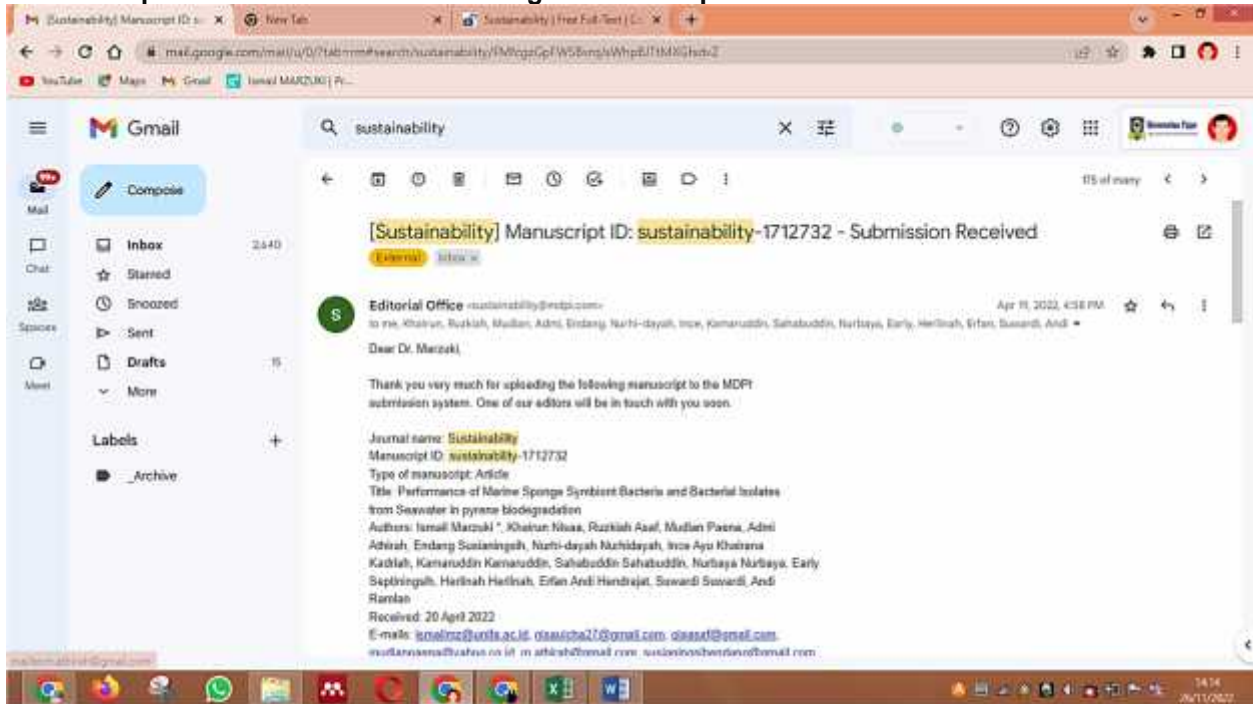
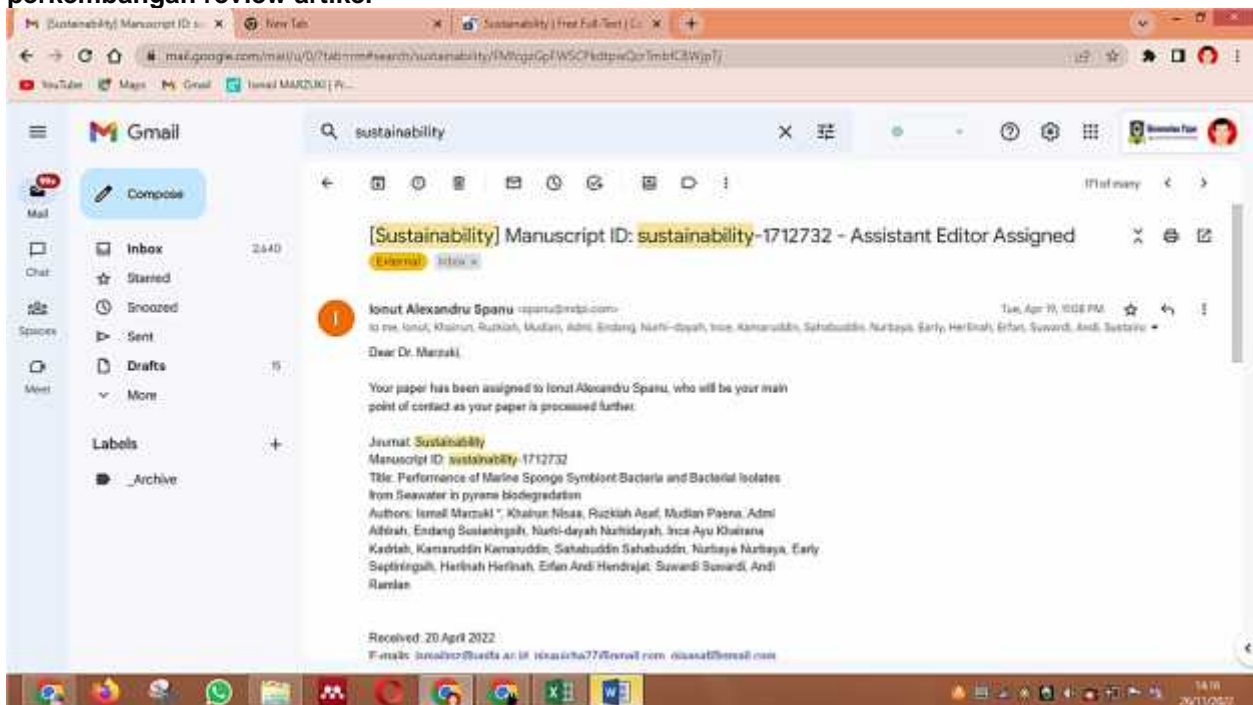


Proses Peer Review Artikel pada Jurnal Sustainability

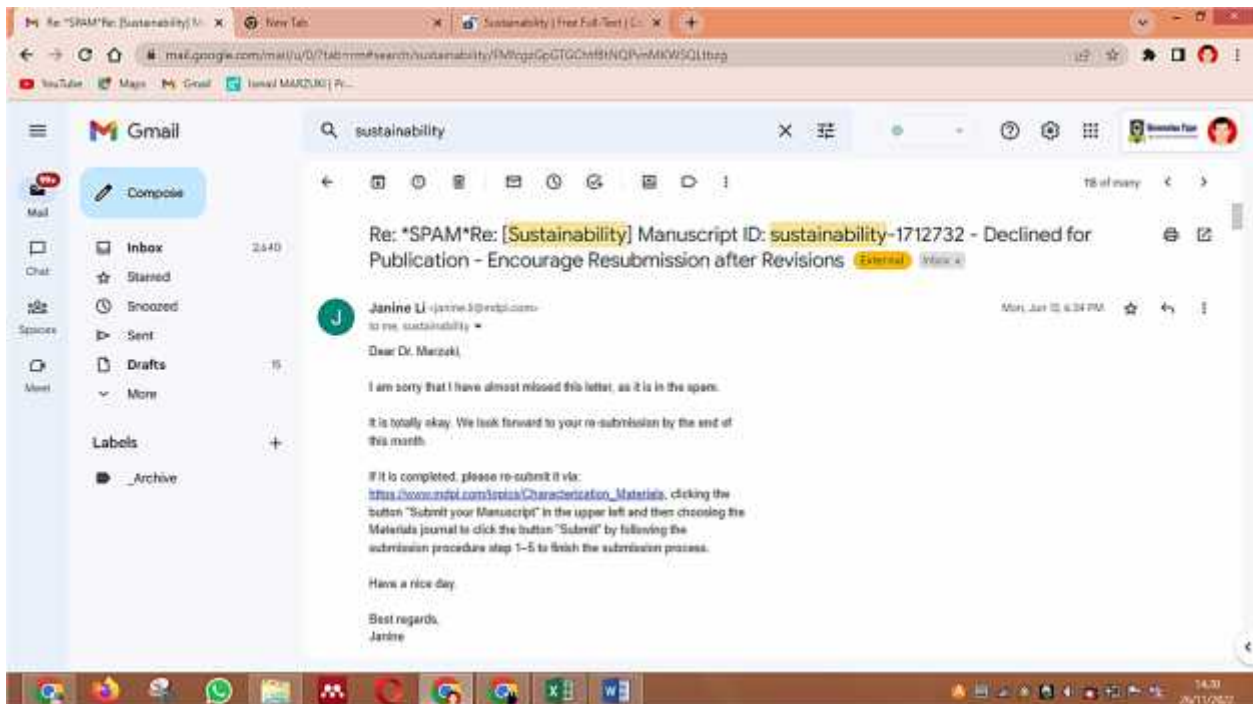
Email 19 April 2022. Informasi terkait dengan manuskrip telah di submit



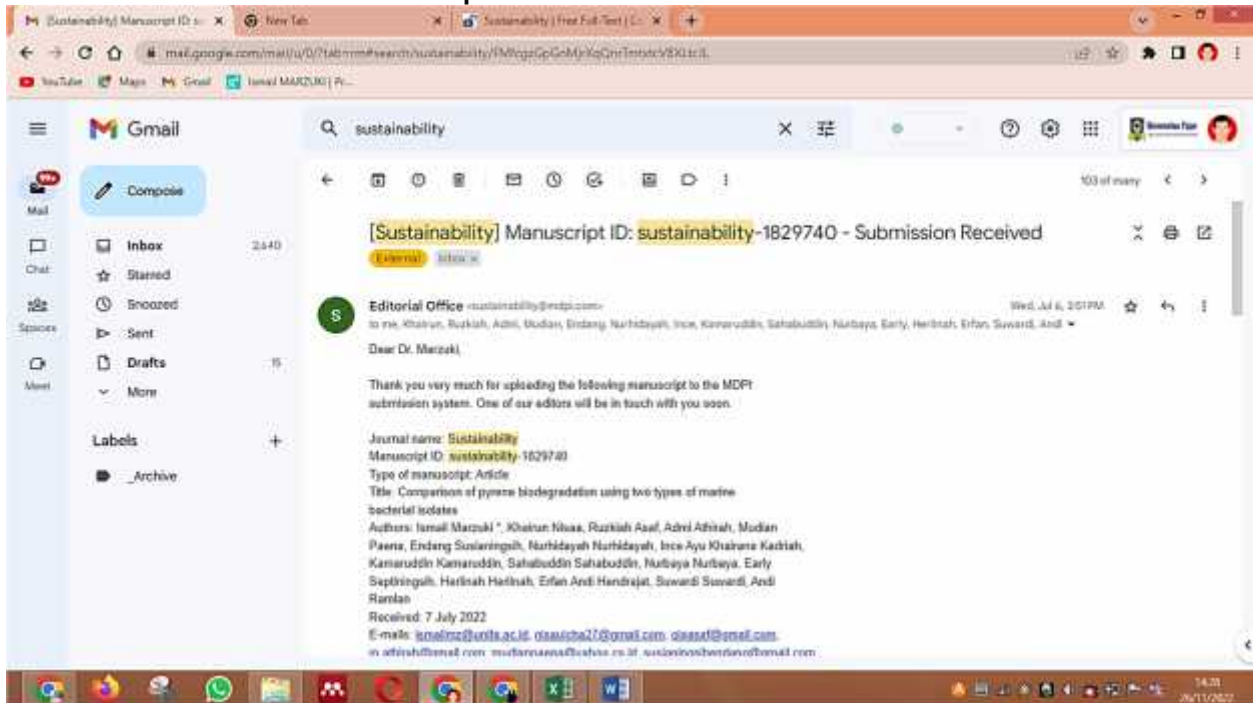
Email 20 April 2022. Pemberitahuan bahwa manuskrip telah diserahkan ke Asistem Editor. Untuk perkembangan review artikel



Email 13 Juni 2022, Artikel direjec karena konfirmasi dari penulis lewat masa dari waktu yang diberikan, akan tetapi ada kesalahan karena balasan email penulis ternyata masuk di SPAM. Kesimpulan meminta di re-submit ulang.

