

Teguh Kurniawan <teguh@untirta.ac.id>

# Fwd: 16214[jets] Copyediting Review Request from Journal of Engineering and Technological Sciences

2 pesan

Anton Irawan <antonirawan@untirta.ac.id> Kepada: teguh@untirta.ac.id 11 Juni 2021 pukul 08.55

------ Forwarded message ------Dari: <jets@lppm.itb.ac.id> Date: Rab, 9 Jun 2021 08.51 Subject: 16214[jets] Copyediting Review Request from Journal of Engineering and Technological Sciences To: ANTON ENERGY <antonirawan1975@gmail.com>, Anton Irawan <antonirawan@untirta.ac.id> Cc: itbjournal <itbjournal@gmail.com>

Dear Anton Irawan,

Your submission "Bayah Natural Zeolites to Upgrade the Quality of Bio Crude Oil from Empty Fruit Bunch Pyrolysis" for Journal of Engineering and Technological Sciences has been through the first step of copyediting, and is available for you to review by following these steps.

- 1. Log into the journal and click on the Copyedited File that appears below.
- 2. Open the downloaded submission.
- 3. Review the text, including copyediting proposals and Author Queries.
- 4. Make any copyediting changes that would further improve the text.
- 5. When completed, upload the file in your reply,
- 6. Send the COMPLETE email to the editor and copyeditor.

This is the last opportunity to make substantial copyediting changes to the submission. The proofreading stage has followd the preparation of the galleys, therefore it is restricted to correcting typographical and layout errors.

We should be grateful if you are able to complete the copyediting review by 12 June 2021. If you are unable to undertake this work at this time or have any questions, please contact me. Thank you for your contribution to this journal.

With kind regards, Prof.Dr. Tjandra Setiadi Journal of Engineering and Technological Sciences Institut Teknologi Bandung jets@lppm.itb.ac.id

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**Teguh Kurniawan** <teguh@untirta.ac.id> Kepada: Anton Irawan <antonirawan@untirta.ac.id> 11 Juni 2021 pukul 09.50

[Kutipan teks disembunyikan]

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International Seminar on Chemical Engineering Soehadi Reksowardojo 2019 Labtek X, Program Studi Teknik Kimia JI. Ganesha 10, Bandung 40132, Indonesia Telp: (022) 253 4264 | Email: stksr@cheitb.id | Website: stksr.che.itb.ac.id

## Manuscript Review Form Journal of Engineering and Technological Sciences

Manuscript code: STKSR2019\_BE 12\_v.1Manuscript title: Bayah Natural Zeolites to Upgrade the Quality of Bio Crude Oil from<br/>Empty Fruit Bunch Pyrolysis

## A. Evaluation

				See
1. Is the manuscript original?		Yes X	No	comments
2. Does the title represent the	contents of the manuscript?	X		
3. Does the abstract represent manuscript?	the contents of the	X		
4. Are research methodologies approaches clearly describe		X		
5. Are the research data and in verified?	nterpretations clear and	X		
6. Is the discussion and analys results of the research?	sis in accordance with the	X		
7. Is the bibliography used rele	evant?	Χ		
8. Do you feel the manuscript h field?	ave contribution to the related	X		
9. Is the depth of research ade	quate?	X		
B. Referee's Decision				
This manuscript:				

- i. Papers can be published without revision
- ii. Papers can be published with a minor revision
- iii. Papers can be publishe<mark>d with a major rev</mark>ision
- iv. The paper was returned to the reviewer after the revision
- v. Papers are not worth publishing

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Do you want your name,	as a referee,	be shown to	the author?
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Yes	No
	X

**C. Comments / notes for the Editor's Board** (comment length is not limited to the area of the box below)

The manuscript has enough content for publication and most of the content are well written. There few minor grammatical error and ambiguous sentence that need some fixes and the author should be careful on the discussion part. It is better not to speculated without additional data or analysis. Overall, I recommend the manuscript to be published after some correction. Thank You

## D. Commentary on manuscripts for Authors (comment length is not limited to the area

of the box below)

