

**LEMBAR HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW  
KARYA ILMIAH : JURNAL INTERNASIONAL**

Judul Jurnal Ilmiah (Artikel) : Effect of rushton impeller speed on biogas production in anaerobic digestion of continuous stirred bioreactor  
 Jumlah Penulis : Nazaruddin Sinaga\*, Kurnia Hatta, Nurjehan Ezzatul Ahmad, Maizirwan Mel  
 Status Pengusul : Penulis ke-1  
 Identitas Jurnal Ilmiah : a. Nama Jurnal : Journal of Advanced Research in Biofuel and Bioenergy  
 b. Nomor ISSN : 2600-8459  
 c. Volume, nomor, bulan tahun : 3, 1 Desember 2018  
 d. Penerbit : Akademia Baru  
 e. DOI artikel (jika ada) : -  
 f. Alamat web Jurnal : http://www.akademiabaru.com/arb.html  
 Alamat Artikel : http://www.akademiabaru.com/doc/ARBBV3\_N1\_P9\_18.pdf  
 g. Terindeks di : Google scholar  
 h. Turnitin Similarity : 13%

Kategori Publikasi Jurnal Ilmiah :  Jurnal International  
 (beri ✓ pada kategori yang tepat)  Seminar Nasional

Hasil Penilaian Peer Review :

Komponen Yang Dinilai	Nilai Maksimal Jurnal Ilmiah		Nilai Akhir yang Diperoleh
	Jurnal Internasional <input checked="" type="checkbox"/>	Seminar Nasional <input type="checkbox"/>	
a. Kelengkapan unsur isi jurnal (10%)	2		1
b. Ruang lingkup dan kedalaman pembahasan (30%)	6		5
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	6		6
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	6		6
<b>Total = (100%)</b>	<b>20</b>		<b>18</b>

**Nilai Pengusul = 60% x 18 = 10.8**

**Catatan Penilaian artikel oleh Reviewer :**

**1. Kesesuaian dan kelengkapan unsur isi jurnal:**

Sudah sangat sesuai dan penulisan artikel sudah sesuai dengan format panduan yang ada di jurnal. Topik maupun materi sesuai dengan jurnal yang bersangkutan. Penulisan Figure dalam text tidak konsisten, seharusnya Fig.

**2. Ruang lingkup dan kedalaman pembahasan:**

Isi artikel membahas tentang efek dari kecepatan putaran mixer pada produksi biogas pada anaerobik bioreaktor stirred kontinyu. Topik dan ruang lingkup bahasan cukup baik. Pembahasan baik, metode penelitian cukup baik dan jelas, namun perlu ditunjang oleh referensi yang memadai sebagai benchmark. Beberapa variable kurang memberikan hasil dengan perbedaan yang signifikan.

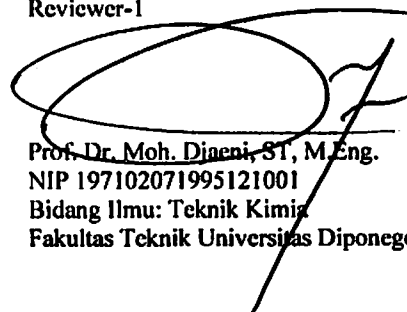
**3. Kecukupan dan kemutakhiran data/informasi dan metodologi:**

Paper ini merupakan hasil kolaborasi antara dosen Undip dengan IUM Malaysia. Nilai novelty/kebaruan artikel adalah baik. Referensi yang disitasi dalam artikel ini ada 14 dimana 13 baru (dalam 10 tahun terakhir). Metode disajikan dengan cukup jelas.

**4. Kelengkapan unsur dan kualitas terbitan:**

Jurnal ini tergolong jurnal internasional yang terindeks pada Google Scholar. Orisinalitas artikel baik dengan indeks similaritas artikel berdasarkan Turnitin yaitu sebesar 13%.