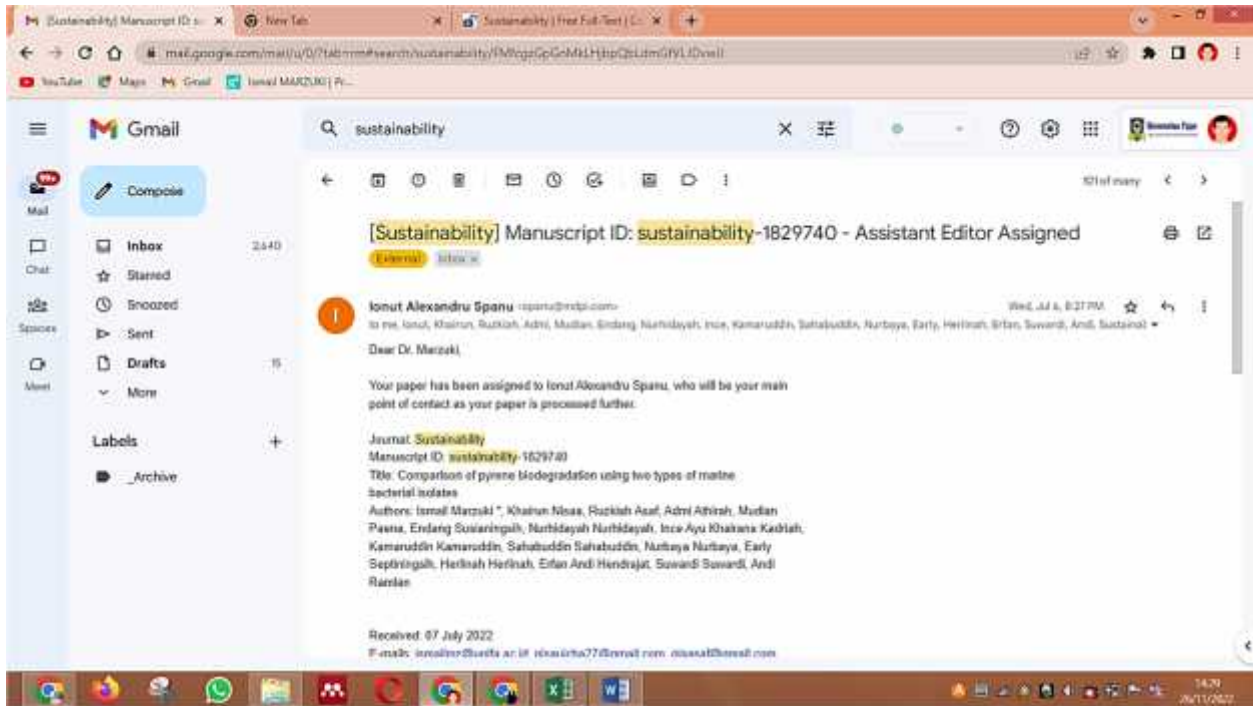


Email 6 Juli 2022. Balasan manuskrip setelah re-submit

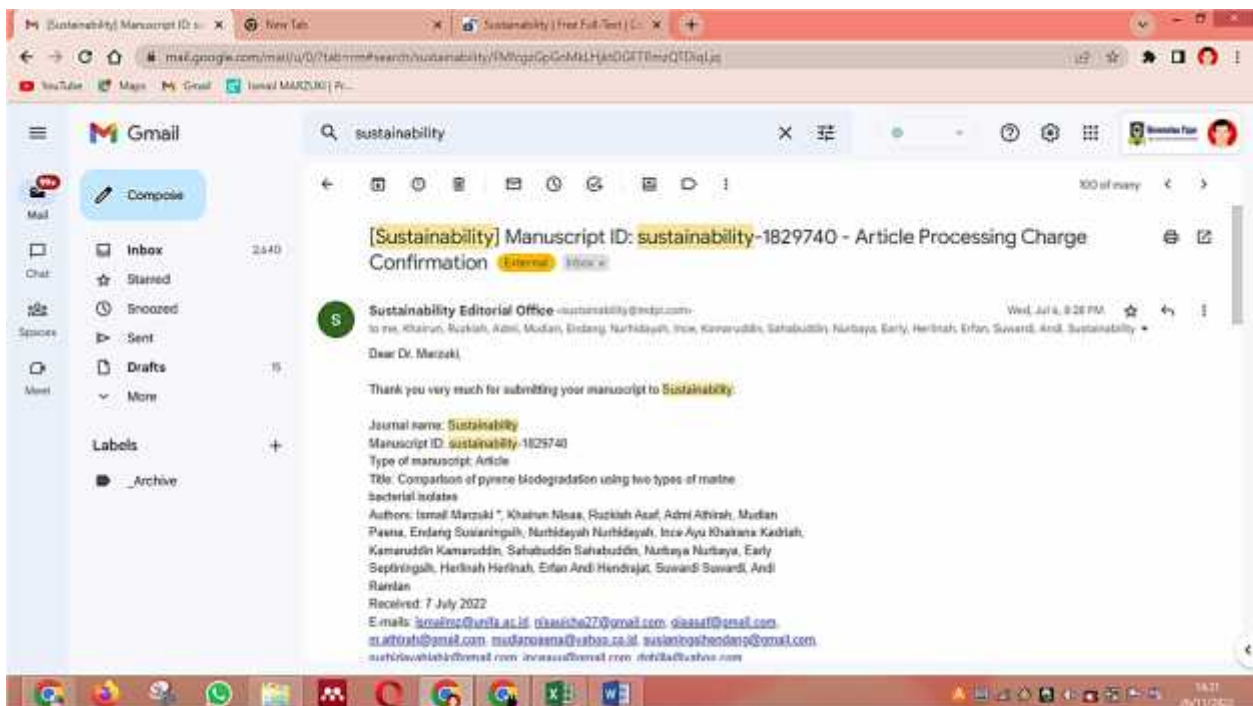


Email 7 Juli 2022.

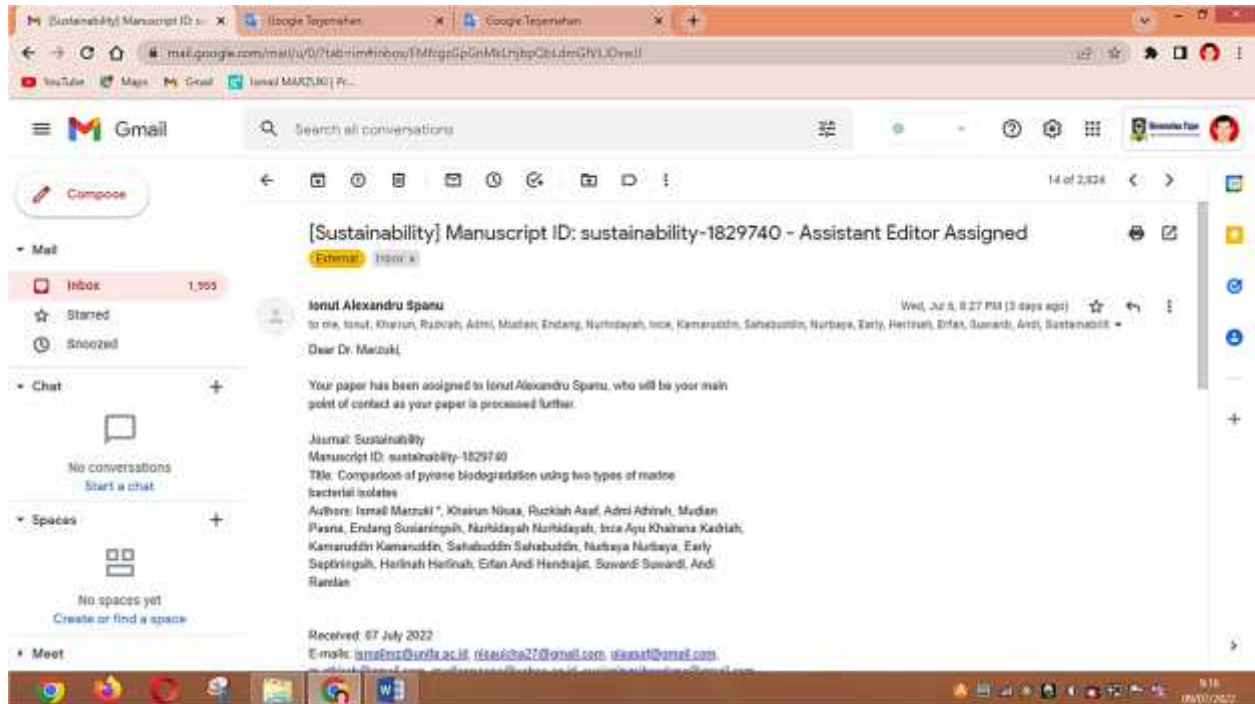
Pemberitahuan manuskrip telah di serahkan kembali ke Asisten Editor untuk proses Peer review



