

Corrections received - [MOLLIQ_112433]

From: optteam@elsevierproofcentral.com (optteam@elsevierproofcentral.com)

To: sheila_p5@yahoo.com

Date: Monday, January 6, 2020, 3:38 PM GMT+7

This is an automatically generated message. Please do not reply because this mailbox is not monitored.

Dear Dr. Sheila Permatasari Santoso,

Thank you very much for using the Proof Central application for your article " Aqueous sorption of tetracycline using rarasaponin-modified nanocrystalline cellulose " in the journal "MOLLIQ"

All your corrections have been saved in our system. The PDF summary of your corrections, generated from Proof Central, can be downloaded from the following site for your reference:

https://s3.amazonaws.com/pcv3-elsevier-live/proofs/elsevier/MOLLIQ/112433/MOLLIQ_112433_edit_report.pdf

To track the status of your article throughout the publication process, please use our article tracking service:

http://authors.elsevier.com/TrackPaper.html?trk_article=MOLLIQ112433&trk_surname=

For help with article tracking:

http://support.elsevier.com/app/answers/detail/a_id/90

Kindly note that now we have received your corrections, your article is considered finalised and further amendments are no longer possible.

For further assistance, please visit our customer support site at <http://support.elsevier.com>. Here you can search for solutions on a range of topics. You will also find our 24/7 support contact details should you need any further assistance from one of our customer support representatives.

Yours sincerely,
Elsevier Proof Central team

When you publish in an Elsevier journal your article is widely accessible. All Elsevier journal articles and book chapters are automatically added to Elsevier's SciVerse Science Direct which is used by 16 million researchers. This means that Elsevier helps your research get discovered and ensures that you have the greatest impact with your new article.

www.sciencedirect.com

Decision on submission to Journal of Molecular Liquids

From: Journal of Molecular Liquids (em@editorialmanager.com)

To: sheila_p5@yahoo.com

Date: Tuesday, December 31, 2019 at 05:07 PM GMT+7

Manuscript Number: MOLLIQ_2019_5319R1

Aqueous sorption of tetracycline using rarasaponin-modified nanocrystalline cellulose

Dear Dr Santoso,

Thank you for submitting your manuscript to Journal of Molecular Liquids.

I am pleased to inform you that your manuscript has been accepted for publication.

My comments, and any reviewer comments, are below.

Your accepted manuscript will now be transferred to our production department. We will create a proof which you will be asked to check, and you will also be asked to complete a number of online forms required for publication. If we need additional information from you during the production process, we will contact you directly.

We appreciate you submitting your manuscript to Journal of Molecular Liquids and hope you will consider us again for future submissions.

Kind regards,
Artur Valente
Editor-in-Chief

Journal of Molecular Liquids

Editor and Reviewer comments:

More information and support

FAQ: When and how will I receive the proofs of my article?

https://service.elsevier.com/app/answers/detail/a_id/6007/p/10592/supporthub/publishing/related/

You will find information relevant for you as an author on Elsevier's Author Hub: <https://www.elsevier.com/authors>

FAQ: How can I reset a forgotten password?

https://service.elsevier.com/app/answers/detail/a_id/28452/supporthub/publishing/kw/editorial+manager/

For further assistance, please visit our customer service site:

<https://service.elsevier.com/app/home/supporthub/publishing/>. Here you can search for solutions on a range of topics, find answers to frequently asked questions, and learn more about Editorial Manager via interactive tutorials. You can also talk 24/7 to our customer support team by phone and 24/7 by live chat and email.

In compliance with data protection regulations, you may request that we remove your personal registration details at any time. (Use the following URL: <https://www.editorialmanager.com/molliq/login.asp?a=r>). Please contact the publication office if you have any questions.