General comment	Please try to fix few minor grammars within the manuscript. For example: line 32, its supposed to be "was successfully decreased or was successfully decreasing".
Introduction	Please clearly mention the contribution of your work in the introduction. Please list the material and the source only in the material section without mentioning the method or how to obtain the material.
Methodology	Line 112-114, please re-arrange the sentence, its ambiguous. Line 117-118, Line 131-134, please fix, etc. Line 136-143, please re-write it carefully.
Results & Discussion	Figure 1, please be consistent on how you write the number on the legend and on the caption. Which one is right? Using 0.0 M or 0.1 M? Fig. 2, there is no data point for 0.1 M. Fig. 3, perhaps the author should highlight or circle certain structure or irregularities or pattern to help the reader through the discussion.
Bibliography/References	Please try to include recent literature or work in the related area.
Others	Please refer to my comment for the editors.
Final Note	Good work. It can published after correction.



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## Manuscript Review Form (2<sup>nd</sup> Cycle) Journal of Engineering and Technological Sciences

Manuscript code: STKSR2019\_BE 12\_v.2Manuscript title: Bayah Natural Zeolite to Upgrade The Quality of Bio Crude Oil from<br/>Empty Fruit Bunch Pyrolysis

## A. Evaluation

		Yes	No	See comments	
1.	Is the manuscript original?				
2.	Does the title represent the contents of the manuscript?				
3.	Does the abstract represent the contents of the manuscript?				
4.	Are research methodologies and problem solving approaches clearly described?				
5.	Are the research data and interpretations clear and verified?	-			
6.	Is the discussion and analysis in accordance with the results of the research?	-			
7.	Is the bibliography used relevant?				
	Do you feel the manuscript have contribution to the related field?	-			
9.	Is the depth of research adequate?				
В.	Referee's Decision		Yes	Νο	
Do	ο you recommend this man <mark>uscript to be pu</mark> blished in JETS (Jou	Irnal of	165		

Engineering and Technological Sciences) without further revision? If your answer is no, please continue to the next page

Do you want your name, as a referee, be shown to the author?

## C. Comments / notes for the Editor's Board (comment length is not limited to the area

of the box below)

The manuscript has been revised accordingly and okay for publication as the current version

## D. Commentary on manuscripts for Authors (comment length is not limited to the area

of the box below)

General comment	
Introduction	
Methodology	
Results & Discussion	
Bibliography/References	
Others	
Final Note	The manuscript has been revised accordingly and okay for publication as the current version

Evaluation Date: 03 03 2020 Referee's Name (complete with a degree):



International Seminar on Chemical Engineering Soehadi Reksowardojo 2019 Labtek X, Program Studi Teknik Kimia JI. Ganesha 10, Bandung 40132, Indonesia Telp: (022) 253 4264 | Email: stksr@cheitb.id | Website: stksr.che.itb.ac.id

## Manuscript Review Form (2<sup>nd</sup> Cycle) Journal of Engineering and Technological Sciences

Manuscript code Manuscript title

- : Manuscript STKSR2019\_BE 12\_v.2
- : Bayah Natural Zeolite to Upgrade The Quality of Bio Crude Oil from Empty Fruit Bunch Pyrolysis

## A. Evaluation

			See	
1 le the menuespirit eriginal?	Yes	No	comments	
1. Is the manuscript original?				
2. Does the title represent the contents of the manuscript?				
3. Does the abstract represent the contents of the manuscript?				
4. Are research methodologies and problem solving approaches clearly described?				
5. Are the research data and interpretations clear and verified?				
6. Is the discussion and analysis in accordance with the results of the research?				
7. Is the bibliography used relevant?				
8. Do you feel the manuscript have contribution to the related field?				
9. Is the depth of research adequate?				
B. Referee's Decision				
		Yes	No	
Do you recommend this manuscript to be published in JETS (Je	ournal of			

Engineering and Technological Sciences) without further revision? If your answer is no, please continue to the next page

Do you want your name, as a referee, be shown to the author?



C. Comments / notes for the Editor's Board (comment length is not limited to the area

of the box below)

After reviewing it for the second time, I found that all the comments from reviewers are completely addressed. The condition of the manuscript is better, and I am confident to provide my recommendation for the publication. It is well written and the result of the work will provide additional useful information regarding the bio-oil upgrading.