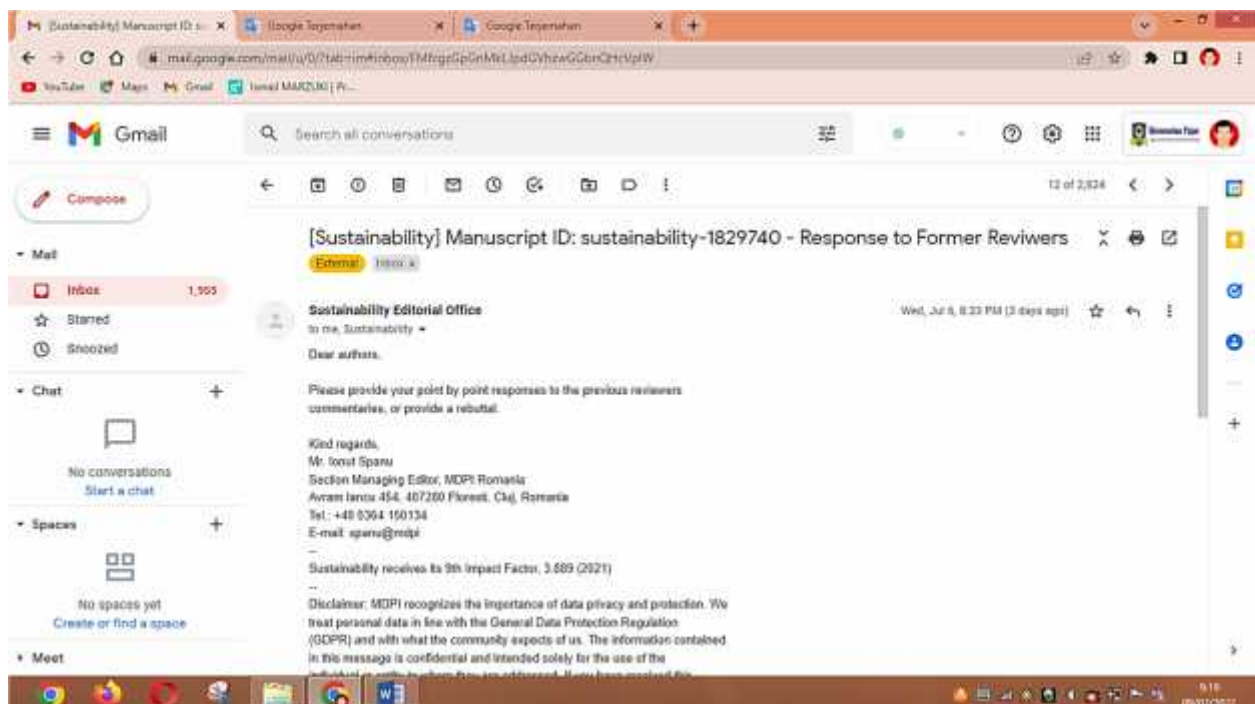
Email 7 Juli 2022. Pemberitahuan bahwa manuskrip telah masuk proses peer review



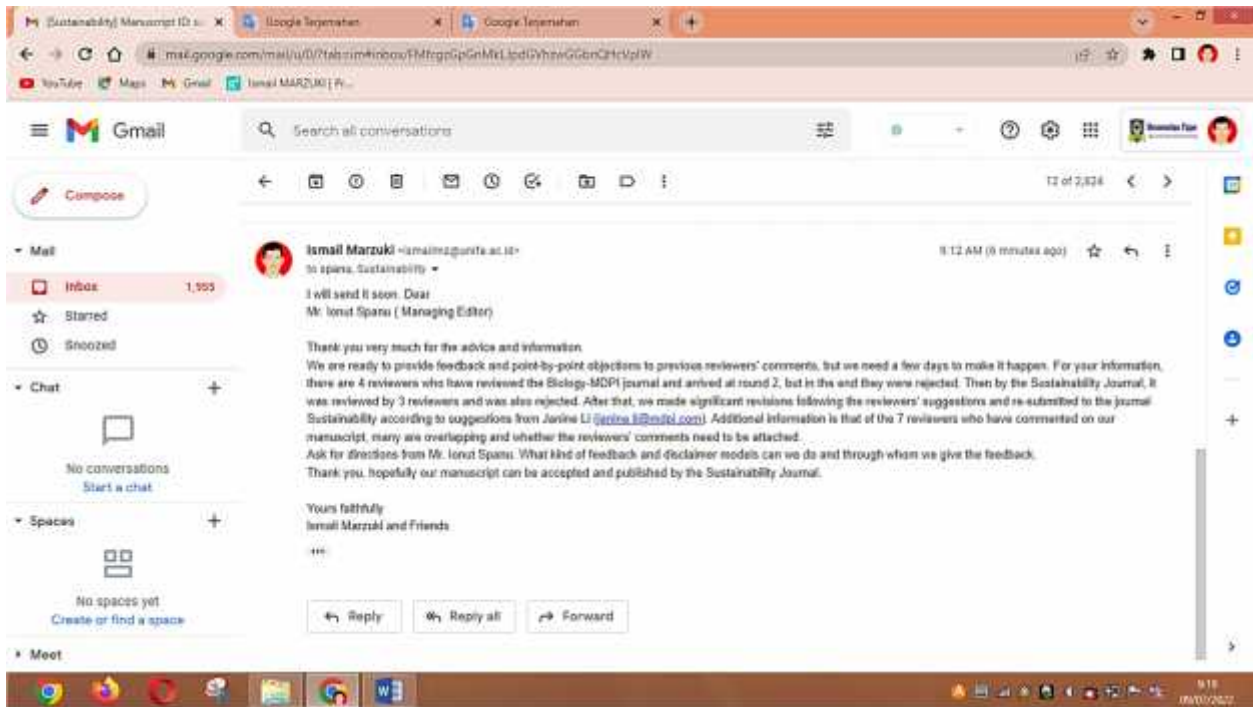
Email, 8 Juli 2022, (Proses review dan kontak person Manuskrip setelah resubmit di tangani oleh asisten editor Mr Ionut A. Spanu)



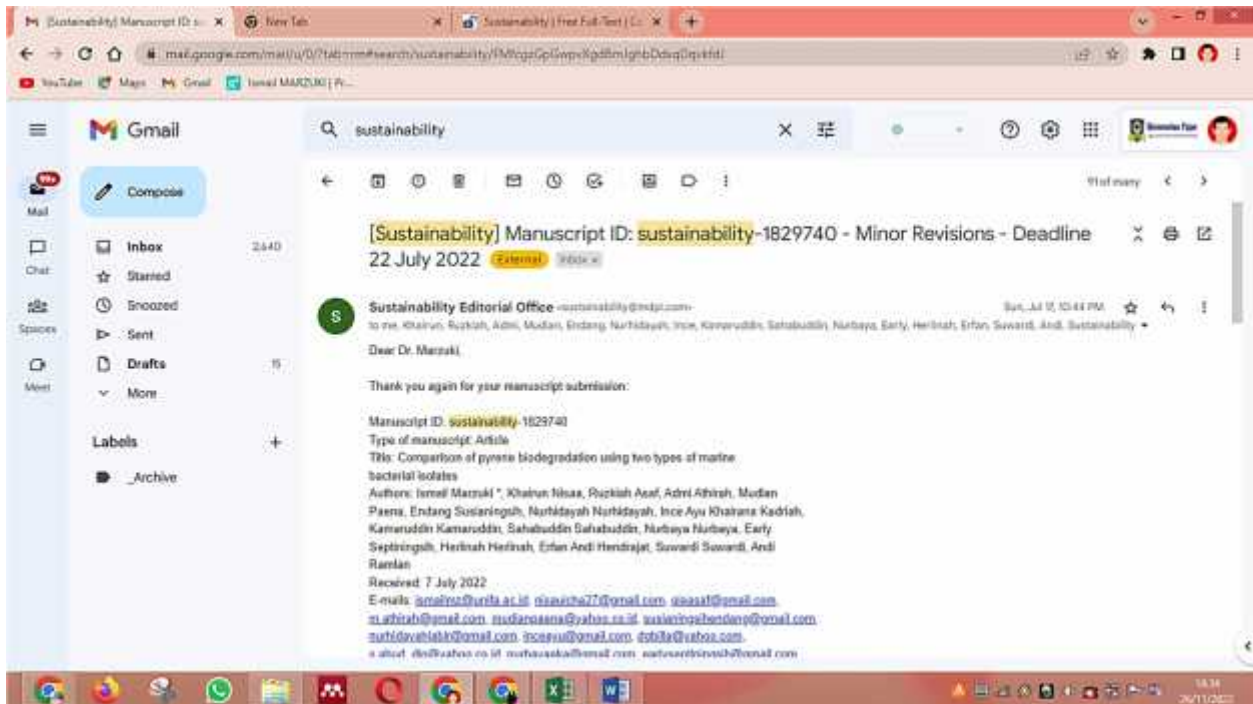
Email tentang pemberitahuan bahwa manuskrip masuk dalam tahap peer review oleh reviewer yang telah ditunjuk



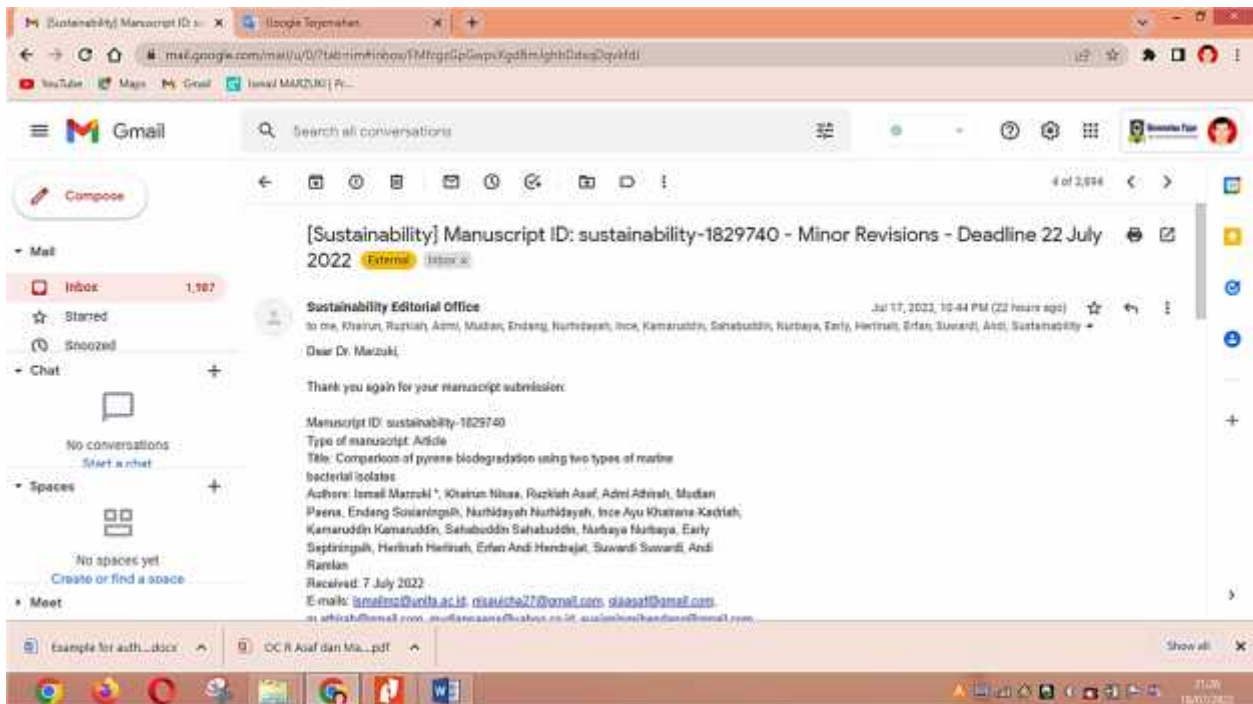
Email 8 Juli 2022. Respon Penulis atas email Asisten editor



