



LILIS HERMIDA <lilis.hermida@eng.unila.ac.id>

Successfully received: submission Slow release urea fertilizer synthesized through intercalation of urea into local natural bentonite with various binders for Environmental Technology & Innovation

1 message

Environmental Technology & Innovation <EvisSupport@elsevier.com>

Mon, Jul 30, 2018 at 9:31 AM

Reply-To: eti@elsevier.com

To: lilis.hermida@eng.unila.ac.id

This message was sent automatically. Please do not reply.

Ref: ETI_2018_342

Title: Slow release urea fertilizer synthesized through intercalation of urea into local natural bentonite with various binders

Journal: Environmental Technology & Innovation

Dear Dr. Hermida,

Thank you for submitting your manuscript for consideration for publication in Environmental Technology & Innovation. Your submission was received in good order.

To track the status of your manuscript, please log into EVISE® at: http://www.evise.com/evise/faces/pages/navigation/NavController.jspx?JRNL_ACR=ETI and locate your submission under the header 'My Submissions with Journal' on your 'My Author Tasks' view.

Thank you for submitting your work to this journal.

Kind regards,

Environmental Technology & Innovation

Have questions or need assistance?

For further assistance, please visit our [Customer Support](#) site. Here you can search for solutions on a range of topics, find answers to frequently asked questions, and learn more about EVISE® via interactive tutorials. You can also talk 24/5 to our customer support team by phone and 24/7 by live chat and email.

Copyright © 2018 Elsevier B.V. | [Privacy Policy](#)

Elsevier B.V., Radarweg 29, 1043 NX Amsterdam, The Netherlands, Reg. No. 33156677.

Your manuscript ETI_2018_342 has been sent for review

1 message

Environmental Technology & Innovation <EvisSupport@elsevier.com>

Sat, Aug 25, 2018 at 7:30 PM

Reply-To: eti@elsevier.com

To: lilis.hermida@eng.unila.ac.id

This message was sent automatically. Please do not reply.

Reference: ETI_2018_342

Title: Slow release urea fertilizer synthesized through intercalation of urea into local natural bentonite with various binders

Journal: Environmental Technology & Innovation

Dear Dr. Hermida,

I am currently identifying and contacting reviewers who are acknowledged experts in the field. Since peer review is a voluntary service it can take time to find reviewers who are both qualified and available. While reviewers are being contacted, the status of your manuscript will appear in EVISE® as 'Reviewer Invited'.

Once a reviewer agrees to review your manuscript, the status will change to 'Under Review'. When I have received the required number of expert reviews, the status will change to 'Ready for Decision' while I evaluate the reviews before making a decision on your manuscript.

To track the status of your manuscript, please log into EVISE® and go to 'My Submissions' via:
http://www.evise.com/evise/faces/pages/navigation/NavController.jsp?JRNL_ACR=ETI

Kind regards,

Environmental Technology & Innovation

Have questions or need assistance?

For further assistance, please visit our [Customer Support](#) site. Here you can search for solutions on a range of topics, find answers to frequently asked questions, and learn more about EVISE® via interactive tutorials. You can also talk 24/5 to our customer support team by phone and 24/7 by live chat and email.

Copyright © 2018 Elsevier B.V. | [Privacy Policy](#)

Elsevier B.V., Radarweg 29, 1043 NX Amsterdam, The Netherlands, Reg. No. 33156677.



LILIS HERMIDA <lilis.hermida@eng.unila.ac.id>

Reviews complete and decision pending for your manuscript ETI_2018_342

1 message

Environmental Technology & Innovation <EvisSupport@elsevier.com>

Tue, Sep 25, 2018 at 1:17 AM

Reply-To: eti@elsevier.com

To: lilis.hermida@eng.unila.ac.id

Reference: ETI_2018_342

Title: Slow release urea fertilizer synthesized through intercalation of urea into local natural bentonite with various binders

Journal: Environmental Technology & Innovation

Dear Dr. Hermida,

I am pleased to inform you that I have received all the required reviews, which I will now evaluate before making a decision on your manuscript referenced above.

In the event that I need to seek the opinion of an additional reviewer, you may see the status of your manuscript revert briefly from 'Ready for Decision' to 'Under Review'.

To track the status of your manuscript, please log into EVISE® http://www.evise.com/evise/faces/pages/navigation/NavController.jsp?JRNL_ACR=ETI and go to 'My Submissions'.

