KEYNOTE ADDRESSES

- 1. <u>Invited Lecture</u> at the The Project Inception and National Training on Innovative Technologies. Organized by the Nepal Agricultural Research Council (NARC). 30 Oct 4 Sept, 2013, Kathmandu, Nepal.
- 2. Invited Lecture at the The 4th International Conference of Bionic Engineering (ICBE'13). Organized by the

- International Society of Bionic Engineering (ISBE). http://www.icbe13.cn August 13-20, 2013, Nanjing, P. R. China.
- 3. <u>Invited expert presentation</u> on "*Rice Cultivation in Thailand*" at the Quarterly Global Portfolio Extension Meeting of John Deere Leadership. 15 January 2013. John Deere Office, THAILAND.
- 4. <u>Invited presentation</u> on "*Towards Sustainable Green Production: Exploring Automated Grading for Oil Palm Fresh Fruit Bunches (FFB) using Machine Vision and Spectral Analysis*" at the "International Conference on Sustainable Agriculture, Food, and Energy (SAFE) 2013 and at the launch of the SAFE Network". Padang, INDONESIA, May 12-14, 2013 http://safetainability.org/
- 5. Presentation on "Machine Vision Application in Indonesian Oil Palm Industry". at the "International Agricultural Engineering Conference of AAAE 2012". Huangzhou, CHINA, Oct 27-30, 2012
- 6. Resource Person at the Thailand Deputy Governors' Training Program; 4th Public Management Executive Development Program (PMED) on Strategic management for Sustainable Development. "Agriculture Technology and Agricultural Industries: Strategic Management for Competitive Advantage". 30 Participant supported by the Thailand Ministry of Interior. 23 Jul 5 Sept 2012, Miracle Grand Hotel (Thailand).
- 7. Resource Person at the Thailand Deputy Governors' Training Program; 3rd Public Management Executive Development Program (PMED) on Strategic management for Sustainable Development. "Agriculture Technology and Agricultural Industries: Strategic Management for Competitive Advantage". 30 Participant supported by the Thailand Ministry of Interior. 15 Aug. 2011, Miracle Grand Hotel (Thailand).
- 8. <u>Resource Person</u> at the Thailand Deputy Governors' Training Program; 2nd Public Management Executive Development Program (PMED) on Strategic management for Sustainable Development. "Agriculture Technology and Agricultural Industries: Strategic Management for Competitive Advantage". 30 Participant supported by the Thailand Ministry of Interior. 28 Jun-13 Jul, 2010, Miracle Grand Hotel (Thailand).
- 9. Resource Person at the Thailand Deputy Governors' Training Program; 1st Public Management Executive Development Program (PMED) on Strategic management for Sustainable Development. "Agriculture Technology and Agricultural Industries: Strategic Management for Competitive Advantage". 30 Participant supported by the Thailand Ministry of Interior. 1 Jun-12 Jun, 2009, Miracle Grand Hotel (Thailand).
- 10. Expert Group Meeting and 5th Session of the Technical Committee Meeting of the UN-APCAEM on Application of Agricultural Machinery for Sustainable Agriculture in the Asia-Pacifid Region. <u>Invited lecture</u> on: "Sustainable Agriculture: Needs to go Green". 16 October, 2009, Los Banos, Laguna (PHILIPPINES).
- 11. Expert Group Meeting of the UN-APCAEM. <u>Invited presentation</u> on: "Review Report on Conservation Tillage CDM Project Development". Based on Feasibility Study Report of Conservation Tillage and Household Biogas CDM Project Development. Institute of Environmental and Sustainable Development in Agriculture, and Chinese Academy of Agricultural Sciences, under China-United Nations Climate Change Partnership Framework Project. Expert Group Meeting, Beijing Friendship Hotel, 11 September 2009, Beijing, (CHINA).
- 12. An <u>invited lecture</u> module for IPoS-2009 participants. "Food, Energy and Water: An Interwoven Nexus" presented on: August 1-12, 2009 at Kantary Bay Resort, Rayong, (THAILAND).
- 13. <u>Invited presentation</u> on "*Strategic Analysis of Urban/Peri-urban Agriculture in Asia: Issues, Potential and Challenges*" at the International Workshop on Sustainable City Region (IWSCR). Inna Grand Bali Beach Hotel, Denpasar, INDONESIA, 23-24 February, 2009. http://www2.ir3s.u-tokyo.ac.jp/scrws2009
- 14. An <u>invited lecture</u> module for IPoS-2008 participants. "Agriculture, Climate Change, Energy: An Investigation into Sustainable Future" presented on: August 17, 2008 at Kantary Bay Resort, Rayong, (THAILAND).
- 15. Presentation at The 11th UNESCO-APEID International Conference on Reinventing Higher Education: Toward participatory and Sustainable Development, December 12-14, 2007, Bangkok (THAILAND). Session chaired by Dr. Derek Elias [UNESCO] presented on: December 13, 2007 "The Status of Agricultural Engineering Education in Thailand: An Investigation into the Need for Restructuring for Sustainability"
- 16. International Seminar on Agricultural Engineering Restructuring and Strengthening; Organized by Asia-Pacific Center for Agricultural Engineering & Machinery of the United Nations, UN-APCAEM; 21st Century Hotel, Beijing (CHINA), April 27-28, 2007. Key presentation on consultancy report. Session chaired by Dr. Nawab Ali [DDG, ICAR], presented on: April 27, 2007 "Current Situation of Agricultural Engineering R&D in

