

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH: PROSIDING

Judul Karya Ilmiah : Recent progress and suggestions on waste management strategy in Kalisalak village, Batang regency

Jumlah Penulis : 5 orang

Nama Penulis : M Arief Budihardjo, Sri Sumiyati, Dian Ratna Sawitri, A M Sari, dan M I Julianggara

Status Pengusul : Penulis anggota/ penulis ke-3

Identitas Prosiding :

- a. Judul Prosiding : IOP Conference Series: Earth and Environmental Science
- b. ISSN : 1755-1315
- c. Thn Terbit, Tempat : 2023, Jakarta Pelaks.
- d. Penerbit/Organiser : IOPScience
- e. Alamat Repository/Web : <https://iopscience.iop.org/article/10.1088/1755-1315/1169/1/012009>
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- f. Terindeks di (jika ada) : Google scholar

Kategori Publikasi Prosiding : ☒ *Prosiding* Forum Ilmiah Internasional
 (beri ✓ pada kategori yang tepat) ☐ *Prosiding* Forum Ilmiah Nasional

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Prosiding		Nilai Rata-rata
	Reviewer I	Reviewer II	
a. Kelengkapan unsur isi prosiding (10%)	1,5	1,5	1,5
b. Ruang lingkup dan kedalaman pembahasan (30%)	3,5	3,75	3,63
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	4	3,5	3,75
d. Kelengkapan unsur dan kualitas penerbit (30%)	3,5	4	3,75
Total = (100%)	12,5	12,75	12,63
Nilai Pengusul = $40\% \times 12,63 : 4 = 3,16$			

7 Mei 2023

Reviewer 2,

Prof. Dr. Drs. Cholichul Hadi, M.Si., Psikolog
 NIP.196403231989031002
 Unit kerja: Fakultas Psikologi Universitas Airlangga
 Bidang Ilmu: Psikologi

Reviewer 1,

Prof. Dr. Hamdi Muluk, M.Si
 NIP. 196603311999031001
 Unit kerja : Fakultas Psikologi Universitas Indonesia
 Bidang Ilmu: Psikologi

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Kategori Publikasi Prosiding : ☒ Prosiding Forum Ilmiah Internasional
 (beri ✓ pada kategori yang tepat) ☐ Prosiding Forum Ilmiah Nasional

Hasil Penilaian *Peer Review*:

Komponen Yang Dinilai	Nilai Maksimal Prosiding		Nilai Akhir Yang Diperoleh
	Internasional	Nasional	
	15		
a. Kelengkapan unsur isi prosiding (10%)	1,5		1,5
b. Ruang lingkup dan kedalaman pembahasan (30%)	4,5		3,5
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	4,5		4
d. Kelengkapan unsur dan kualitas penerbit (30%)	4,5		3,5
Total = (100%)	15		12,5
Nilai Pengusul = 40% x 12,5 : 4 = 1,25			

Catatan penilaian prosiding oleh reviewer:

1. Kelengkapan unsur isi prosiding:

Unsur-unsur yang dimiliki prosiding ini tergolong cukup lengkap, sesuai kaidah penulisan artikel prosiding pada umumnya, yang terdiri dari Title, Abstract, Methods, Results and Discussion, Conclusion, dan References. Judul cukup jelas menggambarkan isi artikel, abstrak tergolong padat. Pendahuluan menyajikan hasil review terkini beberapa penelitian yang relevan. Hasil dan pembahasan membahas hasil literature review. Kesimpulan menggarisbawahi temuan penelitian. Daftar pustaka menyajikan referensi pendukung artikel prosiding ini.

2. Ruang lingkup dan kedalaman pembahasan:

Penelitian ini membahas tentang kemajuan dan saran mengenai pengelolaan sampah di Desa Kalisalak Kabupaten Batang. Data dikumpulkan melalui observasi dan data sekunder diperoleh dari internet. Hasilnya dianalisis, disajikan, dan dibahas meliputi strategi pengelolaan sampah organik, anorganik, dan non-domestic yang sudah dilakukan masyarakat.