## D. Commentary on manuscripts for Authors (comment length is not limited to the area

of the box below)

General comment	Overall, it is a good manuscript. Please be consistent on writing certain things such as name of the catalyst (line 80) and others. All the comments have been addressed properly.
Introduction	Good.
Methodology	It is more than enough. Perhaps next time, you can combine few procedure in to one such as 2.2.1.1 – 2.2.1.3 into one procedure – Zeolite catalyst preparation
Results & Discussion	This part is quite comprehensive. The figure might use a cleaner look (outside border removed for graph, consistent style of the graph area and its legend).
Bibliography/References	Good.
Others	Please see other comments.
Final Note	Well done and looking forward from more publication from all the authors.

Evaluation Date: 20 07 2020 Referee's Name (complete with a degree): AQSHA ST. Msc, PhD Lecturer Chemical Engineering Departmen Universiti Teknologi PETRONAS Email: aqsha@utp.edu.my Aqsha, ST, MSc, PhD, EIT ) (



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## Manuscript Review Form Journal of Engineering and Technological Sciences

Manuscript code: STKSR2019\_BE 12\_v.1Manuscript title: Bayah Natural Zeolite to Upgrade the Quality of Bio Crude Oil from Empty<br/>Fruit Bunch Pyrolysis

## A. Evaluation

1.	Is the manuscript original?	Yes	No	See comments	
2.	Does the title represent the contents of the manuscript?				
3.	Does the abstract represent the contents of the manuscript?				
4.	Are research methodologies and problem solving approaches clearly described?				
5.	Are the research data and interpretations clear and verified?				
6.	Is the discussion and analysis in accordance with the research?	-			
7.	Is the bibliography used relevant?				
8.	Do you feel the manuscript have contribution to the related field?				
9.	Is the depth of research adequate?				

## **B. Referee's Decision**

This manuscript:

- i. Papers can be published without revision
- ii. Papers can be published with a minor revision
- iii. Papers can be published with a major revision
- iv. The paper was returned to the reviewer after the revision
- v. Papers are not worth publishing

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Yes No

### C. Comments / notes for the Editor's Board (comment length is not limited to the area

#### of the box below)

In this manuscript, the authors studied the activated natural zeolite for improving bio crude oil properties, which is interesting and useful. The manuscript has been written systematically and clear. I recommend for the publication with just a minor change.

#### D. Commentary on manuscripts for Authors (comment length is not limited to the area

of the box below)

General comment	
Introduction	Please provide further references which used Bayah Zaolite previously for catalytic application.
Methodology	Please mention the sources of the bayah natural zeolite and the oil palm empty fruit bunches.
Results & Discussion	<ul><li>please describe in more detail how to calculate the percentage of crystallinity value,</li><li>To confirm the suggested desilication reaction in high concentration of NaOH, could the Authors further characterize this mechanism, for instance, using FTIR?</li><li>Figure 4 should be started with a, not g. Figure 4 should be different entity with Figure 3.</li></ul>
Bibliography/References	
Others	The presentation of Figures and its legend could be improved for making clear and understandable, however this is just a minor thing.
Final Note	Very interesting work

Evaluation Date: 02 01 2020 Referee's Name (complete with a degree): 1<sup>st</sup> Reviewer Comments:

Introduction

Please provide further references which used Bayah Zeolite previously for catalytic application.

Answer

The manuscript has been revised. Please refer to the introduction the last two paragraph.

Methodology

Please mention the sources of the bayah natural zeolite and the oil palm empty fruit bunches. Answer

The manuscript has been revised. Please refer to the Methodology.

#### **Results & Discussion**

please describe in more detail how to calculate the percentage of crystallinity value, To confirm the suggested desilication reaction in high concentration of NaOH, could the Authors further characterize this mechanism, for instance, using FTIR? Figure 4 should be started with a, not g. Figure 4 should be different entity with Figure 3.

#### Answer

Crystallinity degrees of zeolites were calculated by main peak relative intensities of crystalline mordenite

for parent and treated zeolite as follow.

crystallinity =  $\frac{\text{Summation of the treated samples main peak areas at } 2\theta (8^{\circ} - 53^{\circ})}{\text{Summation of the parent sample main peak areas at } 2\theta (8 - 53^{\circ})}$ 

The crystallinity degree has been revised according to formula above. Please refer to Figure 2.

Thank you for your suggestion regarding the desilication reaction. We will consider it in our future works.

Figure 4 has been revised.