Toggle navigation

ELSEVIER

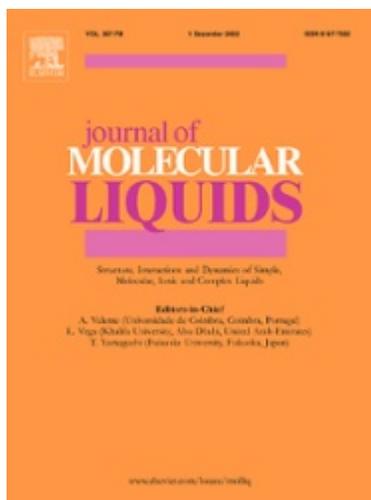
- [Log In](#)
- [Register](#)
- [Help](#)

—

- [Edit Details](#)
- [Change Password](#)
- [Logout](#)

Track Your Accepted Article

The easiest way to check the publication status of your accepted article



[ISSN 0167-7322](#)

Aqueous sorption of tetracycline using rarasaponin-modified nanocrystalline cellulose

Article reference

MOLLIQ_112433

Journal

Journal of Molecular Liquids

Corresponding author

Shella Permatasari Santoso

First author

Vania Bundjaja

Received at Editorial Office

7 Oct 2019

Article revised

27 Dec 2019

Article accepted for publication

31 Dec 2019

DOI

[10.1016/j.molliq.2019.112433](https://doi.org/10.1016/j.molliq.2019.112433)

Last update: 26 Feb 2020

Bibliographic information

Volume/Issue

301C

Full bibliographic details

Journal of Molecular Liquids 301C (2020) 112433

Final article available online

17 Feb 2020

[View your final article](#)

[Cited by in Scopus: 12](#) [Track another article](#)

Status comment

- The printed version of the issue in which your article is compiled has been shipped to subscribers.

Production events

Date	Event	Help
26 Feb 2020	Printed journal shipped to subscribers	
18 Feb 2020	Rights & Access form completed by you	
9 Jan 2020	The Share Link has been sent to you	
9 Jan 2020	Final version of your article published online	
7 Jan 2020	Article published online	
6 Jan 2020	Your proof corrections have been returned to Elsevier	
6 Jan 2020	Proofs available for checking	
6 Jan 2020	Rights & Access form sent to you for completion	
6 Jan 2020	Offprint order form completed by you	
6 Jan 2020	Offprint order letter sent to you for completion	
31 Dec 2019	Received for production	

Complimentary items

- You are entitled to a Share Link for your article free of charge. The Share Link will be sent you as soon as the final article is published in an issue.

[Track another article](#)



Share via email

Aqueous sorption of tetracycline using rarasaponin-modified nanocrystalline cellulose

Sender's name
Sender's email address
Recipient's email address
Use semi colons to separate multiple recipients

Subject

I thought you would find the tracking information about this article useful.

Message

Track your accepted article

Our reference:

Author surname:

Please use the corresponding author.

Copyright © 2022 Elsevier, except certain content provided by third parties. [Terms & Conditions](#) [Privacy Policy](#) [Cookie Notice](#) [Contact us](#)

Cookies are set by this site. To decline them or learn more, visit our

 **RELX** Group™

Manuscript Details

Manuscript number	MOLLIQ_2019_5319_R2
Title	Aqueous sorption of tetracycline using rarasaponin-modified nanocrystalline cellulose
Article type	Full length article

Abstract

The sorption ability of NCC and its modified form against tetracycline were investigated. NCC modification was carried out using a natural surfactant, namely rarasaponin, to improve the NCC adsorption capacity. The modification was made with a mass ratio of NCC to rarasaponin 10:1 (10N1R) and 20:1 (20N1R). The modified NCC characteristics were investigated using Fourier transform infrared (FTIR), zeta potential analyzer, X-ray diffraction (XRD), and scanning electron microscope (SEM). There are no structural changes to the modified NCC, as revealed by SEM. However, other characterizations show that the incorporation of rarasaponin indeed altered some characteristics of NCC. The modified NCC shows higher adsorption capacity towards TET. The adsorption capacity of TET was 13.97, 16.47, and 18.11 mg/g (at 60°C) for NCC, 10N1R, and 20N1R, respectively. The kinetic release (desorption) study of TET@20N1R showed a release efficiency of 18.28% at pH 3 and 55.49% at pH 7.

