Manuscript category: **Letter to the Editor**

August 03, 2019

**Prof. Bojana Obradović**

Editor in Chief

## HEMIJSKA INDUSTRIJA (Chemical Industry)

Dear Editor:

I wish to submit an original article for publication in Journal of Thermal Science, titled:

“Electrofreezing of phase-change material CaCl2·6H2O and its impact on supercooling and nucleation time”.

The paper was co-authored by Annisa Rahman, Risky Afandi Putri, Ahmad Swandi, Radhiah Anggraini, S. Wonorahardjo, D. Kurnia, and S. Wonorahardjo.

This experimental study highlights the role of electric field to the phase-change material CaCl2·6H2O. We believe that our study makes a significant contribution to the literature because it shows the effect of electric field on the nucleation temperature, freezing temperature, supercooling degree, induction time, time for supercooling, and time for crystallisation of CaCl2·6H2O. It further clarifies a simple way to determine the induction time and nucleation period, that can be applied to other materials.

Further, we believe that this paper will be of interest to the readership of your journal because it falls with the aims and scope of the journal. It also introduces two mechanism for nucleation of CaCl2·6H2O, namely bubble generation and copper-chloride complex compound.

This manuscript has not been published or presented elsewhere in part or in entirety and is not under consideration by another journal. We have read and understood your journal’s policies, and we believe that neither the manuscript nor the study violates any of these. There are no conflicts of interest to declare and this manuscript will not be published anywhere else, if accepted for publication.

We recommend 3 reviewers to review our manuscript:

Dr. Darminto, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia. Email: [darminto@physics.its.ac.id](mailto:darminto@physics.its.ac.id)

Dr. Muslum Arichi, Kocaeli University, Engineering Faculty, Mechanical Engineering Department, Umuttepe Campus, 41380 Kocaeli, Turkey. Email: [muslumarici@gmail.com](mailto:muslumarici@gmail.com)

I. Braslavskya, Department of Physics, Technion-Israel Institute of Technology, 32000 Haifa, Israel. Email: phr13ib@vmsa.technion.ac.il

Thank you for your consideration. I look forward to hearing from you.

My best regards,

Inge M. Sutjahja

Prodi Fisika, FMIPA ITB

Jl. Ganesha No. 10, Bandung, Indonesia

Phone/Fax: +62 (22) 2512672

Email: [inge@fi.itb.ac.id](mailto:inge@fi.itb.ac.id), [ingesansansan@gmail.com](mailto:ingesansansan@gmail.com)