Brief CV

Name/中文姓名	Jonbi	Gender	Male	
Title (Pro./Dr.)	Assoc. Prof	Country	Indonesia	
University/Department	Pancasila University/ Departement of Civil Engineering			
Research Area	Nanomaterial, Advanced Concrete Technology, Forensic Engineering			

Some research that has been done

 ➢ Comparison of natural and commercial nano silica for mechanical properties and durability

The nano-technological process allows for the production of amorphous nano silica materials with high reactivity from locally produced silica sands. To obtain sustainable concrete, the mixture is designed to have high strength, andlow permeability using local resources.

 ➢ Mathematics equations of strength development high-performance concrete using nanosilica

The mechanical properties and durability of concrete can be enhanced using nano-silica. Asides that, the relationship between its content and the mechanical properties of concrete needs to be verified in order to develop compressive strength that can be applied to any concrete mixture. The mathematical equation is responsible for the relationship among the specnificecompressive strength, modulus of elasticity and rupture with its compressive forces, and the modulus of rupture with its compressive strength.

Review
 ➢ Application of the kinetic and isotherm models for better understanding of the behaviors of silver nanoparticles adsorption onto different adsorbents

It is the first time to do investigation the reliability and validity of thirty kinetic and isotherm models for describing the behaviors of adsorption of silver nanoparticles (AgNPs) onto different adsorbents. The purpose of this study is therefore to assess the most reliable models for the adsorption of AgNPs onto feasibility of an adsorbent. The fifteen kinetic models and fifteen isotherm models were used to test secondary data of AgNPs adsorption collected from the various data sources. The rankings of arithmetic mean were estimated based on the six statistical analysis methods of using a dedicated software of the MATLAB Optimization Toolbox with a least square curve fitting function. The use of fractal-like mixed 1,2-order model for describing the adsorption kinetics and that of Fritz-Schlunder and Baudu models fordescribing the adsorption isotherms can be recommended as the most reliable models for

AgNPsadsorption onto the natural and synthetic adsorbent materials. The application of thirty models havebeen identified for the adsorption of AgNPs to clarify the usefulness of both groups of the kinetic andisotherm equations in the rank order of the levels of accuracy, and this significantly contributes to understandability and usability of the proper models and makes to knowledge beyond the existing literatures.

*****All the columns need to be filled in.