- 17. International Agricultural Engineering Conference, IAEC-2005; Organized by Asian Association for Agricultural Engineering, AAAE; Miracle Grand Hotel, Bangkok (THAILAND), Dec. 6-9, 2005. Keynote lecture on behalf of Prof. Akira Oida [Kyoto University, Japan]. Session chaired by Dr. J.T. Mailutha [Kenya] and Dr. M.A. Ghani [World Bank], presented on: December 6, 2005 "Microwave Energy Transmission: An Approach to Solve Environmental and Energy Problems."
- 18. International Conference on Plasticulture and Precision Farming. The Ashok, New Delhi (INDIA). <u>Invited speaker</u> in Technical Session- 1: Greenhouse Structure and Crop Management. Session chaired by Prof. Albright. Presented on: November 18, 2005. "*Microclimatic Response of Naturally Ventilated Tropical Nethouses to Cladding Properties.*"
- 19. 9th ICA: International Conference on Agrophysics: Environment and Food Safety. Lublin (POLAND) <u>Keynote lecture on behalf of Prof. V.M. Salokhe</u> in Workshop-1- Physics in Soil Science. Session chaired by A. Ferrero [FAO]. Presented on: August 29, 2005, "*Physics of Soil-tool Adhesion: A Review of Principles Involved in Reducing Adhesive Forces.*"

11. TOTAL NUMBER OF CITATIONS

(Ref: SCOPUS, as on 25 Dec, 2013)

Total number of citations covered by SCOPUSCitations = **49** [excluding self citations] Total number of GoogleScholarCitations = **50**

Author's h index = **4** Total Impact Factor (2013) = **28.839**

B. Research in Progress

1. CURRENT RESEARCH INVOLVEMENT (Selected)

Agricultural mechanization; Farm machinery design, development and evaluation

Design of aquatic weed harvester

Development of Rice Combine Harvester

Design of Cassava Harvester

Machine vision based grading of oil palm FFBs

Anthropometric database for ergonomic design of agricultural tools

Tractive performance of small agricultural tractor on wetland

Controlled environment agriculture

Smart greenhouse control system with remote interface using internet and mobile phones Controlled and modified atmospheric storage of Orchid

Precision agriculture

Precision Spraying using a Radio-Controlled Quad-Copter

Development of Geodatabase and WebGIS for coffee & cocoa pests and disease as DSS

Agricultural/agri-environment systems analysis

Energy balance, energy economics and GHG emissions of crop production systems (Rainfed v/s Irrigated rice in Myanmar; Rice-Wheat v/s Rice-Potato in India; Conventional v/s SRI rice in Cambodia; Open field v/s Greenhouse vegetables in Indonesia)

Issues of land suitability, production and crop substitution under influence of climate change (Thailand, Philippines)

Agribusiness management

Sustainability assessment of Thai agro-industries

Sustainability assessment of selected Rice husk CDM projects in Thailand

Cassava root supply chain for Thai starch mills

Economics of oil palm plantation in Thailand

Theory of planned behavior for agricultural machinery selection

PLANS FOR FUTURE RESEARCH PROJECTS

- a) Low altitude remote sensing using unmanned radio-controlled UAVs on agricultural farms for crop scouting, spraying and field monitoring
- b) Energy input-output analysis in agricultural systems
- c) Wetland traction studies

