

23<sup>rd</sup> International Conference on  
**NANOMATERIALS SCIENCE & NANOENGINEERING & TECHNOLOGY**  
&  
International Conference and Exhibition on  
**PHARMACEUTICAL NANOTECHNOLOGY AND NANOMEDICINE**  
April 18-19, 2018 | Las Vegas, USA

**Electronics physical system of large antioxidant structure in herbal medicine based *Zingiberaceae* fruit: Understanding and application**

**Hendry Izaac Elim<sup>1,2</sup> and Arend L Mapanawang<sup>3</sup>**

<sup>1</sup>Pattimura University, Indonesia

<sup>2</sup>Maritime and Marine Science Center of Excellence, Indonesia

<sup>3</sup>Medika Mandiri Foundation, Indonesia

In this present study, we introduce an electronic physical system of a large antioxidant chemical structure based on herbal medicine fabricated using *Zingiberaceae* fruit (Maluku Golobe) consisted of many different varieties mainly such as Halmahera rambutan Golobe, Halmahera original Golobe, and Ambon durian Golobe. A simple electronics circuit model as a prototype of nanoscale antioxidant structure with the size of 15 carbon atoms plus 2 oxygen atoms was employed to understand the highest antioxidant herbal fruit associated with highly carbon-carbon bonding and carbon-oxygen bonding as well as its interaction with water, the remarkable substance in human body of the immune system. Such electronic physical system in herbal medicine is discussed with their prominent applications particularly as HIV herbal medicine. A brief discussion on how the large antioxidant system can handle HIV virus hiding inside the CD4 T cell of lymphocyte.

**Biography**

Hendry Izaac Elim, PhD, is a young Scientist of Pattimura University. Currently, he is an experienced Indonesian Scientist of Nanoscience and Nanotechnology, and also Head of the Nanotechnology Research Center and Innovative Creation. He is the Chairman for Nanomaterials for Photonics Nanotechnology Laboratory (N4PN Lab), Physics Department, Faculty of Mathematics and Natural Sciences (FMIPA-UNPATTI), Ambon, Indonesia, and regular Member of the Indonesia Theoretical Physicist. After his PhD at NUS, he worked as a Post-doctoral fellow in Physics Department of NUS. He published over 41 papers with h-index of 23, and citation more than 2000 which made him elected as one of Pattimura University Young Scientists in 2017 awarded for the first time since 1963 by Prof. M.J. Saptanno.

hendryelim@gmail.com

**Notes:**