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1 Day : Friday Date: Oct 19, 2018
 2 Guided by: Ms. Berlian (Computational Science, ITERA)

9							
7		15.45	16.00	Diding Suhandy1,4, Meinilwita Yulia2,4, Kusumiyati3	1 Agricultural Engineering Department, The University of Lampung, Bandar Lampung, Lampung, Indonesia 2 Agricultural Technology Department, Lampung State of Polytechnic, Bandar Lampung, Lampung, Indonesia 3 Crop Science Department, Faculty of Agriculture, Padjadjaran University, Bandung, Indonesia 4 Spectroscopy Research Group (SRG), Laboratory of Bioprocess and Postharvest Engineering, Faculty of Agriculture, The University of Lampung, Bandar Lampung, Lampung, Indonesia	The authentication of peaberry and civet ground roasted robusta coffee using Uvvisible spectroscopy and PLSDA method with two different particle sizes	diding.sughandy@fp.unila.ac.id
8		16.00	16.15	M Yulia1,3 and D Suhandy2,3	1 Department of Agricultural Technology, Lampung State Polytechnic, Jl. Soekarno Hatta No. 10, Rajabasa Bandar Lampung, 35141, Indonesia. 2 Department of Agricultural Engineering, The University of Lampung, Jl. Prof. Dr. Soemantri Brojonegoro No.1, Bandar Lampung, 35145, Indonesia. 3 Spectroscopy Research Group (SRG), Laboratory of Bioprocess and Postharvest Engineering, Faculty of Agriculture, The University of Lampung, Bandar Lampung, Lampung, Indonesia.	The Feasibility of Geographical Origin Discrimination of Lampung Robusta Coffee Using UV-Visible Spectroscopy and Chemometric Methods	meinilwitayulia@polinela.ac.id
9		16.15	16.30	P Santoso1, R Setiawan2, Suharso3	1 Chemistry Department, Institut Teknologi Sumatera, Lampung Selatan, Lampung, Indonesia 2 Physics Department, Institut Teknologi Sumatera, Lampung Selatan, Lampung, Indonesia 3 Department of Chemistry, University of Lampung, Bandar Lampung, Lampung, Indonesia	Piper betle leaf extract as a green inhibitor of calcium sulphate (CaSO4) scale formation	prio.santoso@ki.itera.ac.id
10		16.30	16.45	A Yudi1, N B Wirawan1, S A Fauzan1, R Nadeak1	1 Civil Engineering Department, Institut Teknologi Sumatera, Lampung Selatan, Lampung	Structure Behavior Analysis with Time History Levelling Method (Case Study in Building E of ITERA)	ahmad.yudi@si.itera.ac.id
11		16.45	17.00	Indah Oktaviani1, Muhammad Asril1, Yanti Aryanti1, Sovia Santi Ileksikowati1	1 Biology Department, Institut Teknologi Sumatera, Lampung Selatan, Lampung	A SYSTEMATIC SURVEY OF PLANT BIODIVERSITY STUDY WITHIN THE LAND OF INSTITUT TEKNOLOGI SUMATERA (ITERA)	indah.oktaviani@bi.itera.ac.id

Piper betle leaf extract as a green inhibitor of calcium sulphate (CaSO₄) scale formation

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Abstract. The addition of *Piper betle* leaf extract with the concentration 450 ppm as a green inhibitor on the formation of CaSO₄ scale at the concentrations of growth solution of 0.05 M and at temperature 90°C was carried out using a seeded experiment method. The experiments were performed with observing the precipitation change of CaSO₄ crystals growth obtained. In order to prove the efficiency of the inhibitor in inhibiting the formation of CaSO₄ crystals, the changes of the crystal morphology were investigated by scanning electron microscopy (SEM). The research results showed that *Piper betle* leaf extract was able to inhibit the formation of CaSO₄ scale indicated with the morphology change of the CaSO₄ crystals after the addition of this inhibitor. The ability of *Piper betle* leaf extract as an inhibitor of the formation of CaSO₄ is 47.07%.