Semarang, 25 Februari 2020  
 Reviewer-1



Prof. Dr. Moh. Djaeni, ST, M.Eng.  
 NIP 197102071995121001  
 Bidang Ilmu: Teknik Kimia  
 Fakultas Teknik Universitas Diponegoro

**LEMBAR HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW  
KARYA ILMIAH : JURNAL INTERNASIONAL**

Judul Jurnal Ilmiah (Artikel) : Effect of rushton impeller speed on biogas production in anaerobic digestion of continuous stirred bioreactor

Jumlah Penulis : **Nazaruddin Sinaga\***, Kurnia Hatta, Nurjehan Ezzatul Ahmad, Maizirwan Mel

Status Pengusul : Penulis ke-1

Identitas Jurnal Ilmiah : a. Nama Jurnal : Journal of Advanced Research in Biofuel and Bioenergy  
 b. Nomor ISSN : 2600-8459  
 c. Volume, nomor, bulan tahun : 3, 1 Desember 2018  
 d. Penerbit : Akademia Baru  
 e. DOI artikel (jika ada) : -  
 f. Alamat web Jurnal : http://www.akademiabaru.com/arb.html  
 Alamat Artikel : http://www.akademiabaru.com/doc/ARBBV3\_N1\_P9\_18.pdf  
 g. Terindeks di : Google scholar  
 h. Turnitin Similarity : 13%

Kategori Publikasi Jurnal Ilmiah :  **Jurnal Internasional**  
 (beri ✓ pada kategori yang tepat)  Seminar Nasional

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Jurnal Ilmiah		Nilai Akhir yang Diperoleh
	Jurnal Internasional <input checked="" type="checkbox"/>	Seminar Nasional <input type="checkbox"/>	
a. Kelengkapan unsur isi jurnal (10%)	2		2
b. Ruang lingkup dan kedalaman pembahasan (30%)	6		6
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	6		5
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	6		5
<b>Total = (100%)</b>	20		18
<b>Nilai Pengusul = 60% x 18 = 10,8</b>			

**Catatan Penilaian artikel oleh Reviewer :**

**1. Kesesuaian dan kelengkapan unsur isi jurnal:**

Sesuai dengan kaidah penulisan jurnal internasional Journal of Advanced Research in Biofuel and Bioenergy. Artikel ditulis dengan baik, sesuai struktur jurnal standar.

**2. Ruang lingkup dan kedalaman pembahasan:**

Pembahasan dan kedalaman bahasan cukup memadai. Dalam artikel menjelaskan hasil penelitian sebagai kontribusi keilmuan.

**3. Kecukupan dan kemutakhiran data/informasi dan metodologi:**

Kecukupan atau kemutakhiran dengan menggunakan pustaka 5-10 tahun terakhir. Terdapat unsur novelty didalam artikel ini.

**4. Kelengkapan unsur dan kualitas terbitan:**

Kelengkapan unsur sudah baik. Unsur publikasi lengkap. Alamat jurnal dan paper serta pengelola jurnal dapat dilacak.

Bandung, 26 November 2019

Reviewer-2



Prof. Dr. Ir. Priyono Sutikno  
 NIP 195306111978031000  
 Bidang Ilmu: Teknik Mesin  
 Fakultas Teknik Mesin dan Dirgantara  
 Institut Teknologi Bandung

### Effect of rushton impeller speed on biogas production in anaerobic digestion of continuous stirred bioreactor

[\[PDF\] undip.ac.id](#)

[N.Sinaga](#), [K.Hatta](#), [NE.Ahmad](#)... - *Journal of Advanced ...*, 2018 - [eprints.undip.ac.id](#)

The formation of biogas in an anaerobic digester is a complex fermentation process of organic compounds involving microorganisms. The biogas production can be enhanced by using a mixer, which depends on its rotational speed. This study investigated the effect of mixer rotational speed on biogas production in an anaerobic continuous stirred bioreactor with a computational approach. The purpose of this study is to find the optimum speed of the mixer that produces the highest biogas production. The finite volume method is used to ...