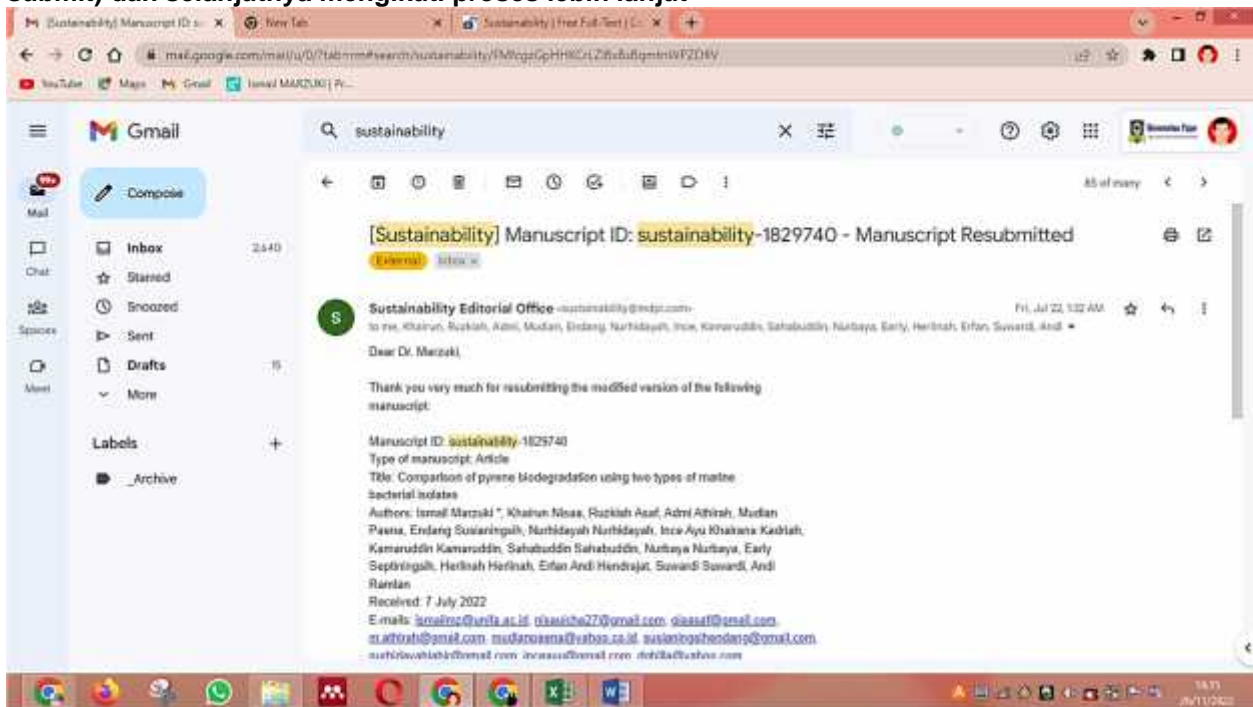
Email 17 Juli 2022. Pemberitahuan bahwa manuskrip telah direview dan harus di revisi oleh penulis dengan status minor revisi



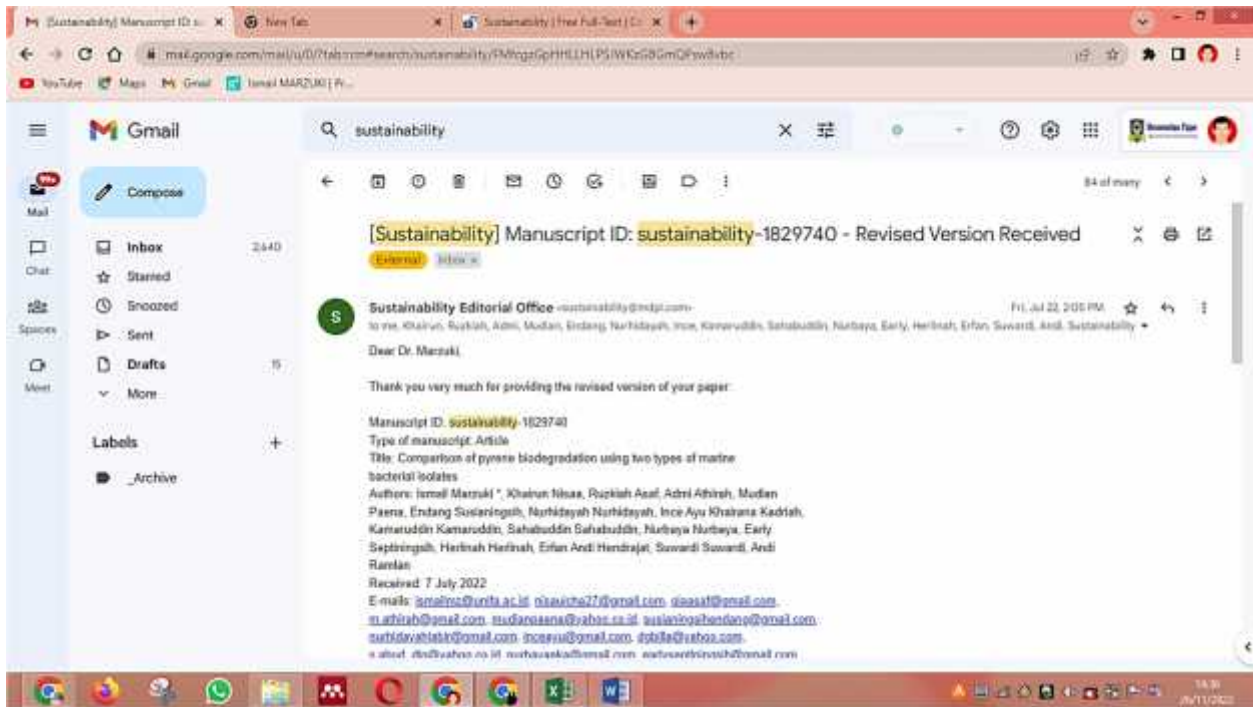
Email 18 Juli 2022, Informasi tentang manuskrip yang harus di revisi round-1 setelah resubmit dengan status minor revisi



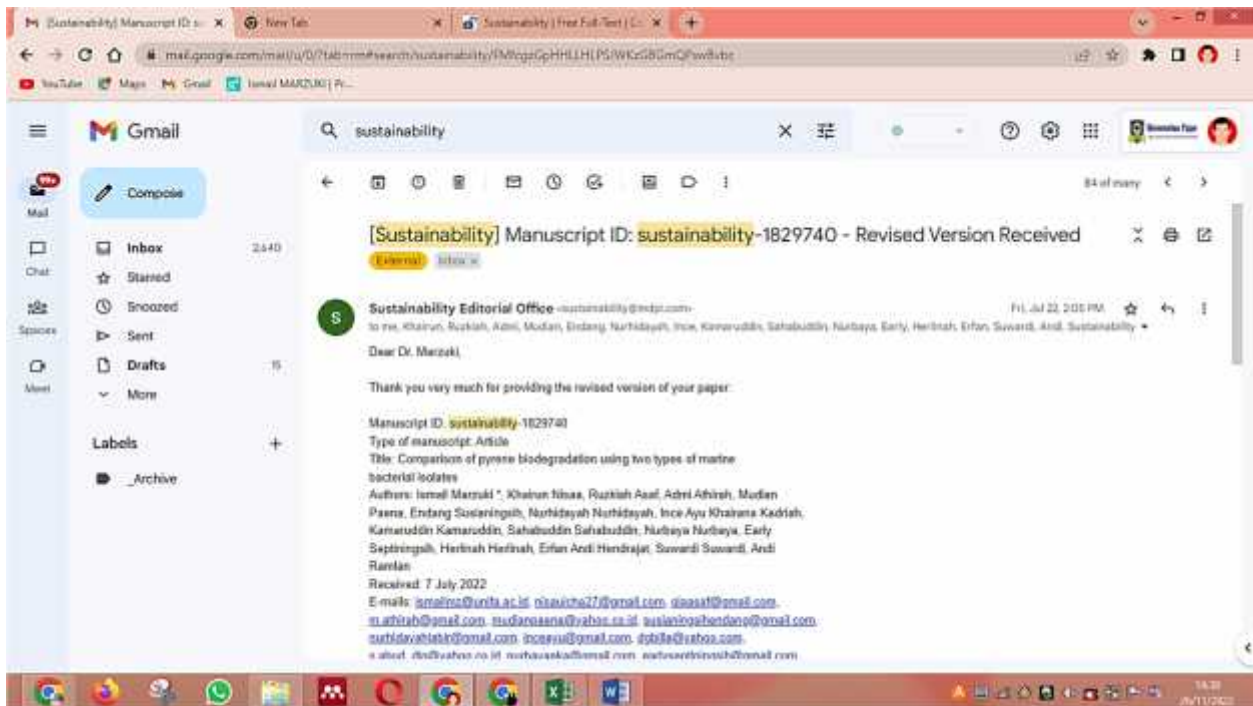
Email 20 Juli 2022. Pemberitahuan bahwa manuskrip hasil revisi penulis telah di terima (Re-submit) dan selanjutnya mengikuti proses lebih lanjut