C. Research Grants and Sponsored Projects

[† Projects developed and negotiated by me solely]

May 2013 - Apr 2016

Co-Principal Investigator

Enhancing Productivity and Market Linkages- Improving the Livelihoods and Food Security of Smallholders in Asia (USD 899,337)

Donor: USAID/RDMA

Agricultural Learning Exchange for Asian Regional Networking (AgLEARN)

Agency: US Agency for International Development (USAID)/Regional Development Mission for Asia (RDMA)

Jan 2013 - Dec 2013 Donor: FAO-RAP

† Principal Investigator

Preparation of an Analytical Publication on the Status and Future of Sustainable Agricultural Mechanization in Asia and the Pacific (THB 1,381,000)

Agency: FAO of the United Nations (Regional Office for Asia and the Pacific)

Feb 2012 - Dec 2013 Donor: John Deere

† Principal Investigator

Development of an Instrumentation and Data Acquisition System for Agricultural Tractor (THB 2,103,422) Agency: John Deere India Pte. Ltd.

Aug 2011 - Dec 2013 Donor: SHIATS, India

† Principal Investigator

Short-term training visit program for MBA final year students as a part of their international internship on Agribusiness and Agroindustries in Thailand (INR 912,000)

Agency: Sam Higginbottom Institute of Agriculture, Technology and Sciences (Allahabad), India

Jul 2010 - Dec 2013 Donor: Sultan Qaboos University, Oman

† Principal Investigator

Laboratory training program for capacity building of SQU (USD 4,000)*

*including second grant negotiated for year 2011

Short Training in Agricultural Systems & Engineering.

Agency: Sultan Qaboos University, Muscat (Oman)

Jan 2010 - Dec 2012 Donor: CIRAD

Team Member (AIT)

The Regional Program "SDCC / AIT – France Network Project (EUR 137,528 + THB 3,560,00)

Life Cycle Assessment of Export Rice and Cotton in South-South East Asia: promoting communication, capacity building and networking in LCA research activities.

Agency: CIRAD (France)

Jan 2010 – Dec 2011 Donor: FAO, Italy

† Principal Investigator

Commissioning and coordinating regional studies on Public-Private- Partnership (PPP) for Agribusiness and Agro-industry development in Asia (<u>USD 3,182</u>)

Agency: FAO of the United Nations (Italy)

Jan 2010 – May 2010 Donor: University of Hanover, Germany

Principal Investigator (substitute)

Sustainable Vegetable Production in Humid Tropics using Protected Cultivation

Jan 2008 – Dec 2010 Donor: British Council- PMI2

Project Coordinator (substitute)

Research Cooperation project (RC136) with Harper Adams University College, UK (GBP 22,113):

The control of agricultural tractors carrying out cultivations with the aim of maximizing tractive efficiency and resulting in minimum fuel use and minimum operator time.

Agency: British Council – Prime Minister's Initiative (PMI)-2 Research Cooperation project grant.

Jun 2008 – Jan 2009

Client: Fuel-Freedom International (FFi)

Principal Investigator

Automobile Engine Vibration and Sound Pressure Level Testing for MPG-CAPS (<u>THB 220,000</u>) Client: Fuel-Freedom International (FFi)

Jul 2007 - Dec 2007

Donor: German Technical Cooperation (GTZ)

Team Member (Project Engineer)

Energy & Eco-Efficiency in Agro-Industry (E3Agro) Project (THB 1,031,600) on:

Testing of Pond Aerators – Comparative Testing of Efficiency of Oxygen Transfer Performance and Pond Water Body Mixing.

Agency: German Technical Cooperation (GTZ); Dept. of Alternative Energy (Ministry of Energy, Thailand); AIT

V. Service / Outreach

A. Professional Service

1. LEADERSHIP IN POLICY AND PROGRAM DEVELOPMENT IN PROFESSIONAL ORGANIZATIONS

Contributed to a regional feasibility study conducted by United Nations Asia and Pacific Center for Agricultural Engineering and Machinery (UN-APCAEM) for establishment of an Asian Network of Testing Agricultural Machinery (ANTAM) – Oct. 2009.

Preparing a strategic analytic report on Sustainable Agricultural Mechanization in the Asia and the Pacific – commissioned by the FAO-RAP – 2013.

