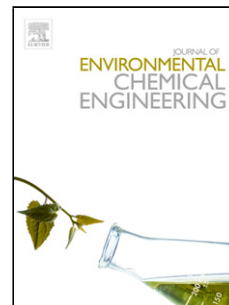


Accepted Manuscript

Title: Catalytic performance of sulfonated carbon-based solid acid catalyst on esterification of waste cooking oil for biodiesel production

Authors: Iryanti Fatyasari Nata, Meilana Dharma Putra, Chairul Irawan, Cheng-Kang Lee



PII: S2213-3437(17)30165-3
DOI: <http://dx.doi.org/doi:10.1016/j.jece.2017.04.029>
Reference: JECE 1578

To appear in:

Received date: 30-1-2017
Revised date: 8-4-2017
Accepted date: 15-4-2017

Please cite this article as: Iryanti Fatyasari Nata, Meilana Dharma Putra, Chairul Irawan, Cheng-Kang Lee, Catalytic performance of sulfonated carbon-based solid acid catalyst on esterification of waste cooking oil for biodiesel production, Journal of Environmental Chemical Engineering <http://dx.doi.org/10.1016/j.jece.2017.04.029>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

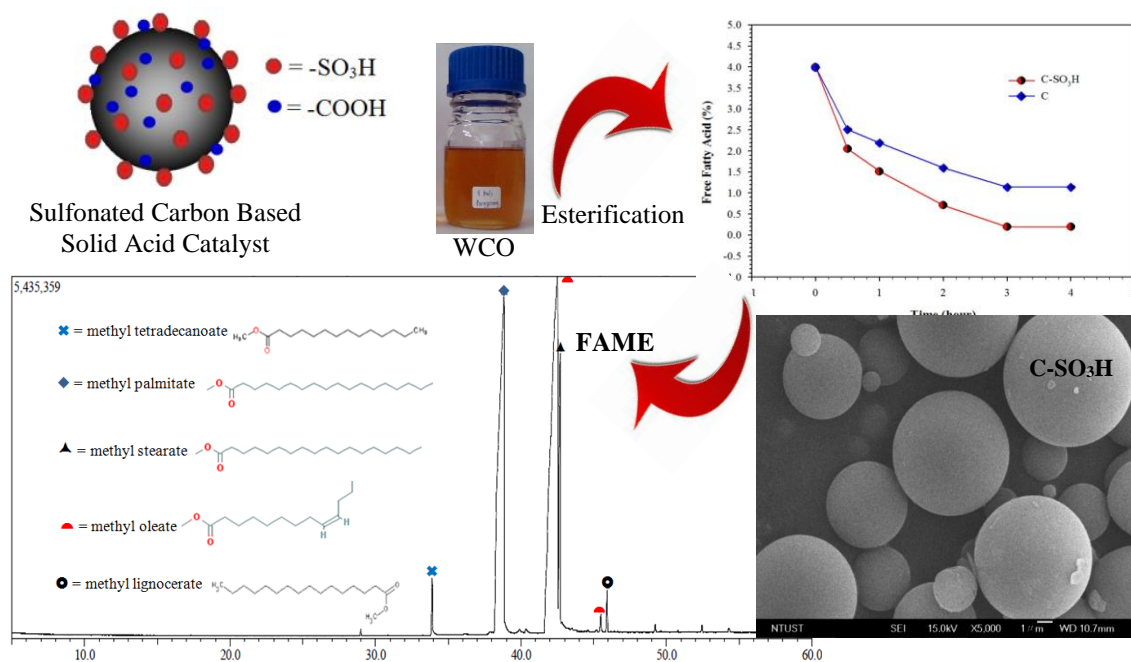
Catalytic performance of sulfonated carbon-based solid acid catalyst on esterification of waste cooking oil for biodiesel production

Iryanti Fatyasari Nata^{a*}, Meilana Dharma Putra^a, Chairul Irawan^a, Cheng-Kang Lee^b

^aChemical Engineering Department, Faculty of Engineering, Lambung Mangkurat University, Jl. A. Yani Km. 36 Banjarbaru, South Kalimantan, Indonesia 70714. Fax: +62 511 4773858; Tel: +62 511 4773858; *Email: ifnata@unlam.ac.id

^bDepartment of Chemical Engineering, National Taiwan University of Science and Technology, 43 Keelung Rd. Sec.4, Taipei, Taiwan 106. Fax: +886 2 27376644; Tel: +886 2 27376629;

Graphical abstract



Highlights

- The C-SO₃H was successfully prepared by one-step hydrothermal carbonization
- The C-SO₃H was shown good catalytic performance on esterification waste cooking oil
- The sulfonated carbon material is a potential candidate for solid acid catalyst
- The solid acid catalyst is not significantly deteriorated after repeated use

Download English Version:

<https://daneshyari.com/en/article/4908362>

Download Persian Version:

<https://daneshyari.com/article/4908362>

[Daneshyari.com](https://daneshyari.com)