I will inform you once I have made a decision.

Thank you again for submitting your manuscript to Environmental Technology & Innovation and for giving me the opportunity to consider your work.

Kind regards,

Environmental Technology & Innovation

Have questions or need assistance?

For further assistance, please visit our [Customer Support](#) site. Here you can search for solutions on a range of topics, find answers to frequently asked questions, and learn more about EVISE® via interactive tutorials. You can also talk 24/5 to our customer support team by phone and 24/7 by live chat and email.

Copyright © 2018 Elsevier B.V. | [Privacy Policy](#)

Elsevier B.V., Radarweg 29, 1043 NX Amsterdam, The Netherlands, Reg. No. 33156677.



LILIS HERMIDA <lilis.hermida@eng.unila.ac.id>

Revision requested for ETI_2018_342

2 messages

Ravi Naidu (Environmental Technology & Innovation) <EvisSupport@elsevier.com> Tue, Sep 25, 2018 at 10:39 PM
Reply-To: ravi.naidu@crccare.com
To: lilis.hermida@eng.unila.ac.id

Ref: ETI_2018_342

Title: Slow release urea fertilizer synthesized through intercalation of urea into local natural bentonite with various binders

Journal: Environmental Technology & Innovation

Dear Dr. Hermida,

Thank you for submitting your manuscript to Environmental Technology & Innovation. I have received comments from reviewers on your manuscript. Your paper should become acceptable for publication pending suitable minor revision and modification of the article in light of the appended reviewer comments.

When resubmitting your manuscript, please carefully consider all issues mentioned in the reviewers' comments, outline every change made point by point, and provide suitable rebuttals for any comments not addressed.

To submit your revised manuscript:

- Log into EVISE® at: http://www.evise.com/evise/faces/pages/navigation/NavController.jspx?JRNL_ACR=ETI
- Locate your manuscript under the header 'My Submissions that need Revisions' on your 'My Author Tasks' view
- Click on 'Agree to Revise'
- Make the required edits
- Click on 'Complete Submission' to approve

What happens next?

After you approve your submission preview you will receive a notification that the submission is complete. To track the status of your paper throughout the editorial process, log in to EVISE® at: http://www.evise.com/evise/faces/pages/navigation/NavController.jspx?JRNL_ACR=ETI.

Data in Brief (optional)

We invite you to convert your supplementary data (or a part of it) into a Data in Brief article. Data in Brief articles are descriptions of the data and associated metadata which are normally buried in supplementary material. They are actively reviewed, curated, formatted, indexed, given a DOI and freely available to all upon publication. Data in Brief should be uploaded with your revised manuscript directly to Environmental Technology & Innovation. If your Environmental Technology & Innovation research article is accepted, your Data in Brief article will automatically be transferred over to our new, fully Open Access journal, Data in Brief, where it will be editorially reviewed and published as a separate data article upon acceptance. The Open Access fee for Data in Brief is \$500.

Please just fill in the template found here:

http://www.elsevier.com/inca/publications/misc/dib_data%20article%20template_for%20other%20journals.docx.

Then, place all Data in Brief files (whichever supplementary files you would like to include as well as your completed Data in Brief template) into a .zip file and upload this as a Data in Brief item alongside your Environmental Technology & Innovation revised manuscript. Note that only this Data in Brief item will be transferred over to Data in Brief, so ensure all of your relevant Data in Brief documents are zipped into a single file. Also, make sure you change references to supplementary material in your Environmental Technology & Innovation manuscript to reference the Data in Brief article where appropriate.

Questions? Please send your inquiries to dib@elsevier.com. Example Data in Brief can be found here: <http://www.sciencedirect.com/science/journal/23523409>

MethodsX (optional)

We invite you to submit a method article alongside your research article. This is an opportunity to get full credit for the time and money you have spent on developing research methods, and to increase the visibility and impact of your work. If your research article is accepted, your method article will be automatically transferred over to the open

access journal, MethodsX, where it will be editorially reviewed and published as a separate method article upon acceptance. Both articles will be linked on ScienceDirect. Please use the MethodsX template available here when preparing your article: <https://www.elsevier.com/MethodsX-template>. Open access fees apply.

I look forward to receiving your revised manuscript as soon as possible.