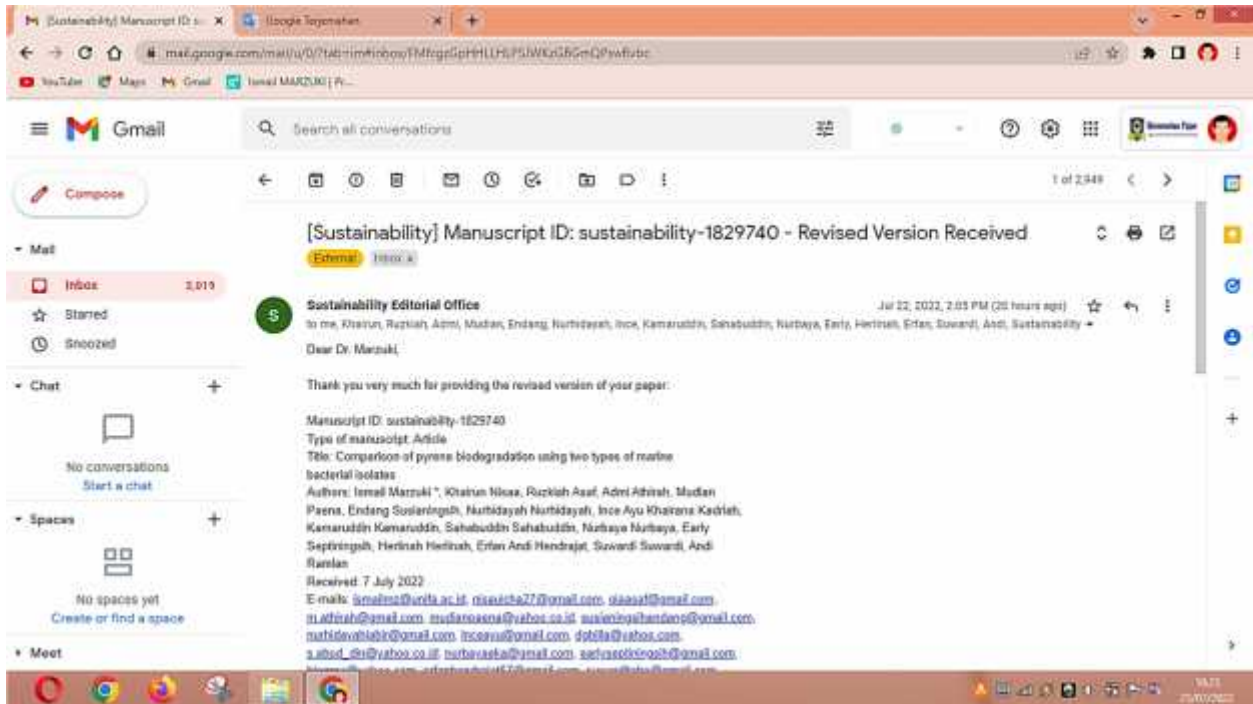
Email 21 Juli 2022. Permintaan asisten editor untuk memproofreading Manuskrip ke native



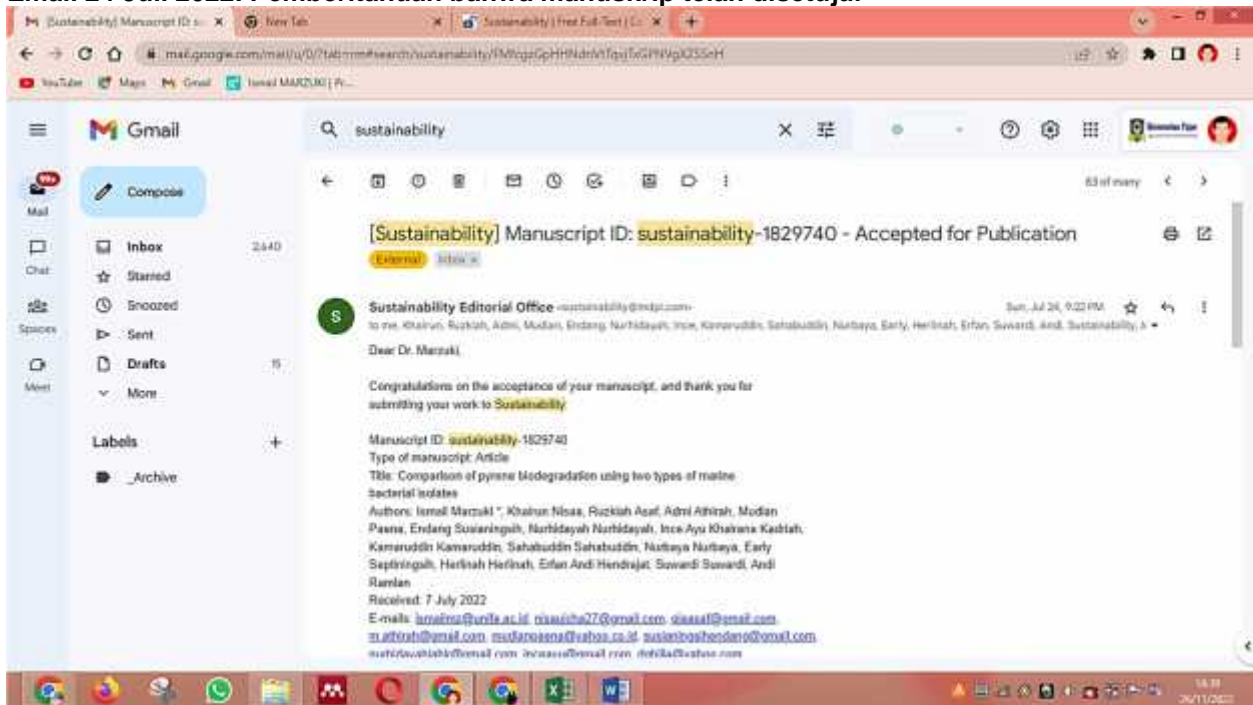
Email 22 Juli 2022. Pemberitahuan bahwa manuskrip hasil revisi kedua telah diterima



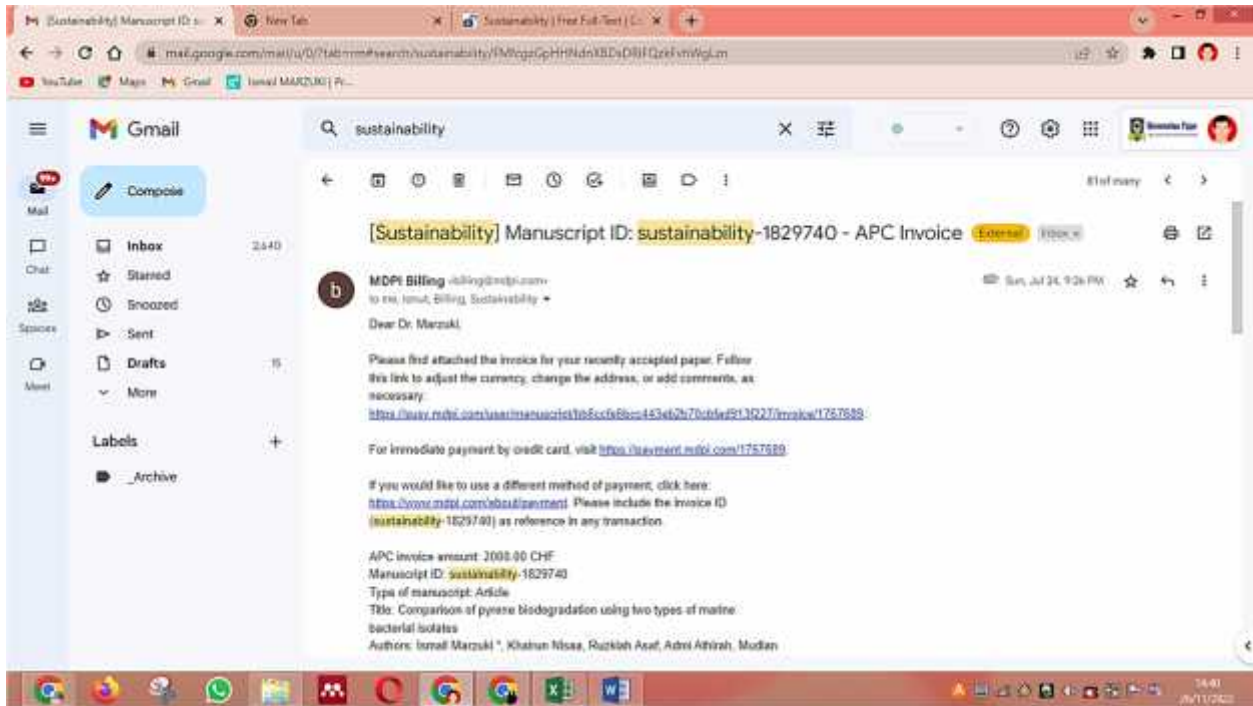
Email per 23 Juli 2022. Konfirmasi artikel revisi telah diterima untuk dilanjutkan review



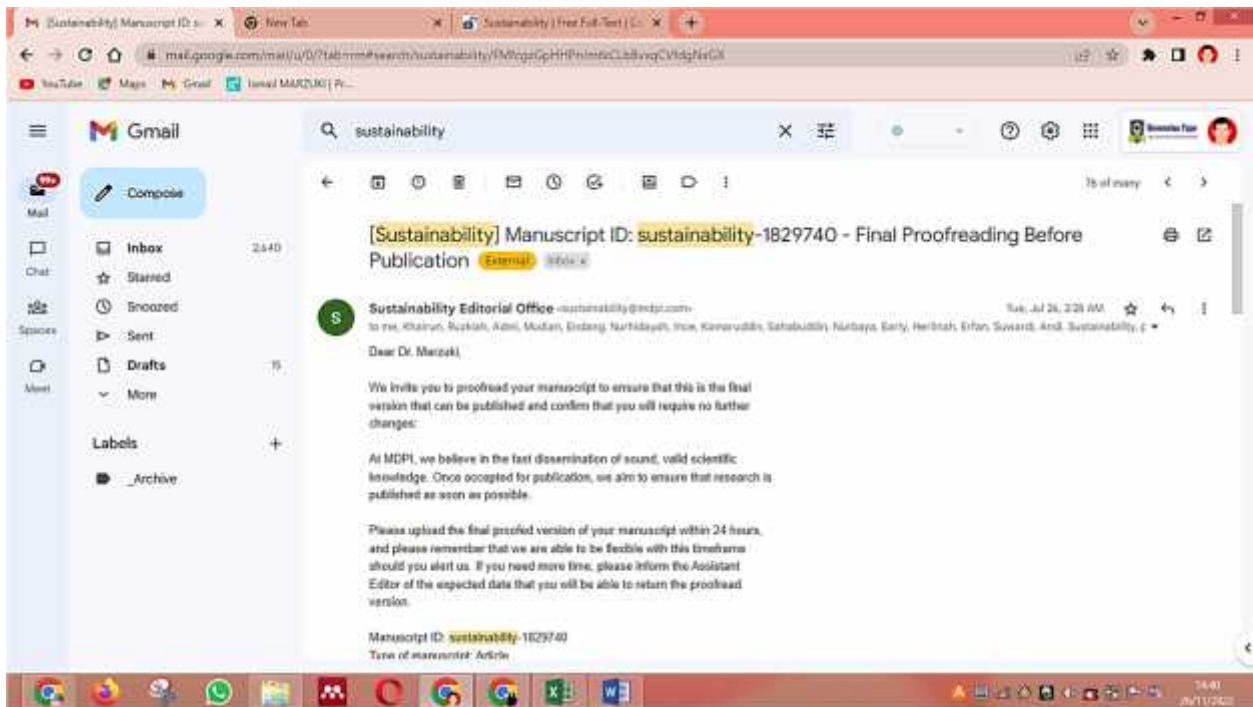
Email 24 Juli 2022. Pemberitahuan bahwa manuskrip telah disetujui