Keywords	cellulose; nanocrystal; rarasaponin; surface modification; tetracycline; drug delivery.
Manuscript category	Simple organic liquids and mixtures
Corresponding Author	Shella Permatasari Santoso
Corresponding Author's Institution	Widya Mandala Catholic University Surabaya
Order of Authors	Vania Bundjaja, Tirta Mutiara Sari, Felycia Edi-Soetaredjo, Maria Yuliana, Artik Elisa Angkawijaya, Suryadi Ismadji, Kuan-Chen Cheng, Shella Permatasari Santoso
Suggested reviewers	Ali Ahmadpour, Ahmed Fazary, Ali Demirci

Submission Files Included in this PDF

File Name [File Type]

Cover Letter.docx [Cover Letter]
Response to reviewer comments_R2.docx [Response to Reviewers]
Highlights.docx [Highlights]
Graphical abstract.docx [Graphical Abstract]
MOLLIQ_2019_5319R2.docx [Manuscript File]
declaration-of-competing-interests.docx [Conflict of Interest]
Author statement.docx [Author Statement]
Supplementary data_R1.docx [Supplementary Material]

To view all the submission files, including those not included in the PDF, click on the manuscript title on your EVISE Homepage, then click 'Download zip file'.



October 7, 2019

W. Schröer

Editors-in-Chief, Journal of Molecular Liquids

University of Bremen Faculty 2 Biology Chemistry

Leobener Str. NW2, 28359, Bremen, Germany

Dear Prof. Schröer,

I am submitting a manuscript for consideration of publication in Journal of Molecular Liquids. The details of the manuscript are as follows:

Manuscript Title: Aqueous sorption of tetracycline using rarasaponin-modified nanocrystalline cellulose

Rationale of the manuscript:

Cellulose has been chemically modified to prepare nanocrystalline cellulose (NCC). NCC is charged particles that can form stable suspension in aqueous phase. NCC is a nanoparticle which has been widely used for drug carrier due to its biocompatibility. **However, the amount of drug that can be loaded onto NCC is limited due to its high surface charge density. In this study we investigate the potency of a natural surfactant, namely rarasaponin, to enhanced the loading capacity of NCC.** The attachment of rarasaponin onto NCC cause some structural alteration in the NCC. The alteration caused by rarasaponin allow more drug adsorbed onto NCC. The thermodynamic investigation has been performed to investigate the spontaneity of the adsorption. The drug release study also conducted in a phosphate buffer. The effect of pH in controlling the drug release have been investigated.

For the purpose of review, we have listed 3 potential referees:

1. Dr. Ali Demirci

Department of Agricultural and Biological Engineering

Penn State University

249 Ag Eng Bldg University Park PA 16802 USA

Email: axd29@engr.psu.edu

2. Dr. Ali Ahmadpour

Department of Chemical Engineering, Faculty of Engineering

Ferdowsi University of Mashhad, Mashhad, Iran.



Widya Mandala Catholic University Surabaya
FACULTY OF ENGINEERING – CHEMICAL ENGINEERING DEPARTMENT
Jl. Kalijudan 37 Surabaya 60114, East Java, Indonesia
Tel: +62 31 3893933 ext.: 103, 111, Fax: +62 31 3891267

E-mail: ahmadpour@um.ac.ir

3.Dr. Ahmed Fazary

Chemistry Department, Faculty of Science

King Khalid University, Abha 9004, Saudi Arabia

e-mail: aefazary@gmail.com; aefazary@kku.edu.sa

The prepared manuscript entitled “**Aqueous sorption of tetracycline using rarasaponin-modified nanocrystalline cellulose**” has not been previously submitted and published by any of the authors and the content is not under consideration for publication in another journal at the time of submission. We hope that this original article fits the journal scope and its standard quality to be considered for publication in *Journal of Molecular Liquids*. Thank you for your consideration and I am looking forward to hearing from you.

Yours Sincerely,

Shella Permatasari Santoso

Widya Mandala Surabaya Catholic University

Kalijudan No. 37, Surabaya 60114, Indonesia

Tel.: +62-31-5922030; Fax: +62-31-5922030

Email: shella_p5@yahoo.com