



iqbal syaichurrozi <iqbalsyaichurrozi@gmail.com>

New manuscript received by Editorial Office (PJOES-00952-2020-01)

1 message

Polish Journal of Environmental Studies <kontakt@editorialssystem.com>

Sun, Jun 14, 2020 at 10:46 AM

Reply-To: "office@pjoes.com" <office@pjoes.com>

To: Iqbal Syaichurrozi <iqbalsyaichurrozi@gmail.com>

Dear Iqbal Syaichurrozi,

Thank you for your manuscript: Optimization of parameters for biogas production from bagasse using Taguchi method. The following number has been assigned to it: PJOES-00952-2020-01.

The manuscript will be checked by Editors and then sent to the Reviewers. You will be informed by email about any further decisions on this article.

Thank you for submitting your work to our journal.

With kind regards,

Professor Hanna Radecka
Executive Editor

Professor Jerzy Radecki
Editor – in – Chief
Polish Journal of Environmental Studies
www.pjoes.com

Editorial System is available here: <https://www.editorialssystem.com/pjoes/>



iqbal syaichurrozi <iqbalsyaichurrozi@gmail.com>

Decision on manuscript PJOES-01201-2020-01

1 message

Polish Journal of Environmental Studies <kontakt@editorialsystem.com>

Wed, Sep 2, 2020 at 6:48 PM

Reply-To: "office@pjoes.com" <office@pjoes.com>

To: Iqbal Syaichurrozi <iqbalsyaichurrozi@gmail.com>

September 02, 2020

PJOES-01201-2020-01

Optimization of parameters for biogas production from bagasse using Taguchi method

Dear Iqbal Syaichurrozi,

I am pleased to inform you that your manuscript, entitled: Optimization of parameters for biogas production from bagasse using Taguchi method, might be accepted for publication in our journal, pending some minor changes suggested by reviewers (see below).

Please revise your manuscript strictly according to the attached Reviewers' comments as well as Editor's remarks. Your manuscript won't be taken into consideration without the revisions made according to the recommendations.

Please, check all Editor's remarks when revising your manuscript:

- R e f e r e n c e s should be indicated in the text by consecutive numbers and the full references should be listed in the same order at the end of the article according to Journal way
- In references all authors name must be included
- E-mail address of Corresponding Author must be provided
- Manuscript should be divided into the sections: Abstract, Keywords, Introduction, Material and Methods (could be omitted in Reviews), Results and Discussion, Conclusions, Acknowledgements, References

Please, provide the following items:

- 1) copy of the fully revised manuscript that has all the changes highlighted in red colour, along with high-quality figures. Each figure prepared in colour will be charged 60 EURO
- 2) answers to all the Reviewer comments

Authors of our journal are requested to prepare a revised version of their manuscript as soon as possible. This may ensure fast publication if an article is finally accepted.

Thank you for submitting your work to our Journal and fruitful co-operation.

With kind regards,

Professor Hanna Radecka
Executive Editor

Professor Jerzy Radecki
Editor – in – Chief
Polish Journal of Environmental Studies
www.pjoes.com

Manuscript evaluation is available here:

<https://www.editorialsystem.com/pjoes/article/213283/view/#showDecisionLetter209421>

Review 1:

In this work, an interesting approach to the optimization of unit processes was applied. The article presents the results of research on the influence of selected parameters on the biogas yield from bagasse, type of inoculum (manure and manure), pretreatment time (0, 24, 48 h) and solids content (2, 5, 10%), and then optimization of these parameters using the Taguchi method. This idea was new and original as none of the previous authors had conducted the Taguchi technique to evaluate the effect of parameters on biogas from bagasse. I think the authors' deliberations are good, but I have got some general remarks:

- 1) Why the pre-treatment time was arbitrarily set at 0, 24 and 48 h. What was this dictated by?

- 2) On the basis of what premises were TS at the level of 2, 5 and 10% selected?
- 3) It was shown that the best pre-treatment time is 48h. How will the results be influenced by extending this time to e.g. 72h?
- 4) Is the R-square in Figure 3 not missing?
- 5) Why are the selected values in Table 5 in bold? What was this dictated by?
- 6) The temperature range of the reaction mixture seems to be too wide, which may affect the test results. And what was the pH?
- 7) Please complete the description of the symbols in equation (1)
- 8) The description of Experimental design and procedures in 7 lines seems too laconic and cannot be approved in this form. Please attach a photograph or a sketch of the test bench.