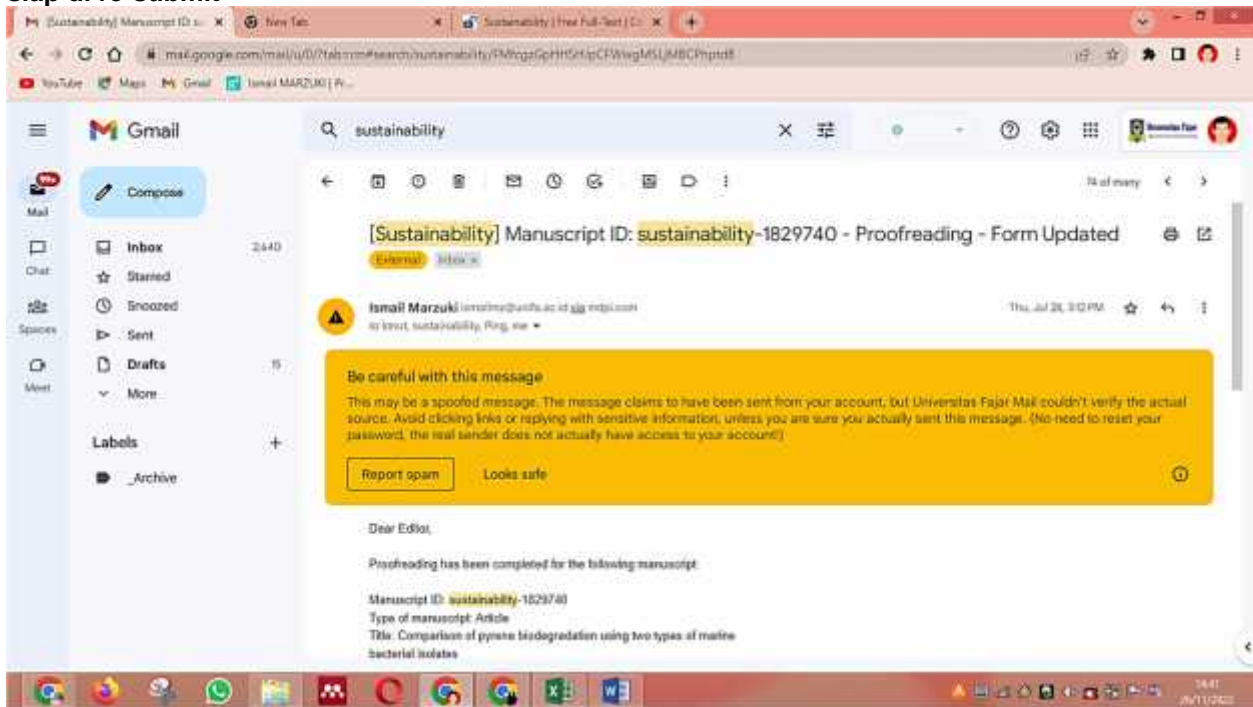
Email 24 Juli 2022. Pemberitahuan bahwa untuk proses penerbitan, penulis segera melakukan pembayaran



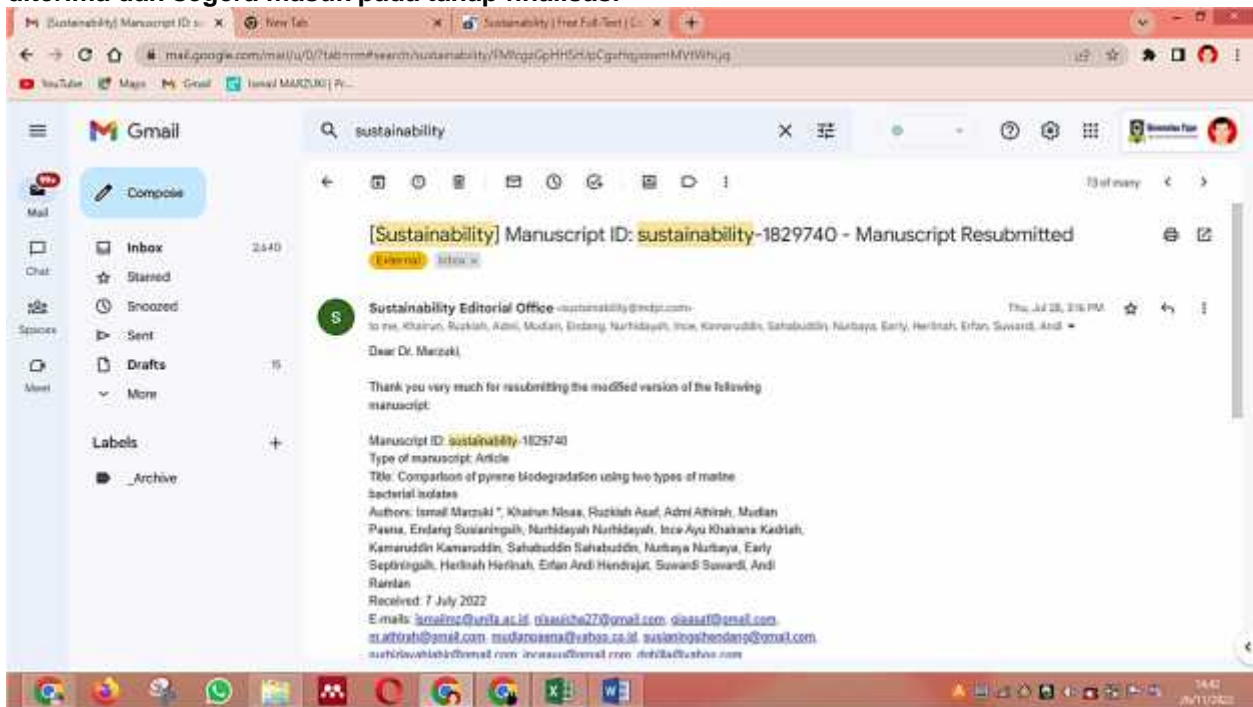
Email 26 Juli 2022. Penulis telah melakukan pembayaran APC jurnal dan diberitahukan oleh asisten editor bahwa APC yang di lakukan penulis telah di terima.



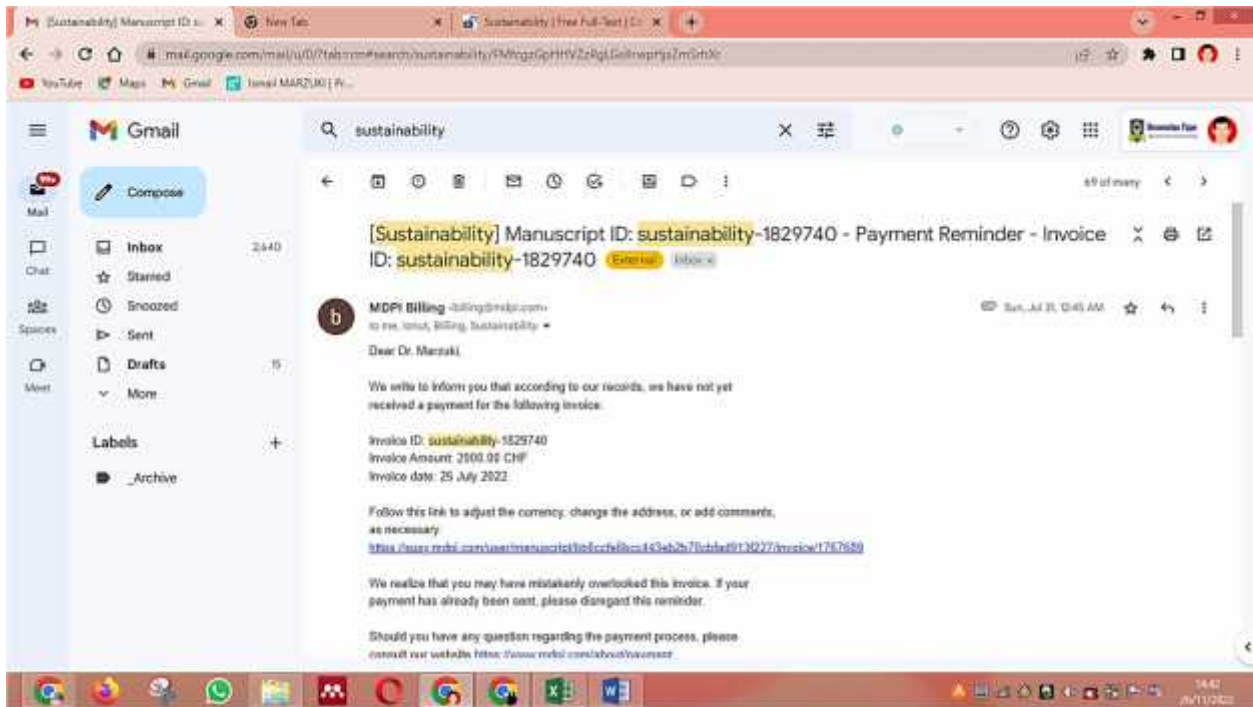
Email 28 Juli 2022. Penulis menginformasikan kepada editor bahwa proofreading telah selesai dan siap di re-submit



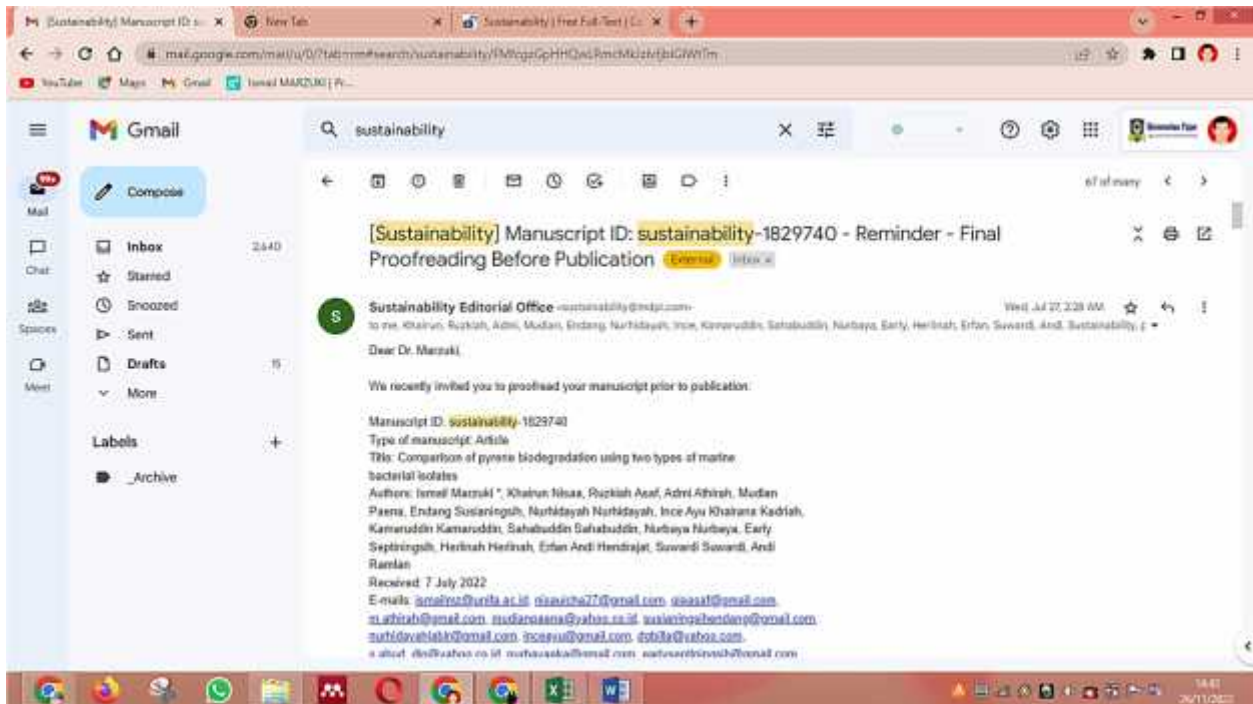
Email 28 Juli 2022. Informasi dari asisten editor bahwa manuskrip hasil proofreading telah diterima dan segera masuk pada tahap finalisasi