#### Others

The presentation of Figures and its legend could be improved for making clear and understandable, however this is just a minor thing.

Answer Thank you for your suggestions. Final Note

Very interesting work

Answer Thank you. 2<sup>nd</sup> Reviewer Comments:

General comment

Please try to fix few minor grammars within the manuscript. For example: line 32, its supposed to be "was successfully decreased or was successfully decreasing".

Answer

The manuscript has been revised. The changes have been highlighted with blue color.

#### Introduction

Please clearly mention the contribution of your work in the introduction. Please list the material and the source only in the material section without mentioning the method or how to obtain the material.

#### Answer

The manuscript has been revised. Please refer to the last paragraph of introduction section.

#### Methodology

Line 112-114, please re-arrange the sentence, its ambiguous. Line 117-118, Line 131-134,

please fix, etc. Line 136-143, please re-write it carefully.

Answer

The manuscript has been revised. Please refer to the manuscript in methodology section.

**Results & Discussion** 

Figure 1, please be consistent on how you write the number on the legend and on the caption. Which one is right? Using 0.0 M or 0.1 M? Fig. 2, there is no data point for 0.1 M. Fig. 3, perhaps the author should highlight or circle certain structure or irregularities or pattern to help the reader through the discussion.

The manuscript has been revised. Please refer to figure 1.

Bibliography/References Please try to include recent literature or work in the related area. Answer

Recent literature has been cited. Please see the references.

- "[12] Mahdi, H.I., Irawan, E., Nuryoto, N., Jayanudin, J., Sulistyo, H., Sediawan, W. B., & Muraza, O. Glycerol Carbonate Production from Biodiesel Waste Over Modified Natural Clinoptilolite. Waste and Biomass Valorization (7), 1349–1356, 2016."
- "[13] Nuryoto N., Sulistyo, H., Sediawan, W.B., Perdana, I. *Peningkatan Unjuk Kerja Katalisator Zeolit Alam Bayah pada Reaksi Ketalisasi Gliserol*. Reaktor, 17(1), 9-16, 2017."
- [14] Kurniawan, T., Muraza, O., Hakeem, A.S., Al-Amer, A.M., Mechanochemical Route and Recrystallization Strategy to Fabricate Mordenite Nanoparticles from Natural Zeolites. Crystal Growth and Design (17) 3313–3320, 2017.

"[21] Ibarra, A., Hita, I., Azkoiti, M.J., Arandes, M.J., Bilbao, J. Catalytic cracking of raw bio-oil under FCC unit conditions over different zeolite-based catalysts. Journal of Industrial and Engineering Chemistry, (78) 372-382, 2019"

"[22] Galadima, A., and Muraza, O. Hydrothermal liquefaction of algae and bio-oil upgrading into liquid fuels: Role of heterogeneous catalysts. Renewable and Sustainable Energy Reviews (81) 1037-1048, 2018."

#### Others

Please refer to my comment for the editors.

The manuscript has enough content for publication and most of the content are well written. There few minor grammatical error and ambiguous sentence that need some fixes and the author should be careful on the discussion part. It is better not to speculated without additional data or analysis. Overall, I recommend the manuscript to be published after some correction. Thank You

#### Answer

The grammatical error and ambiguous sentence have been revised. Thank you for your comments and recommendation.

1<sup>st</sup> Reviewer Comments:

The manuscript has been revised accordingly and okay for publication as the current version

Answer

Thank you for your valuable comments

2<sup>nd</sup> Reviewer Comments:

General comment

Overall, it is a good manuscript. Please be consistent on writing certain things such as name of the catalyst (line 80) and others. All the comments have been addressed properly.

Answer

The manuscript has been revised. The changes have been highlighted with blue color.

#### Methodology

It is more than enough. Perhaps next time, you can combine few procedure in to one such as 2.2.1.1 - 2.2.1.3 into one procedure – Zeolite catalyst preparation

#### Answer

Thank you for your suggestion. The manuscript has been revised. Please refers to the section 2.2.1.

#### **Results & Discussion**

This part is quite comprehensive. The figure might use a cleaner look (outside border removed for graph, consistent style of the graph area and its legend).

Answer

Thank you for your suggestions.

#### **Final Note**

Well done and looking forward from more publication from all the authors. Answer

Thank you very much for your valuable comments.