19.8.2019.

Dear Editor,

We would like to submit a paper entitled:

**Encapsulation of Chaga extract in alginate beads: simplicity meets efficiency**

By authors:

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for publication in the**: Hemijska Industrija**

The aim of this study was to investigate the possibility of encapsulating hot water Chaga extract in alginate beads in order to obtain modified, pH-dependant and prolonged release of active principles, with the accent on antioxidant compounds. Chaga (*Inonotus obliquus*) is a parasitic fungus that grows predominantly on birch trees (*Betula* spp.) and is gaining popularity as a promising natural source of all kinds of physiologically active metabolites. The fungus produces dark sclerotium which has been used in traditional medicine in Russia and other northern European countries, in form of decoctions (“tea”), for treatment of stomach diseases, intestinal worms, liver and heart ailments, as well as different kinds of cancer. Recent studies revealed that Chaga has a huge medical potential, showing antioxidant, anti-inflammatory, immunomodulatory, antitumor, hypolipemic, hypoglycaemic and antimicrobial activity Total carbohydrates, proteins and antioxidant/phenolic compounds were determined, and the extract was tested for radical-scavenging and antimicrobial activity. There are several commercial products that contain Chaga extracts (Befungin is certified in EU), but none of these offers modified release of the extract, which could lead to better bioavailability of the active compounds.

The manuscript has not been published previously, it is not under consideration for publication elsewhere, its publication is approved by all authors by the responsible authorities where the work was carried out, and, if accepted, it will not be published elsewhere including electronically in the same form, in English or in any other language, without the written consent of the copyright-holder.

We hope the paper will meet your requirements and be accepted for publication.

With kind regards,

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