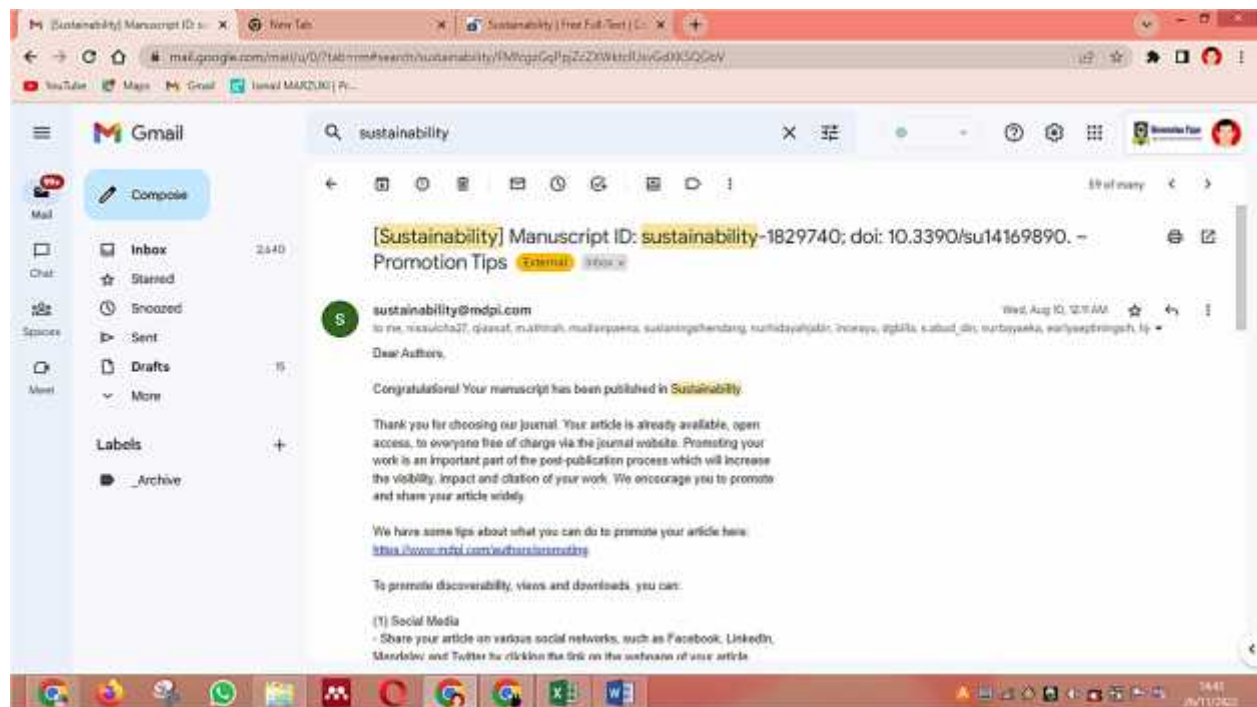
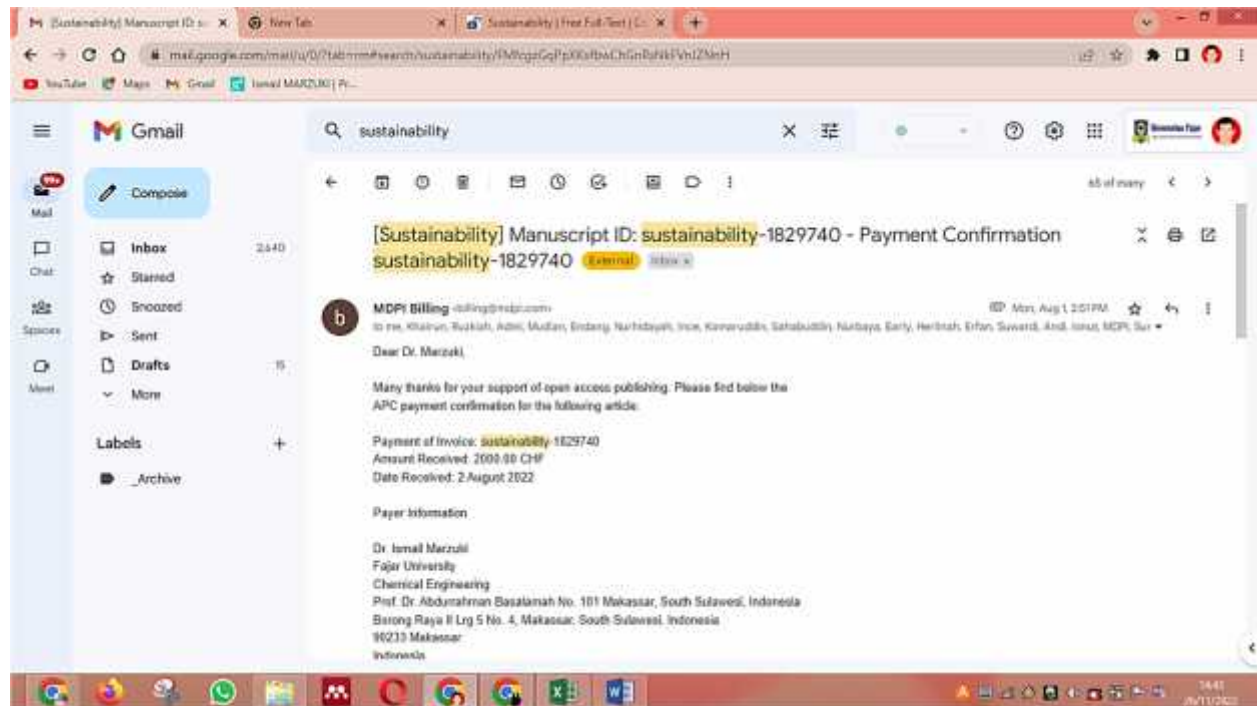
Email 28 Juli 2022. Informasi yang sama dari bagian APC Jurnal



Email 27 Juli 2022, dari bagian produksi bahwa manuskrip masih harus di proofreading final sebelum masuk tahap produksi, khususnya terkait dengan kepastian nama para penulis, email, afiliasi dan administrasi lainnya terkait dengan kelengkapan jurnal



Email 1 Agustus 2022. APC pemrosesan manuskrip telah final dan valid. Selanjutnya masa menunggu artikel terbit online



[Sustainability] Manuscript ID: sustainability-1829740; doi: 10.3390/su14169890. Paper has been published. [External](#) [Inbox](#)

sustainability@mdpi.com Wed, Aug 10, 12:58 AM

Dear Authors,

We are pleased to inform you that your article "Comparison of Pyrene Biodegradation Using Two Types of Marine Bacterial Isolates" has been published in *Sustainability* and is available online:

Abstract: <https://www.mdpi.com/2071-1055/14/16/9890>
PDF Version: <http://www.mdpi.com/2071-1055/14/16/9890/pdf>
The meta data of your article, the manuscript files and a publication certificate are available here (only available to corresponding authors after login): https://www.mdpi.com/user/manuscripts/view_info/4f4d4c4efb0c412e62b75d4fd913222
Topic: https://www.mdpi.com/topics/Characterization_Materials

Please take a moment to check that everything is correct. You can reply to this email if there is a problem. If any errors are noticed, please note that all authors must follow MDPI's policy on suitable published names. Thank

Berikut adalah komentar para reviewer atas manuskrip (Round-1)

Reviewer 1.

Open Review

I would not like to sign my review report

I would like to sign my review report

English language and style

Extensive editing of English language and style required

Moderate English changes required

English language and style are fine/minor spell check required

I don't feel qualified to judge about the English language and style

	Yes	Can be improved	Must be improved	Not applicable
Is the content succinctly described and contextualized with respect to previous and present theoretical background and empirical research (if applicable) on the topic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are all the cited references relevant to the research?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are the research design, questions, hypotheses and methods clearly stated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are the arguments and discussion of findings coherent, balanced and compelling?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
For empirical research, are the results clearly presented?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the article adequately referenced?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are the conclusions thoroughly supported by the results presented in the article or referenced in secondary literature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments and Suggestions for Authors

The paper from Markuzi and collaborators describes the evaluation of two strains for pyrene biodegradation. To this reviewer opinion, this manuscript is not suitable for publication in Sustainability journal.

The manuscript is poorly written, the English style needs a revision, and it contains continue repetition of the same sentences. The authors state the isolation site of the bacteria several times and yet, they never clarify if they performed the isolation or not. Also, how come the bacteria isolated from a marine sponge corresponds to a Bacillus strain present in the ATCC bank and isolated from milk?

The M&M lacks tremendous amount of details, the protocols are not clear, and even the media composition is not stated.

The results are quite preliminary and do not go into details as the authors state. They merely report a growth curve and one graph, without any abiotic control reporting the pyrene degradation of the strains. All the other GC-MS analysis (for which there is no protocol) are of low relevance.

The authors also state that this is the first paper to utilize bacteria isolated from sponges (not clear if they did) for PAHs degradation. This is simply untrue, and below there is just the most recent example I could find:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8624637/>

Submission Date
20 April 2022
Date of this review
03 May 2022 09:48:58

Reviewer 2.

Open Review

- I would not like to sign my review report
- I would like to sign my review report

English language and style

- Extensive editing of English language and style required
- Moderate English changes required
- English language and style are fine/minor spell check required
- I don't feel qualified to judge about the English language and style

	Yes	Can be improved	Must be improved	Not applicable
Is the content succinctly described and contextualized with respect to previous and present theoretical background and empirical research (if applicable) on the topic?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Are all the cited references relevant to the research?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Are the research design, questions, hypotheses and methods clearly stated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Are the arguments and discussion of findings coherent, balanced and compelling?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For empirical research, are the results clearly presented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the article adequately referenced?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Are the conclusions thoroughly supported by the results presented in the article or referenced in secondary literature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments and Suggestions for Authors

1. Title.

“Performance” is not usual word for description of bacterial activity. I recommend an emphasis on degradation of pyrene: “Pyrene Biodegradation by Two Marine Bacteria”.

