Editor-in-Chief, Hemijska industrija

Dear Editor,

Please find enclosed the manuscript entitled **Novel composite zinc-alginate hydrogels with activated charcoal for potential applications in multifunctional wound dressings** by Andrea Osmokrovic, Ivan Jancic, Ivona Castvan Jankovic, Predrag Petrovic, Marina Milenkovic and Bojana Obradovic aimed for publishing in the journal *Hemijska industrija*.

The manuscript is an original scientific paper that is written by the above stated authors and is being submitted for publication for the first time. It is not not being considered for publication by any other journal and will not be submitted for publication elsewhere while in the reviewing process in the journal Hemijska industrija.

The manuscripts presents production of new composite Zn-alginate hydrogels with activated charcoal particles that are released upon the contact with biological fluids. The composites were analyzed by FE-SEM and characterized regarding textural parameters, as well as Zn2+ and AC release kinetics in the physiological saline solution. Also, potential functionality of the obtained composites was evaluated regarding antibacterial activity in suspensions of the standard bacterial strain *Escherichia coli* 25922. Suitable release of activated charcoal particles and zinc ions as well as strong bactericidal effects determined in the present study indicate the obtained composites as attractive candidates for multifunctional wound dressings that will regulate the moisture level in the wound, adsorb malodor and tissue degradation products, and treat bacterial infection.

We believe that the results obtained in this work will be interesting for scientists in the areas of biomaterials and biomedical engineering focusing on development of bioactive composites. We hope that the manuscript will be suitable for publication in the journal *Hemijska industrija.*

 We propose potential reviewers:

1. Prof. Dr Nabanita Saha, Tomas Bata University in Zlin, Czech Republic, E-mail: nabanita@utb.cz

2. Dr Steva Levic, Assistant Professor, Faculty of Agricutlure, University of Belgrade, E-mail: slevic@agrif.bg.ac.ra

3. Dr Slavko Mojsilovic, Institute for Medical Research, University of Belgrade, E-mail: slavko@imi.bg.ac.rs

29.06.2018, Belgrade

Sincerely,

Andrea Osmokrovic, MSc

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