



2019

Book of Abstracts

10th International Conference on Green Technology 2019

Empowering the 4.0 Industrial Revolution Through
Green Science and Technology



Malang, October 2nd - 3rd, 2019

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PREFACE

THE DEAN OF FACULTY OF SCIENCE AND TECHNOLOGY

UNIVERSITAS ISLAM NEGERI MAULANA MALIK IBRAHIM MALANG

It is our pleasure to very warm welcome all participant to the 2019 10th International Conference on Green Technology (ICGT 2019) in Faculty of Science and Technology, Universitas Islam Negeri Maulana Malik Ibrahim Malang. The ICGT have started ten years ago and this year, the theme of the conference is “*Empowering the Fourth Industrial Revolution through Green Science and Technology*”. Now, we are entering the fourth industrial revolution which will influence all aspect in the civilization of humankind. Thus, we hope through this conference we can contribute by the result of green science and technology in Empowering the Fourth Industrial Revolution through Green Science and Technology. And also, we hope this conference can bring academic scientists, engineers, industry researchers together to discuss, exchange and share their experiences and research results about green technology.

We would like to thank:

1. Rector and Vice-Rector of Universitas Islam Negeri Maulana Malik Ibrahim for their assistance and support for 10th International Conference on Green Technology.
2. Academic board committee for work in abstract and paper review.
3. The event organizing committee for managing this conference.
4. All the keynote speaker who willingly attended this conference.
5. Special Thanks to IOP Conference Proceeding Series, Journal of Islamic Architecture, ALCHEMY Journal of Chemistry, NUTRINO Journal, CAUCHY, and MATICS.

We wish all participants of 10th ICGT an enjoyable scientific meeting in Malang, Indonesia. We look forward to seeing all of you next year at 11th ICGT

Dean of Faculty of Science and Technology
UIN Maulana Malik Ibrahim Malang

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Preparation of Zeolite-Y from Rice Husk Silica and Food Grade Aluminum Foil as Catalyst for Co-pyrolysis of Mixed Cassava Tuber and Palm Oil

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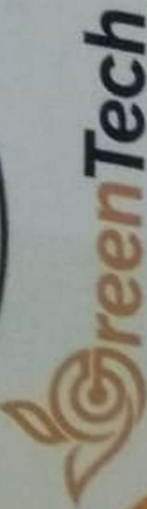
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In this research, zeolite-Y prepared from rice husk silica and food-grade aluminum was applied as catalyst for co-pyrolysis of mixed cassava tuber and palm oil to obtain bio-crude oil (BCO). Zeolite samples were prepared using hydrothermal process at 110 oC with varied crystallization time of 24, 48 72, 98, and 120 h. Zeolite samples were calcined at 550 oC for 6 h and characterized using XRD and SEM. Synthesized zeolites were then applied as catalyst co-pyrolysis of mixed cassava tuber and palm oil, and the BCO produced was analyzed using GC-MS. The experimental results obtained show that BCOs produced contain hydrocarbon as the main component.

Keywords: zeolite-Y, rice husk silica, pyrolysis, bio-crude oil

CERTIFICATE

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This certificate is hereby awarded to:

SONI SASCORI

Our sincerest gratitude for your contribution as

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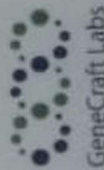
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