2. Abstract.

Abstract is an essential part of article because it (i) saves time of potential readers, (ii) pays special attention to the main results. Thus, please,

- remove lines 19-21 to the "Discussion" section;

- present the whole abstract in more simple and clear style. For example, lines 30-33: "It was concluded that there was no significant difference in biodegradation performance between BI and Sb bacteria on for pyrene. Both types of bacterial isolates from different sources can carry out the function of biodegradation of pyrene" must be reduced to: "There was no significant difference in the pyrene biodegradation between BI and Sb bacteria."

3. Introduction.

The introduction contains redundant descriptions of: 1) characteristics of the group of polyaromatic hydrocarbons in general; 2) characteristics of aquatic bacteria in general; etc. These descriptions are in the nature of educational popular literature. Please rewrite the full "Introduction" section. The content must be limited with the following statements:

- pyrene is toxic aromatic compound,

- pyrene is a known pollutant for various ecosystems, including marine environment,

- pyrene can be degraded by various microorganisms (by the way, please, never name bacteria "materials": this word might be applied to any organism just if we discuss them as a non-living mass),

- the presented article is dedicated to study if two bacterial strains of marine origin could degrade pyrene.

That's enough – any introduction must be short and clear. Never overload it with references (87 references!): it is just an introduction but not a review.

4. Materials and Methods.

Main aim of the section "Materials and Methods" is to provide any reader with possibility to repeat / to check the presented study. Please reduce the section according to this point of view.

4.1. "Materials" – rename this subsection to "Bacterial strains" or "Used bacterial strains".

Reduce the whole subsection to: "Two bacterial strains, namely *Bacillus licheniformis* ATCC 9789 (BI) isolated from the marine sponge *Auletta* sp. and *Sphingobacterium* sp. 21 (Sb) isolated from marine water were used in experiments. These bacteria were selected by their biodegradation potential of PAHs in previous studies [3,5,92]." (Lines 141-143, lines 206-207.)

4.2. Subsection "Sampling" is outside the scope of experiments and does not contain any information the reader needs. Please eliminate this subsection.

4.3. Subsections "Sample Preparation" and "Performance of bacteria and biodegradation products" must be united into one subsection "Description of experiments". This subsection must be shortened. For example, lines 171-175 must be eliminated.

4.4. Please add one subsection more: "Statistics". The statistical analysis is very essential. For example, conclusions contain the sentence "The total percentage of bacterial biodegradation products of Sb type (39.00%) was slightly higher than that of BI type biodegradation products (38.29%) achieved during the interaction period of 30 days". "Slightly higher" - is it statistically significant or not? As well, this analysis is a measure for the "human errors" too: "Second, the use of glassware and analytical instruments during the sample preparation process leads to the possibility of equipment contamination with naphthalene components due to human error" (lines 341-343).

5. Results.

5.1. Subsection "Morphological analysis ". The morphology of bacteria can be left in the article only if it changes depending on the biodegradation of pyrene. Otherwise, it is outside the scope of this article and should be excluded.

5.2. Style and excess content. Extensive editing of English language and style required. An example is (lines 331-332): "Potential formation of pyrene derivative products as a result of bacterial biodegradation in biodegradation was using was studied for bacteria types BI and Sb." Please rewrite the new results and present them in a more clear description.

6. In nutshell, the article must be rewritten, shortened, and presented with a distinct description: what results are new and why they could be of interest.

[peer-review-19160460.v1.docx](#)

Submission Date

20 April 2022

Date of this review

25 Apr 2022 09:40:20

Reviewer 3.

Open Review

I would not like to sign my review report

I would like to sign my review report

English language and style

Extensive editing of English language and style required

Moderate English changes required

English language and style are fine/minor spell check required

I don't feel qualified to judge about the English language and style

	Yes	Can be improved	Must be improved	Not applicable
Is the content succinctly described and contextualized with respect to previous and present theoretical background and empirical research (if applicable) on the topic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are all the cited references relevant to the research?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the research design, questions, hypotheses and methods clearly stated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Are the arguments and discussion of findings coherent, balanced and compelling?	()	(x)	()	()
For empirical research, are the results clearly presented?	()	(x)	()	()
Is the article adequately referenced?	()	(x)	()	()
Are the conclusions thoroughly supported by the results presented in the article or referenced in secondary literature?	()	(x)	()	()

Comments and Suggestions for Authors

This study investigated the feasibility of PAH biodegradation by two types of marine bacteria. The topic is of potential interest for readers. I have several comments for authors' consideration:

1- The English of this paper should be improved. For example:

L22: it should be "the study aims" instead "the study aimed"

L22-23: it should be "to compare the capacity of PAH biodegradation by two types of bacteria isolated from different sources" instead "to compare the biodegradation power of two types of bacteria isolated from different sources against PAHs"

L26: it should be "The capacity of pyrene degradation by BI bacteria" instead "the aggressiveness of biodegradation of BI bacteria against pyrene"

Authors should use the present tense to announce results

2- There should be full names for the abbreviations in their first appearances, for example: PAH, BI, Sb, GC/MS, FTIR...

3- Please add a figure of the Molecular structure of pyrene and some typical polycyclic aromatic hydrocarbons (PAHs)

4- The introduction part can be improved by:

adding more details about the mechanisms involved in the PAH biodegradation

adding a figure of the Molecular structure of pyrene and some PAHs

removing repeated ideas

5- The "Materials and Methods" part is unclear. It is difficult to follow, and it is difficult to understand the experimental approach carried out. Authors should rewrite this part as follows:

- Collection of samples or sampling sites
- Isolation of bacteria
- Screening of the isolated strains
- Culture conditions and growth monitoring of the selected stains
- Morphology analysis of the selected strains

- Biodegradation experiment
- Extraction of pyrene for GC/MS and FTIR analysis

6- The authors need to present a microscopic image or a photo of an isolated strain in order to support the bacterial morphology description

7- The quality of Figures 3,4, 8 and 9 need to be improved.

8- L225: What is the selective medium used?

9- The description of the results does not help in the understanding of this manuscript. Authors must be precise and well organized according to each idea or result. For example, in the page 6, the authors present the growth results of the two isolated bacteria. However, in the description of these results, we find that the authors discuss the capacity of PAH degradation by these two bacteria.

10- Better growth does not imply better biodegradation efficiency. If the OD increases, the rate of biodegradation may increase. However, to measure the effectiveness, it is necessary to divide the biodegradation rate by the OD.

11- Given the GC/MS and FTIR data, what are the authors' predictions about the Biodegradation mechanism and the enzymes involved in this process?

12- Figures 8 and 9: Authors should present these results as total XX/OD versus time

13- Abstract, discussion and conclusions should be modified after this major revision

Submission Date
20 April 2022
Date of this review
06 May 2022 16:56:54

Berikut adalah komentar para reviewer atas manuskrip (Round-2), setelah resubmit kedua, tinggal 2 reviewer.

Reviewer 1

Open Review

- I would not like to sign my review report
- I would like to sign my review report

English language and style

- Extensive editing of English language and style required
- Moderate English changes required
- English language and style are fine/minor spell check required
- I don't feel qualified to judge about the English language and style

	Yes	Can be improved	Must be improved	Not applicable
Is the content succinctly described and contextualized with respect to previous and present theoretical background and empirical research (if applicable) on the topic?	(x)	()	()	()
Are all the cited references relevant to the research?	(x)	()	()	()
Are the research design, questions, hypotheses and methods clearly stated?	(x)	()	()	()
Are the arguments and discussion of findings coherent, balanced and compelling?	(x)	()	()	()
For empirical research, are the results clearly presented?	(x)	()	()	()
Is the article adequately referenced?	(x)	()	()	()
Are the conclusions thoroughly supported by the results presented in the article or referenced in secondary literature?	(x)	()	()	()

Comments and Suggestions for Authors

This manuscript is clearly written and relevant. The analytical techniques are appropriate and well described. Results are also appropriate. Three hyphens in the first paragraph (Lines 39, 41, 42) should be removed.

Submission Date

07 July 2022

Date of this review

15 Jul 2022 22:46:30

Reviewer 2

Open Review

I would not like to sign my review report

I would like to sign my review report

English language and style

Extensive editing of English language and style required

Moderate English changes required

English language and style are fine/minor spell check required

I don't feel qualified to judge about the English language and style

	Yes	Can be improved	Must be improved	Not applicable
Is the content succinctly described and contextualized with respect to previous and present theoretical background and empirical research (if applicable) on the topic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are all the cited references relevant to the research?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the research design, questions, hypotheses and methods clearly stated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Are the arguments and discussion of findings coherent, balanced and compelling?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For empirical research, are the results clearly presented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the article adequately referenced?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the conclusions thoroughly supported by the results presented in the article or referenced in secondary literature?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments and Suggestions for Authors

- The english of the manuscript should be reworked and revised.
- Some words should be revised like:
- Line 131 : what the meaning of PA, PA ?
- Line 134-138: the description of the GC program should be reformulated and revised (temperature 350°C of what?)
- Line 151 : distance between the two sampling points is ± 3.45 Nm or Km ?
- It is recommended to put the error bars in the the graphic of the figure 3!
- Lines 213-15 : phrase (changes in optical density.....) should be reformulated....
- All graphics and graphics should be re-worked in a clear form.

- What about the toxic level of chemical compounds resulted from the biodegradations of PAHs ? I am not sure that these molecules are also safe for the environment. It is important to comment this point!
- The percentage of biodegradation (38-39%) is considered good for the safety of the environment? and what about the 60% of PAHS remained in the environment!
- It is important to indicate the method used in the calculation of the percentage of biodegradation ?

Submission Date
07 July 2022
Date of this review
13 Jul 2022 01:02:23

Catatan:

Proses dan Perubahan artikel melalui OJS jurnal Sustainability dapat dilihat pada URL berikut:
<https://www.mdpi.com/2071-1050/14/16/9890> ;

Lalu klik review report, akan tampak nama-nama para reviewer atas nama (**John Vakros; Evroula Hapeshi dan Catia Cannilla**), dan informasi lainnya terkait proses review manuskrip. Atau jika mau langsung, juga dapat langsung dengan mengklik link di bawah:

https://www.mdpi.com/2071-1050/14/16/9890/review_report :

Link ini merupakan fasilitas rekaman peer review yang dilakukan oleh Jurnal Molekules yang dapat dilihat dalam OJS artikel secara online dan open access, yang menunjukkan bahwa Jurnal Molecules telah menerapkan sistem management pengelolaan jurnal dan proses review yang transparan dan akuntabel.