☆  [Artikel terkait](#) 

Menampilkan hasil terbaik untuk penelusuran ini. [Lihat semua hasil](#)



Pusat  
Akademia Baru

# Advanced Research in Biofuel and Bioenergy

الَّذِي جَعَلَ لَكُمْ مِنَ الشَّجَرِ الْأَخْضَرِ نَارًا فَإِذَا  
أَنْتُمْ مِنْهُ تُوقِدُونَ

[it is] He who made for you from the green tree, fire, and  
then from it you ignite

Yasin:80

## JOURNAL OF ADVANCED RESEARCH IN BIOFUEL AND BIOENERGY

Search by journal name...

Search by keyword...

Search by author...

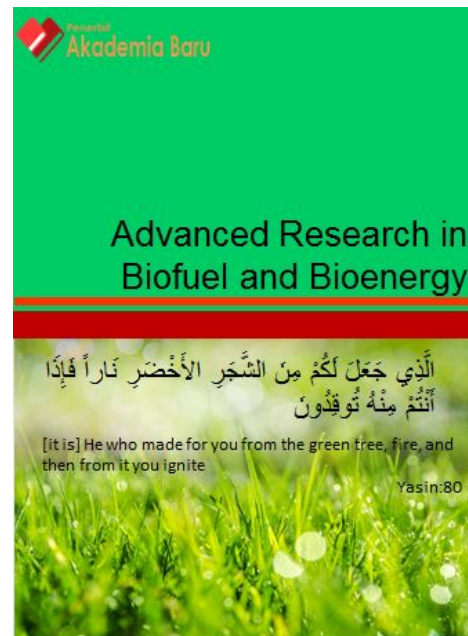
**ISSN (Online)** : 2600-8459

**Frequency** : Quarterly

**Editor-in-Chief** : **Dr. Maizirwan Mel** (E-mail)

[View full editorial board](#)

**Aims and Scope** : Journal of Advanced Research in Biofuel and Bioenergy offers the current research and progress on biofuel and bioenergy. The journal covers original research papers, short communications, review articles and case studies on various aspects of bio based energy including solid, liquid and gaseous fuels processed through biochemical, chemical, thermochemical, electrochemical, etc. routes for efficient and eco-friendly technologies and techno-economic studies of different processes on bioenergy and biofuels. The scopes of the journal extend to the aspects of biomass, biological residues, bioenergy processes, bioenergy utilization/applications, biomass and the environment, advanced biofuels (biohydrogen, biomethane, bioethanol, biodiesel), algae biofuels, aviation biofuels, biorefineries, and bioeconomy of biofuel.



## Recent Articles

**Volume 2, No. 1 (September, 2018)**

Evaluation of a Large Eddy Simulation on Thermal Boundary Condition in Underground Car Park

[Ahmad Faiz Tharima, Mohd Zamri Yusoff, Md Mujibur Rahman](#)

## INDEXING



## PUBLISHED ARTICLES

Preface

+ Volume 1, No. 1 (June, 2018)

Volume 1 - Volume 5

+ Volume 2, No. 1 (September, 2018)

- Volume 3, No. 1 (December, 2018)

Preliminary Study on Designing and Development of Biogas Analyser and Monitoring System using IoT

Muhamad Farhan Mohd Pu'ad, Khairul Azami Sidek, Maizirwan Mel

Page 1 – 8

Effect of Rushton Impeller Speed on Biogas Production in Anaerobic Digestion of Continuous Stirred Bioreactor

Nazaruddin Sinaga, Kurnia Hatta, Nurjehan Ezzatul Ahmad, Maizirwan Mel

Page 9 – 18

Upgrading Biogas by Membrane Contactor Separation

Nopia Rahmat, Maizirwan Mel

Page 19 – 26

+ Volume 4, No. 1 (March, 2019)

## Submit Your Manuscript

Manuscripts submitted to the Akademia Baru journals must be original work that has not been published or under consideration for publication elsewhere. The manuscript must be written in good English or Malay and should be no more than 20 pages in length inclusive of tables, figures and illustrations. All submissions will be peer reviewed.