Kind regards,

Professor Naidu
Editor-in-Chief
Environmental Technology & Innovation

Comments from the editors and reviewers:
-Reviewer 1

-

This Research Article highlights the experimental study on "

Slow release urea fertilizer synthesized through intercalation of urea into local natural bentonite with various binders" .

Authors need to address the following clarifications before consideration of this manuscript in this Journal.

1. Why bentonite clay was chosen as a substrate? even though a lot of other cheaper eco friendly materials are available. Some Introduction of material selection.
2. In the preparation of SRUF, on what basis the binder and substrate composition were fixed?
3. Have you analyzed the size of pellets prepared ? what is the average particle size of prepared material?
4. Do the size of pellets have any impact on SRUF? Authors need to add some reference on this.
5. In section 2.4, clearly mention the amount of SRUF taken for static release experiment either using corn starch or HPMC?
6. It could be more appropriate if the author mention the elemental composition of SRUF-4 and SRUF-7.
7. Check the Table.2 for amount of bentonite taken is it 9,2 or 9.2 and 9,8 or 9.8.
8. Check the x-axis title in Figure 3A. Authors need to write the axis title in English Language.
9. In Figure 6, the author need to mark and highlight the new peaks and peak changes in FTIR analysis.

-Reviewer 2

-

General Comments

In their study, the authors have addressed the preparation of bentonite-incorporated slow release urea fertilizer while the efficacy of two different binders was tested. Additionally, urea desorption or release studies were carried out to find out the best-suited combination. Indeed, the preparation of slow release urea fertilizers (SRUFs) for one of the best-suited techniques to reduce the environmental problems originated from the application of a huge amount of urea. However, the overall manuscript is poorly organized and prepared that suffers from lack of sufficient data as well as clarification. Hence, several remarks of forms and corrections must be made to the manuscript so that it's suitable for publication.

The major concerns are:

1. The authors have prepared SRUFs by intercalation of urea into bentonite clay. The intercalation process was reported from the EDX analysis. From EDX analysis, we can only get information about elemental composition not intercalation. Generally, the term intercalation is used when any guest molecules are loaded to the interlayer space of any clay. Thus, X-ray diffraction (XRD) analysis is essential before and after urea loading to provide some evidence of intercalation.
2. The authors failed to clarify role of binders used in this study. If the binders facilitate the intercalation of urea to clay, it is needed to describe the possible mechanism. The procedure of SRUFs preparation used in this study is not suited for intercalation of binders into clay as well as to exfoliate the phyllosilicate layers. Rather, from SEM images, it

is observed that the binders acted as surface modifying agents. Moreover, the authors have used only 9.2-9.8 g bentonite to intercalate 90 g of urea, which is not possible. Thus, the term 'intercalation' used throughout the manuscript is questionable. The authors need to be careful during reporting of any scientific term.

3. As per authors, the main objective of this study was to investigate the effects of binder types (i.e. corn starch and HPMC) on structural characteristics and release mechanisms that was not reported by Xiaoyu et al., (2013); Lixiang et al., (2011); Zengming et al., (2008). However, the characteristics of SRUFs pellets are completely missing.

4. The release data presented in Figure 2 is not realistic. The way of data presentation is questionable.

With the above-mentioned concerns, the manuscript is not suitable for publication in its current format. The authors may submit the revised manuscript addressing the following specific comments and suggestions as well.

Specific comments and suggestions

1. Please change the title. For instance, 'Slow release urea fertilizer synthesized through recrystallization of urea incorporating natural bentonite using polymeric binders'. However, if the bentonite used as coating material then please change the title accordingly.

2. Please revise the whole manuscript as it is suffering from the term 'intercalation'.

3. The references used by authors are not appropriate and also indicates that the authors have used some references without any evaluation those journal articles. For an example, in material section the authors mentioned that natural bentonite was treated using method reported in the literature (Higuchi, 1963). Did Higuchi use bentonite in their experiment? If not, why the authors have used this reference?

4. Is it possible to measure urea concentration directly using UV-vis spectrophotometer? If yes, please give some references. If not, please write the procedure in details.

5. Along with Figure 2, another figure representing cumulative release percentages of urea are also appreciated.

6. The way of data analysis using Peppas model is not sound please check again and provide some references.

7. Please mention clearly, why only SRUF-4 and SRUF-7 were selected for characterization as well as understand release mechanism.

