



CERTIFICATE

The organizing committee certifies that

Prof. Sutopo Hadi

has contributed as

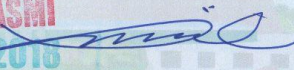
KEYNOTE SPEAKER

The 2nd International Conference on Applied Sciences, Mathematics and Informatics (ICASMI)
"The Contribution of Sciences on Sustainable Valorization of Natural Resources"

Held by Faculty of Mathematics and Natural Sciences, University of Lampung
August 09th-11th, 2018 at Horison Hotel, Bandar Lampung, Indonesia.



Prof. Warsito, S.Si., DEA., Ph.D.
Dean



Dr. Junaidi, S.Si., M.Sc.
Chairman

Sponsor :



Institute of Research and
Community Services
University of Lampung



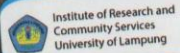


PROGRAM BOOK

The 2nd International Conference on Applied Sciences, Mathematics and Informatics



Sponsor :



Time	Duration	Activity	PIC
		<i>and Behaviour Monitoring</i>	
		Keynote speaker 6 Prof. Celestine C. Kokonendji "How to Measure a Multivariate Dispersion for Count Data/Models?"	
09.35 am	15 mins.	Coffee Break	Widiarti, M.Si.
09.50 am	60 mins.	Plenary Session 3 Keynote speaker 7 Prof. Wannapong Triampo <i>"Speech title"</i> Keynote speaker 8 Prof. Sutopo Hadi <i>"The Biological Activity of Some Organotin(IV) benzoate compounds"</i>	Moderator: Dr. Favorisen R. Lumbanraja Operator: Muhammad Ibrahim & Aris Subagio
10.50 am	40 mins.	Poster session	Dr. Aang Nuryaman
11.30 pm	90 mins.	Lunch break	Widiarti, M.Si.
01.00 pm	120 mins.	Parallel Session 4 Room A: Chemistry and Applied Chemistry Room B: Biology and Applied Biology Room C: Mathematics and Applied Mathematics Room D: Informatics and Computer Science Room E: Physics and Applied Physics	Moderator: Room A: Dr. Ni Luh Gede Ratna Juliasih Room B: Dra. Elly Lestari Rustiati, M.Sc Room C: Dr. Notiragayu Room D: Ani Rose Irawati, M.Cs. Room E: Gurum A. Pauzi, M.T. Operator: Room A: Ahmad Ikhsanudin Room B: Muhammad Ibrahim Room C: Theresia Indah Room D: Destia Latifah A Room E: Alvin Wiwiet Susanto
03.00 pm	15 mins.	Coffee break	Widiarti, M.Si.



Sutopo Hadi

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The Biological Activity of Some Organotin(IV) benzoate compounds

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Abstrak: The organotin(IV) carboxylate and its derivatives are widely known since the derivative of these compounds are very active and strong even at very low concentration. This condition makes these compounds continue to attract more attention to be used in many biological activities. We have previously succeeded in the syntheses and performed many activity studies of some organotin(IV) benzoates, in this work, we reported the antibacterial and antimalaria activity studies of some organotin(IV) derivatives. The targeted compounds were prepared from their organotin(IV) chlorides via the intermediate products of dibutyltin(IV) oxide, diphenyltin(IV) dihydroxide and triphenyltin(IV) hydroxide, respectively and followed by reacting the intermediate products with benzoic acid desired. The antimalaria activity was performed against *Plasmodium falciparum*. While the antibacterial activity was performed against *Pseudomonas aeruginosa* and *Bacillus subtilis*. The results showed that the IC_{50} of all organotin(IV) compounds tested were little bit higher than the chloroquine as the positive control, however one advantage is that the organotin(IV) compounds are not resistant to the Plasmodium, thus making the use of organotin(IV) as antimalaria is widely opened. The triphenyltin(IV) compound is more potent to be used as antimalaria and has potential to be developed as antimalarial drug in the near future. The results of antibacterial activity revealed that the triphenyltin(IV) 4-chlorobenzoate was the most active compound although it is less active compared to the chloramphenicol.

Keywords: *antibacteria, antimalaria, organotin(IV) benzoate*