Submit your paper

## Guide for Authors

## ARBB EDITORIAL BOARD

**ISSN (Online) :** 2600-8459

**Frequency :** Quarterly

**Editor-in-Chief :** **Dr. Maizirwan Mel** (E-mail)

[View full editorial board](#)

**Aims and Scope :** Journal of Advanced Research in Biofuel and Bioenergy offers the current research and progress on biofuel and bioenergy. The journal covers original research papers, short communications, review articles and case studies on various aspects of bio based energy including solid, liquid and gaseous fuels processed through biochemical, chemical, thermochemical, electrochemical, etc. routes for efficient and eco-friendly technologies and techno-economic studies of different processes on bioenergy and biofuels. The scopes of the journal extend to the aspects of biomass, biological residues, bioenergy processes, bioenergy utilization/applications, biomass and the environment, advanced biofuels (biohydrogen, biomethane, bioethanol, biodiesel), algae biofuels, aviation biofuels, biorefineries, and bioeconomy of biofuel.



## Recent Articles

**Volume 2, No. 1 (September, 2018)**

Evaluation of a Large Eddy Simulation on Thermal Boundary Condition in Underground Car Park  
**Ahmad Faiz Tharima, Mohd Zamri Yusoff, Md Mujibur Rahman**

## Editorial Board

**Editor-in-Chief**

**Dr. Maizirwan Mel**

International Islamic University Malaysia, **MALAYSIA**

### Associate Editors

**Nor Azwadi C. Sidik**

Department of Mechanical Engineering  
Precision, Malaysia-Japan International  
Institute of Technology, Universiti Teknologi  
Malaysia, **MALAYSIA**

**Dr. Muhammad Noor Afiq Witri Mohd Yazid**

School of Mechanical Engineering, Faculty  
of Engineering, Universiti Teknologi  
Malaysia, **MALAYSIA**

**Dr. Wira Jazair Yahya**

Department of Mechanical Engineering  
Precision, Malaysia-Japan International  
Institute of Technology, Universiti Teknologi  
Malaysia, **MALAYSIA**

**Dr. Ahmad Muhsin Ithnin**

Department of Mechanical Engineering  
Precision, Malaysia-Japan International  
Institute of Technology, Universiti Teknologi  
Malaysia, **MALAYSIA**

**Dr Sany Izan Ihsan**

Kulliyah of Engineering, International  
Islamic University, **MALAYSIA**

**Dr. Sarina Sulaiman**

Kulliyah of Engineering, International  
Islamic University, **MALAYSIA**

**Dr. Noor Illi Mohd Puad**

Kulliyah of Engineering, International  
Islamic University, **MALAYSIA**

**Dr. Azlin Suhaida Azmi**

Kulliyah of Engineering, International  
Islamic University, **MALAYSIA**

**Dr. Nazaruddin Sinaga**

Universitas Dipengoro Indonesia,  
**INDONESIA**

**Dr.rer.agr. Soni Sisbudi Harsono**

Universitas Jember, **INDONESIA**

**Roy Hendroko Setyobudi**

Universitas Muhamadiyah Malang,  
**INDONESIA**

**Dr. Muhammad Yusuf Abduh**

Bandung Institute of Technology,  
**INDONESIA**

**Dr. Rachmadian Wulandana**

State University of New York (SUNY), **USA**

## Submit Your Manuscript

Manuscripts submitted to the Akademia Baru journals must be original work that has not been published or under consideration for publication elsewhere. The manuscript must be written in good English or Malay and should be no more than 20 pages in length inclusive of tables, figures and illustrations. All submissions will be peer reviewed.

[Submit your paper](#)

## Guide for Authors

Manuscripts submitted must be original work that has not been published.

[Download Guide](#)

[Author's Template](#)

## Guide for reviewers

The reviewers of the journal assist the editors in making editorial decisions and through the editorial communications; the reviewers assist the authors in improving the manuscript.

## Ethics in Publishing

Authors should report their results clearly, honestly, and without fabrication, falsification or inappropriate data manipulation. Authors should provide sufficient details on the method and references to allow others to replicate the work.

[View More](#)