8. Please give the elemental composition observed in Figure 5.

9. Please correct the Figure 6. In Figure 6, A: Urea should be A: Bentonite while B: Bentonite is B: Urea

Have questions or need assistance?

For further assistance, please visit our [Customer Support](#) site. Here you can search for solutions on a range of topics, find answers to frequently asked questions, and learn more about EVISE® via interactive tutorials. You can also talk 24/5 to our customer support team by phone and 24/7 by live chat and email.

Copyright © 2018 Elsevier B.V. | [Privacy Policy](#)

Elsevier [B.V.](#), [Radarweg 29, 1043 NX Amsterdam, The Netherlands](#), Reg. No. 33156677.

L Hermida <lilis.hermida@eng.unila.ac.id>
To: JONI AGUSTIAN <joni.agustian@eng.unila.ac.id>

Thu, Sep 27, 2018 at 9:21 PM

Yours sincerely

Dr. Lilis Hermida,

27/09/2020

unila.ac.id Mail - Revision requested for ETI_2018_342

Senior Lecturer,
Department of Chemical Engineering, Universitas Lampung, Indonesia
E-mail: lilis.hermida@eng.unila.ac.id
lilish60@gmail.com

[Quoted text hidden]

Your manuscript ETI_2018_342_R1 has been accepted

1 message

Ravi Naidu (Environmental Technology & Innovation) <EvisSupport@elsevier.com> Sat, Nov 24, 2018 at 1:24 PM
Reply-To: ravi.naidu@crccare.com
To: lilis.hermida@eng.unila.ac.id

Ref: ETI_2018_342_R1

Title: Slow release urea fertilizer synthesized through recrystallization of urea incorporating natural bentonite using various binders

Journal: Environmental Technology & Innovation

Dear Dr. Hermida,

I am pleased to inform you that your paper has been accepted for publication. Now that your manuscript has been accepted for publication it will proceed to copy-editing and production.

Thank you for submitting your work to Environmental Technology & Innovation. We hope you consider us again for future submissions.

Kind regards,

Ravi Naidu
Editor-in-Chief
Environmental Technology & Innovation

Comments from the editors and reviewers:**Have questions or need assistance?**

For further assistance, please visit our [Customer Support](#) site. Here you can search for solutions on a range of topics, find answers to frequently asked questions, and learn more about EVISE® via interactive tutorials. You can also talk 24/5 to our customer support team by phone and 24/7 by live chat and email.

Copyright © 2018 Elsevier B.V. | [Privacy Policy](#)

Elsevier B.V., Radarweg 29, 1043 NX Amsterdam, The Netherlands, Reg. No. 33156677.



LILIS HERMIDA <lilis.hermida@eng.unila.ac.id>

Rights and Access form completed for your article [ETI_294]

1 message

Elsevier - Author Forms <Article_Status@elsevier.com>
To: lilis.hermida@eng.unila.ac.id

Tue, Dec 4, 2018 at 7:15 AM

ELSEVIER

Dear Dr. Hermida,

Thank you for completing the Rights and Access Form for your article *Slow release urea fertilizer synthesized through recrystallization of urea incorporating natural bentonite using various binders* on December 04, 2018.

The Order Summary is attached to this email.

If you have any questions, please do not hesitate to contact us. To help us assist you, please quote our article reference ETI294 in all correspondence.



Now that your article has been accepted, you will want to maximize the impact of your work. Elsevier facilitates and encourages authors to share their article responsibly. To learn about the many ways in which you can share your article whilst respecting copyright, visit: www.elsevier.com/sharing-articles.

Kind regards,
Elsevier Researcher Support

Have questions or need assistance?

Please do not reply to this automated message.

For further assistance, please visit our [Elsevier Support Center](#) where you search for solutions on a range of topics and find answers to frequently asked questions.

You can also talk to our researcher support team by phone 24 hours a day from Monday-Friday and 24/7 by live chat and email.

© 2018 Elsevier Ltd | [Privacy Policy](#) <http://www.elsevier.com/privacypolicy>

Elsevier Limited, The Boulevard, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom, Registration No. 1982084. This e-mail has been sent to you from Elsevier Ltd. To ensure delivery to your inbox (not bulk or junk folders), please add article_status@elsevier.com to your address book or safe senders list.

**Order Confirmation.html**

9K