Brief CV of Dr. Sakae Shibusawa

Dr. Sakae Shibusawa is an emeritus professor of Tokyo University of Agriculture and Technology, working as a part-time professor in World-leading Innovative and Smart Education (WISE) Program. His work is focused on agricultural engineering, precision agriculture and community-based approaches. His research interests include real-time soil sensing, foods and waste supply chain, and organizing the learning groups of farmers and engineers in the community-based precision agriculture. In addition, he has been actively involved in the development of agricultural machines, such as deep rotary tillage, and in phytotechnolgy based on speaking-plant approaches. He is the editor and co-author of the book "Precision Agriculture" (in Japanese). This book describes the Japanese model for the community-based precision agriculture and how it relates to science, technology and business storyboards. It also explains how to organize a community to push precision agriculture practices. He is also a co-author of the "Handbook of Precision Agriculture" (Ed. Ancha Srinivasan), where he describes the worldwide state-of-the-art of soil sensing technologies available for precision agriculture.

1.	Name:	Sakae SHIBUSAWA
2.	Date of Birth:	April 17, 1953
3.	Affiliation	Institute of World-leader Innovative and Smart Education, Tokyo University of Agriculture and Technology
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		Japan
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5.	Field of Specialization:	Agricultural Engineering
		Precision Agriculture
6.	Academic Qualifications:	Doctor of Agriculture, Kyoto University, 1984
		Master of Agriculture, Kyoto University, 1979
7.	Position Held:	Emeritus Professor, Part-time Professor

8. Number of Postgraduate Students Supervised:
 a) PhD
     Graduated   -   14 supervised and 8 co-supervised

 b) Masters
     Graduated   -   30

9. Achievements/Awards: ● Outstanding Contribution Award to XIV Memorial CIGR World Congress (CIGR (International Commission for Agricultural Engineers), November, 2000)

- Academic Award on Community-based Precision Agriculture in Japan(Japanese Society of Agricultural Informatics, September, 2003)
- Academic Award on Community-based Precision Agriculture in Japan(Japanese Society of Agricultural, Biological and Environmental Engineers and Scientists, September, 2016)

10. Number of Publications: about 80 Journal papers (including Japanese)
about 100 international conference papers
10 books
more than 70 technical papers non-reviewed

11. List 10 Significant Journal Publications (Latest):

1) Bintang MADRINI, Sakae SHIBUSAWA, Yoichiro KOJIMA and Shun HOSAKA (2016). Effect of natural zeolite (clinoptilolite) on ammonia emissions of leftover foodrice hulls composting at the initial stage of the thermophilic process. Journal of Agricultural Meteorology 72 (1): 12-19.

2) S. N. Aliah Baharom, S. Shibusawa, M. Kodaira, R. Kanda (2015). Multiple-depth Mapping of Soil Properties using a Visible and Near Infrared Real-time Soil Sensor for a Paddy Field. EAEF (Engineering in Agriculture, Environment and Food), 8: 13-17.

3) S. Shibusawa (2015). Chapter 8. A Systems Approach to Community-based Precision Agriculture, in Precision Agriculture Technology- Past, Present, and Future-, Ed. by Qin Zhang, CRC Press.

4) Zainal Abidin, M. S. B., Shibusawa, S., Ohaba, M., Li, Q. and Khalid, M. B. (2014) Capillary flow responses in a soil-plant system for modified precision irrigation, Precision Agriculture15: 17-30, DOI 10.1007/s11119-013-9309-6

5) M. Kodaira, S. Shibusawa (2013). Using a mobile real-time soil visible-near infrared sensor for high resolution soil property mapping. Geoderma, Vol.199, 64-79.

6) Y. Li, S. Shibusawa, M. Kodaira (2013) Carbon Sequestration Potential and Farming Income: Identifying the Optimal Carbon Farming Practices in Japanese Paddy Fields. EAEF, 6(2), 68-76.

7) C. Hache, S. Shibusawa, A. Sasao, T. Suhama, B. P. Sah. (2007) Field-derived spectral characteristics to classify conventional and conservation agriculture. Computer and Electronics in Agriculture, 57:47-61

8) S. Shibusawa (2006). Soil sensors for precision farming. Chapter 3 In "Handbook of Precision Agriculture", Ed A. Srinivasan, The Haworth Press Inc., New York pp. 683: 57-90.

9) J. Qiao, A. Sasao, S. Shibusawa, N. Kondo, E. Morimoto (2005). Mapping yield and quality using the mobile fruit grading robot. Biosystems Engineering, Elsevier, 90(2), 135-142.

10) S. Shibusawa (2004). Paradigm of value-driven and community-based precision farming. Int. J. Agricultural Resources, Governance and Ecology, 3 (3/4), 299-309

11. Others
1) President, Japanese Society of Agricultural Machinery (now Japanese Society of

Agricultural Machinery and Food Engineers), 2009-2011.
2) Chair, National Technical Working Group of Japan, GLOBALG.A.P., 2011 - Now
3) Council Member, Science Council of Japan, 2013 – Now
4) Chair, Department of Environmental and Agricultural Engineering, TUAT. 2017.
5) Advisory Scientist. Council of Strategic Headquarters for Advanced IT Network Society, Cabinet Secretariat, Japan. 2014 - now.
6) Advisory Scientist, Council of Science and Technology Innovation, Cabinet Office, 2014 -2017.
7) Founder and Board Member of Asian-Australasian Conference on Precision Agriculture. 2015 - Now