I was recently invited to contribute to the formation of an Asia Pacific Sustainable Agriculture, Food, and Energy (SAFE) Network by a group of institutions and individuals. SAFE Network is an Asia Pacific network of university and college educators, researchers, and activists, who collaborate in analysis, synthesis, connecting and educating the people for a better economy, ecology, and equity in agriculture, food and energy system. http://safetainability.org/

3. ELECTIVE OR APPOINTED OFFICES HELD

Asian Association for Agricultural Engineering

Secretary-General - Elected Position

Asian Association for Agricultural Engineering (AAAE)

http://www.aaae.ait.ac.th

President of the AIT Student Union - Elected Position

2004

Ex-Officio Participation to the AIT Board of Trustees - Privileged appointment as SU President 2004

4. ORGANIZATION OF TRAINING COURSES, CONFERENCES, SEMINARS AND WORKSHOPS

Training Courses

Aug 2011 - Dec 2013

Donor: SHIATS, India

Principal Investigator

Short-term training visit and International Internship on Agribusiness and Agroindustries in Thailand - for MBA final year students of the Joseph School of Business Studies (INR 912,000)

Agency: Sam Higginbottom Institute of Agriculture, Technology and Sciences (Allahabad), India

Jul 2010 - Dec 2013

Donor: Sultan Qaboos University, Oman

Principal Investigator

Laboratory training program for capacity building of SQU (USD4,000)

Short Training in Agricultural Systems & Engineering.

Agency: Sultan Qaboos University, Muscat (Oman)

Conferences

17 Sept 2010 - 20 Sept 2010

Asian Association for Agricultural Engineering

Member of the Organizing Committee; and Moderator of the Technical Session (Asia Forum)

11th International Agricultural Engineering Conference (IAEC) on:

Innovation, Cooperation and Sharing

Great Tang Hotel, Shanghai (China)

7 Dec 2009 - 10 Dec 2009

Asian Association for Agricultural Engineering

Organizing Secretary

10th International Agricultural Engineering Conference (IAEC) on:

Role of Agricultural Engineering in Advent of Changing Global Landscape

Manhattan Hotel, Thailand

3 Dec 2007 - 6 Dec 2007

Asian Association for Agricultural Engineering

Organizing Committee

9th International Agricultural Engineering Conference (IAEC) on:

Cutting edge technologies and innovations on sustainable resources for world food sufficiency AIT Conference Center, Asian Institute of Technology (Thailand)

6 Dec 2005 - 9 Dec 2005

Asian Association for Agricultural Engineering

Organizing Committee

8th International Agricultural Engineering Conference (IAEC) on:

Agricultural Engineering- Technologies and Future Trends

Miracle Grand Convention Hotel, Thailand

Workshops, Seminars

2 Mar 2009 - 18 Mar 2009

Agency: USAID; Participants: 7

Coordinator/Instructor

USAID; Advancing Afghan Agriculture Alliance (A4), Kabul – funded training program for Faculty Staff members of Kabul University

Laboratory Procedures for Agriculture Sciences

Asian Institute of Technology (Thailand)

6 Dec 2008 - 16 Dec 2008

Agency: IPoS/Nissan Motors; Participants: 33

Facilitator

Nissan Workshop in IPoS - 2008 on:

Cities and Sustainable Transportation in 2050

Sajima Marina Hotel, Yokosuka (Japan)

12 Nov 2008 Agency: AVRDC; Participants: 16

Resource Person

Asian Vegetable Research and Development Center – Asian Regional Center (AVRDC-AVC) of CGIAR training on:

Mechanizing Vegetable Production

9 Jun 2008 Agency: World Bank; Participants: 5

Resource Person

AARM Training to Sri Lankan Participants

Aquacultural Engineering

Aquaculture Outreach Center, AIT, Bangkok (Thailand)

May 2006 – Jul 2006 Agency: AIT; Participants: 6

Resource Person

To teach Agricultural Systems and Engineering at AIT-Bridging program

20 Jul 2004 – 16 Sept 2004 Agency: Nestle; Participants: 30

Organizer and Instructor

Workshop for Nestle-Waters senior and middle management staff on: Business Communication & Managerial Aptitude Development Workshop Ayutthaya factory (Thailand)

5. Editing or serving on advisory boards of journals

May 2013 – SAFE-Newtork, Indonesia

Member of Editorial Board

Asia Pacific Journal of Sustainable Agriculture, Food and Energy (APJSAFE) ISSN 2338-1345; Published by Sustainable Agriculture, Food and Energy (SAFE2013) Network, Indonesia http://journal.bakrie.ac.id/index.php/APJSAFE/index

