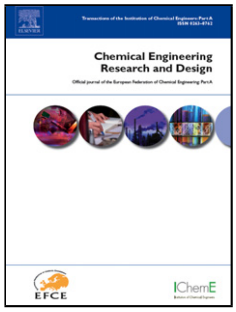


Title: Modelling of Transport Mechanisms and Drying Shrinkage for Multilayer Ceramic Membrane Structure

Author: Zawati Harun Tze Ching Ong Takeshi Matsuura Siti Khadijah Hubadillah Mohd Hafiz Dzarfan Othman Ahmad Fauzi Ismail

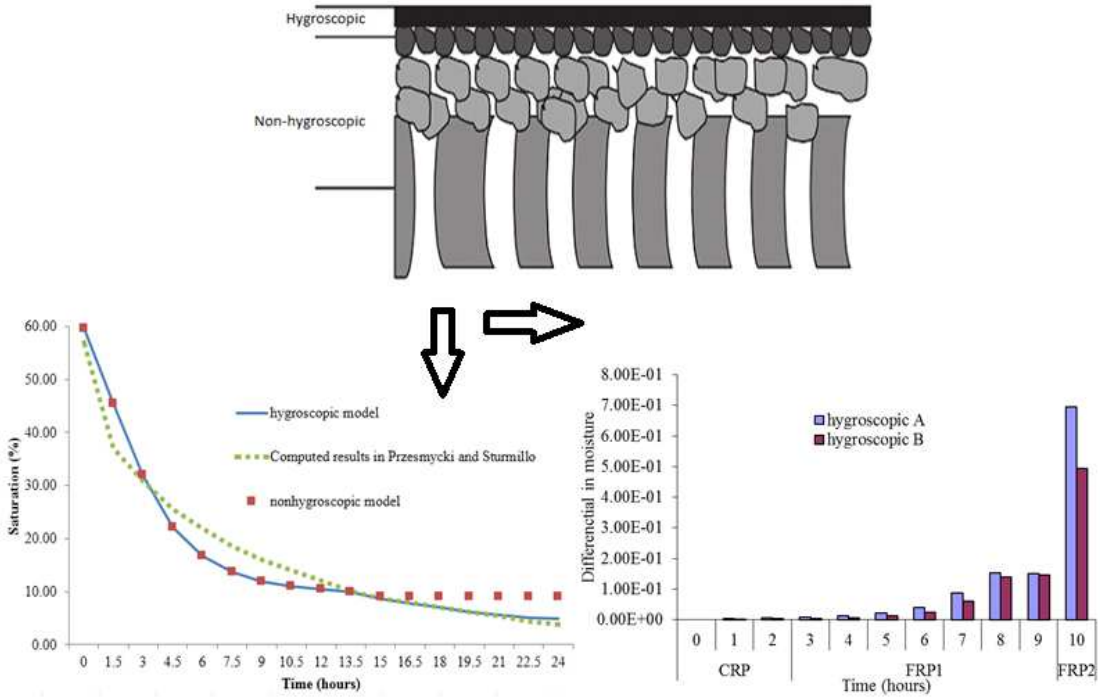
PII: S0263-8762(18)30104-7
DOI: https://doi.org/doi:10.1016/j.cherd.2018.02.039
Reference: CHERD 3068

To appear in:

Received date: 21-4-2016
Revised date: 25-2-2018
Accepted date: 27-2-2018

Please cite this article as: Harun, Z., Ong, T.C., Matsuura, T., Hubadillah, S.K., Othman, M.H.D., Ismail, A.F.,Modelling of Transport Mechanisms and Drying Shrinkage for Multilayer Ceramic Membrane Structure, *Chemical Engineering Research and Design* (2018), https://doi.org/10.1016/j.cherd.2018.02.039

Graphical Abstract



The present study revealed the evolution of dynamic drying variables in the hygroscopic and non-hygroscopic multi-layer ceramic structure is strongly associated to the different properties of both layer structures. A strong relationship between drying variables and the possibility of deformation or cracking in the multilayer dried body was presented by correlating the drying variables evolution in the fully coupled model with the strain mechanism.