



**RIO18**  
21st World Congress  
of Soil Science

**21 WORLD CONGRESS OF SOIL SCIENCE**  
Sunday 12 – Friday 17 August 2018  
Rio de Janeiro, Brazil

Rio de Janeiro August | 12 - 17

## DIVISIONAL SYMPOSIUM – DIVISION 1

Thursday (Aug, 16)		Room "Oceania VI e VII"	
<b>WG05</b>		<b>Proximal soil sensing (PSS)</b>	
		<b>Convener:</b> Gustavo M. Vasquez, Pesquisador Embrapa Solos, Rio de Janeiro, RJ, Brazil	
		<b>Co-Convener:</b> Zhou Shi, College of Environmental and Resource Sciences, Zhejiang University, China	
Schedule	ID	Title	Presenter
15:30 – 15:40	--	Opening	Conveners
15:40 – 16:05	Invited	<i>Applications of electromagnetic induction techniques in soil studies across different spatial and temporal scales</i>	Jingyi Huang
16:00 – 16:25	Invited	<i>Machine learning and computer vision applications in proximal soil sensing</i>	Asim Biswas
16:25 – 16:40	1690	Development of a low cost MIR spectrometer for proximal soil sensing: progress and challenges	Matthew Keller
16:40 – 16:55	2678	Estimating soil organic carbon with soil Vis-NIR spectroscopy: a comparison of different algorithms in two forest areas	Gabriele Buttafuoco
16:55 – 17:10	300	Monitoring soil moisture dynamics at the plot scale using repeated electromagnetic induction surveys	Jingyi Huang
17:10 – 17:25	2667	Prediction of total silicon concentrations in French soils using pedotransfer functions from mid-infrared spectrum or pedological characteristics	Nicolas PA Saby
17:25 – 17:40	2434	Seeing is believing: managing soil variability, improving crop yield and minimising off-site impacts in sugarcane using proximal soil sensing and digital soil mapping	John Triantafyllis
17:40 – 17:55	789	Soil spectra fusion based on Outer Product Analysis (OPA): a strategy for modeling soil properties	Fabrcio da Silva Terra
17:55 – 18:10	968	Soil survey for agricultural land physical quality grade assessment using in-situ vis-NIR spectroscopy in Jiangxi Provicne, China	H Y Li
18:10 – 18:15	--	Closing	Conveners



**Brazilian Soil Science Society**



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