Jan 2012 – Dec 2015 CSAE, CSAM, China

Member of Editorial Board

International Journal of Agricultural and Biological Engineering (IJABE)

http://www.ijabe.org

July 2008 - Dec 2009

Asian Association for Agricultural Engineering

Assistant Editor

International Agricultural Engineering Journal (IAEJ), Vol. 17 (1-4); Vol. 18(1-2); Vol. 18(3-4) ISSN 0858-2114, published quarterly

April 2007 - Dec 2009

Asian Association for Agricultural Engineering

Newsletter Editor

AAAE Newsletter, Vol. 16(3), 16(4), 17(1), 17(2), 17(3&4), 18(1&2), 18(3&4) ISSN 0858-706X, published quarterly

8. PROFESSIONAL MEMBERSHIP

Life-member, International Society of Bionic Engineering (ISBE); PM361

Member, American Society of Agricultural and Biological Engineers (ASABE)

Life-member, Asian Association for Agricultural Engineering (AAAE); LM109

Life-member, Indian Society of Agricultural Engineers (ISAE); LM10014

Life-member, Indian Science Congress Association (ISCA); 10065

Life-member, AIT Alumni Association (AITAA); II009AU03

Life-member, CTAE Alumni Association; 2001/BE(Ag.)/227

B. Significant Institute Committee Service

1. FIELD OF STUDY

Involved in preparation of Under Graduate courses in Biosystems Engineering. 2012

2. SCHOOL

Sept 2010 - Dec 2012

School of Environment, Resources and Development

Member

SERD- SAMC School Academic Matters Committee

Feb 2011 - to date

School of Environment, Resources and Development (SERD), AIT

Member

Working group on development of a new Masters program on "Rural Entrepreneurship and Agricultural Development (READ)"

Mar 2011 - Aug 2011

School of Environment, Resources and Development (SERD), AIT

Member

Working group on Classroom Renovation

3. INSTITUTE

Apr - May 2013

Asian Institute of Technology

Member of Election Committee for FRC

Representing SERD as one of the three members of Election Committee to conduct election for Faculty Representation Committee (FRC) to the AIT Board of Trustees

May 2013 – Apr 2015

Asian Institute of Technology

Member of UGPRC

Representing SERD as a member of Undergraduate Programs Review Committee (UGPRC)

Dec 2012 - Dec 2014

Asian Institute of Technology

Member of Steering Committee

Asian Water Research and Education (AWARE) Center under the umbrella of the Center of Excellence on Sustainable Development in Context of Climate Change (SDCC)

C. Administrative Service

1. FIELD-OF-STUDY/PROGRAM

Apr 2010 – Aug 2011

Asian Institute of Technology

Coordinator: ABM

Assuming administrative responsibilities for Agribusiness Management (ABM); Representing FoS at school and institute level meetings; FoS promotion; Students recruitment; Brochure and website preparation and maintenance

Dec 2009 – Jan 2010

Asian Institute of Technology

Coordinator: ASE, ABM

Assuming administrative responsibilities for two fields of study, namely, Agricultural Systems and Engineering (ASE), and Agribusiness Management (ABM); Representing FoS at school and institute level meetings

D. Community Service

3. REFEREEING OF JOURNAL ARTICLES, GRANT PROPOSALS

2003 - to date

Reviewer

- a) International Agricultural Engineering Journal, Publisher: Asian Association for Agricultural Engineering
- b) Biosystems Engineering, Publisher: Elsevier
- c) Journal of Terramechanics, Publisher: Elsevier
- d) Transactions of ASABE, Publisher: American Society of Agricultural and Biological Engineers
- e) International Journal of Agricultural and Biological Engineering, Publisher: CSAE
- f) Energy Efficiency, Publisher: Springer

Jan 2012

Project Proposal Reviewer

The Deanship of Research at Sultan Qaboos University: Research Grant IG/AGR/12/05: Project amount = OMR 9,700, Project duration = 3 years

"Evaluation of the effect of soil compaction and tillage management on the growth and yield of crops"

Nov 2012

Project Proposal Reviewer

The United States - Israel Binational Agricultural Research and Development Fund (BARD): BARD Proposal IS-4575-13 Reviewer Number 11: Project amount = USD 300,000, Project duration = 3 years "Advancing precision weed management by integrating biology and 3-D modeling"