Authors' responses

1) Why the pre-treatment time was arbitrarily set at 0, 24 and 48 h. What was this dictated by?

Response:

Thank you. We have added information in Page 2-3.

“Syaichurrozi *et al.* [17] suggested that the chemical pretreatment for organic solid prior AD should be conducted for 48 h. Above that time, it was not effective. Therefore, this study set the low, middle and high level for pretreatment time on 0, 24 and 48 h.”

2) On the basis of what premises were TS at the level of 2, 5 and 10% selected?

Response:

Thank you. We have added information in Page 3.

“Furthermore, the optimum total solid content for agricultural wastes, municipal solid waste and banana stem waste was 9% [18], 10% [19] and 2-4% [20]. It means that the optimum range of total solid for solid waste is 2-10%. Based on that, this study set the low, middle and high level for total solid on 2, 5 and 10%.”

3) It was shown that the best pre-treatment time is 48h. How will the results be influenced by extending this time to e.g. 72h?

Response:

Thank you. In introduction, we have explained that above time of 48 h, the chemical pretreatment is not effective. Please see Page 2-3.

4) Is the R-square in Figure 3 not missing?

Response:

Thank you. We have added the value of R^2 in Fig.4. Please see page 17.

5) Why are the selected values in Table 5 in bold? What was this dictated by?

Response:

Thank you. We have added information about that in page 5.

“The highest S/N ratio value was shown by value in bold mode in Table 5.”

6) The temperature range of the reaction mixture seems to be too wide, which may affect the test results. And what was the pH?

Response:

We are so sorry because the temperature range should be 28-30 °C not 28-35 °C. We have revised it. The temperature range during this experiment was 28-30 °C. This value is room temperature in Indonesia. This range did not affect the results significantly.

To maintain the substrate's pH during fermentation, buffer (NaHCO_3) was added (Please page 3, experimental design and procedures). Therefore, the substrate pH was maintained in neutral pH range

7) Please complete the description of the symbols in equation (1)

Response:

Thank you. We have completed it. Please see page 4.

8) The description of Experimental design and procedures in 7 lines seems too laconic and cannot be approved in this form. Please attach a photograph or a sketch of the test bench.

Response:

Thank you. We have added information in Experimental design and procedures. Please see page 3-4. And then, we have added schematic for this experiment, Fig.1, page 16.



iqbal syaichurrozi <iqbalsyaichurrozi@gmail.com>

New revision received by Editorial Office (PJOES-01201-2020-02)

1 message

Polish Journal of Environmental Studies <kontakt@editorialsystem.com>

Fri, Oct 2, 2020 at 2:16 PM

Reply-To: "office@pjoes.com" <office@pjoes.com>

To: Iqbal Syaichurrozi <iqbalsyaichurrozi@gmail.com>

Dear Iqbal Syaichurrozi,

Thank you for the revision of the manuscript: Optimization of parameters for biogas production from bagasse using Taguchi method.

The following number has been assigned to it: PJOES-01201-2020-02.

The manuscript will be rated once again by the Editors and then sent to the Reviewers.

You will be informed by email about any further decisions on this article.

With kind regards,

Professor Hanna Radecka
Executive Editor

Professor Jerzy Radecki
Editor – in – Chief
Polish Journal of Environmental Studies
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Decision on manuscript PJOES-01201-2020-02

1 message

Polish Journal of Environmental Studies <kontakt@editorialsystem.com>

Mon, Nov 2, 2020 at 7:13 PM

Reply-To: "office@pjoes.com" <office@pjoes.com>

To: Iqbal Syaichurrozi <iqbalsyaichurrozi@gmail.com>

November 02, 2020

PJOES-01201-2020-02

Optimization of parameters for biogas production from bagasse using Taguchi method

Dear Iqbal Syaichurrozi,

I am pleased to inform you that your manuscript, entitled: Optimization of parameters for biogas production from bagasse using Taguchi method, has been finally accepted for publication in our journal.

Thank you for submitting your work to our Journal and fruitful co-operation.

With kind regards,

Professor Hanna Radecka
Executive Editor

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