Nov 2013 (ongoing)

Project Proposal Reviewer

The United States - Israel Binational Agricultural Research and Development Fund (BARD): BARD Proposal IS-4690-14 R Reviewer Number 1: Project amount = USD 300,000, Project duration = 3 years

"Integrating Wood Piplomy and 3 D Modeling to Advance Propinion Crop Management"

"Integrating Weed Biology and 3-D Modeling to Advance Precision Crop Management"

4. SERVING AS EXTERNAL EXAMINER TO NON-AIT DOCTORAL STUDENT

1. Mr. Om Prakash Chaturvedi [India] - Sept-Dec 2011

Dissertation: "Process Optimization for Conversion of Vegetable Oil into Biodiesel and Design of Biodiesel Plant"

TERI University, New Delhi, India

2. Mr. Jishnu Mohan Bhattarai [Nepal] - April-May 2010

Dissertation title: "Determinants of Yield Rates in Nepalese Agriculture by using Suitable Model for Nepal" Institute of Science and Technology, Tribhuvan University, Nepal

VI. Ability to Cooperate

1. Joint Research Activity

Undertaken research projects with involvement of <u>institute-wide FoSs</u> (FEBT, WEM/NRM, Energy, AARM). This has provided me an opportunity to closely work with institutions/agencies like:

- a) Harper Adams University College, UK
- b) Hanover University, Germany
- c) Sultan Qaboos University, Oman
- d) CIRAD, France

- e) GIZ, Germany
- f) Alliance for Global Sustainability, University of Tokyo
- g) Sam Higginbottom Institute of Agriculture, Technology and Sciences, India
- h) USAID/RDMA

2. Joint Pedagogical Activity

I have jointly offered courses with several instructors, namely-

- a) Prof. V. M. Salokhe ASE [Former Professor]
- b) Dr. H. P. W. Jayasuriya ASE [Former Assistant Professor]
- c) Prof. C. K. Lin AARM [Former Professor]
- d) Dr. Yang Yi AARM [Former Professor]
- e) Dr. D. P. Thakur AARM [Former Affiliated Faculty]
- f) Dr. Amaratne Yakupitiyage AARM
- g) Dr. Lionel Dabbadie AARM
- h) Dr. Eiji Morimoto Ishikawa Agricultural Research Center, Japan
- i) Dr. Alexander Keen Harper Adams University College, UK
- j) Dr. Roongruang Kalsirisilp RMUTT, Thailand
- k) Dr. Grianggai Samseemoung RMUTT, Thailand
- I) Dr. Kiattisak Sangpradit RMUTT, Thailand
- m) Dr. Anuchit Chamsing Ministry of Agriculture and Cooperatives, Thailand
- n) Dr. Ramchandra Bastakoti Former Adjunct Faculty

I have been also teaching courses in FoSs other than ASE, namely-

- a) ABM
- b) AARM

I am involved in Masters/Doctoral students' research supervision at different FoSs as well as across the three schools of AIT, namely-

- a) ASE SERD
- b) ABM SERD
- c) AARM SERD
- d) FEBT SERD
- e) NRM SERD
- f) Mechatronics SET
- g) RS&GIS SET
- h) WEM SET
- i) DBA SOM

3. Interaction with Public and Private Sectors

During the academic and professional interactions, I have established strong links with both public and private sectors, mainly with-

- j) British Council
- k) UN-APCAEM, China
- I) UN-APCTT, India
- m) UN-FAO, Italy
- n) UN-FAO-RAP, Thailand
- o) USAID/RDMA
- p) Agricultural Engineering Research Institute, Thailand
- q) Fuel-Freedom International (FFi), Thailand

- r) Siam Kubota, Thailand
- s) Eastern Sugar & Cane Co. Ltd., Thailand
- t) National Instruments, Thailand
- ú) CP-Food, Thailand
- v) John Deere Asia (India, Singapore, Thailand)
- w) A number of Thai national universities (Kasetsart University; Thammasat University; Naresuan University; Rajamangla University system; Khon Kaen University; Prince of Songla University)
- x) A number of Indonesian national universities (Andalas University; Jember University; Bogor University)
- y) Japanese national universities (Kyoto University; Tokyo University)
- z) Chinese Academy of Agricultural Mechanization and Sciences (CAAMS), Beijing