3. Kecukupan dan kemutakhiran data/ informasi dan metodologi:

Kemutakhiran informasi yang disajikan artikel prosiding ini didukung dengan digunakannya 25 referensi yang sebagian besar diantaranya merupakan terbitan 10 tahun terakhir.

4. Kelengkapan unsur dan kualitas penerbit:

Artikel ini telah memenuhi syarat prosiding internasional yaitu terdiri dari penulis yang berasal dari 4 negara dalam satu keonferensi dan terdapat 4 keynote speaker.

5. Indikasi plagiasi:

Uji plagiasi yang telah dilakukan memberikan hasil Turnitin similarity indeks sebesar 11%. Hal ini menunjukkan bahwa artikel prosiding tergolong orisinal dan tidak terindikasi adanya plagiarisme.

6. Kesesuaian bidang ilmu:

Kontribusi pengusul dalam penulisan artikel prosiding ini sesuai dengan bidang keilmuan yang ditekuninya, yaitu Psikologi.

Depok, 5 Mei 2023

Reviewer



Prof. Dr. Hamdi Muluk, M.Si

NIP. 196603311999031001

Unit kerja: Fakultas Psikologi Universitas Indonesia

Bidang Ilmu: Psikologi

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Hasil Penilaian *Peer Review*:

Komponen Yang Dinilai	Nilai Maksimal Prosiding		Nilai Akhir Yang Diperoleh
	Internasional 15	Nasional 	
a. Kelengkapan unsur isi prosiding (10%)	1,5		1,5
b. Ruang lingkup dan kedalaman pembahasan (30%)	4,5		3,75
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	4,5		3,5
d. Kelengkapan unsur dan kualitas penerbit (30%)	4,5		4
Total = (100%)	15		12,75
Nilai Pengusul = 40% x 12,75 : 4 = 1,275			



Catatan penilaian prosiding oleh reviewer:

1. Kelengkapan unsur isi prosiding:

Unsur-unsur dalam prosiding seminar internasional ini tergolong cukup lengkap, meliputi Title, Abstract, Methods, Results and Discussion, Conclusion, dan References. Judul singkat dan jelas menggambarkan isi artikel, abstrak tergolong sistematis. Pendahuluan menyajikan hasil review terkini beberapa penelitian yang relevan dengan tema yang diketengahkan. Hasil dan pembahasan membahas hasil literature review. Kesimpulan menggarisbawahi temuan penelitian. Daftar pustaka menyajikan referensi pendukung artikel prosiding ini.

2. Ruang lingkup dan kedalaman pembahasan:

Penelitian ini menengahkan tema psikologi lingkungan mengenai kemajuan dan saran mengenai pengelolaan sampah di Desa Kalisalak Kabupaten Batang. Data dikumpulkan melalui observasi dan data sekunder diperoleh dari internet. Hasilnya dianalisis, disajikan, dan dibahas meliputi strategi pengelolaan sampah organik, anorganik, dan non-domestic yang sudah dilakukan masyarakat.

3. Kecukupan dan kemutakhiran data/ informasi dan metodologi:

Kemutakhiran informasi yang disajikan di dalam artikel prosiding ini ditunjukkan dengan digunakannya 25 referensi yang sebagian besar diantaranya merupakan terbitan 10 tahun terakhir.

4. Kelengkapan unsur dan kualitas penerbit:

Komite seminar berasal dari Indonesia meskipun demikian keynote speaker dan peserta konferensi telah terdiri dari minimal 4 negara.

5. Indikasi plagiasi:

Uji Turnitin untuk cek plagiasi yang telah dilakukan memberikan hasil Turnitin similarity indeks sebesar 11%. Hal ini memberikan justifikasi bahwa artikel prosiding tergolong orisinal dan tidak terindikasi adanya plagiarisme.

6. Kesesuaian bidang ilmu:

Kontribusi pengusul dalam penulisan artikel prosiding ini berkaitan dengan bidang keilmuan yang ditekuninya, yaitu Psikologi.

Surabaya, 5 Mei 2023

Reviewer



Prof. Dr. Drs. Cholicul Hadi, M.Si., Psikolog

NIP. 196403231989031002

Unit kerja: Fakultas Psikologi Universitas Airlangga

Bidang Ilmu: Psikologi

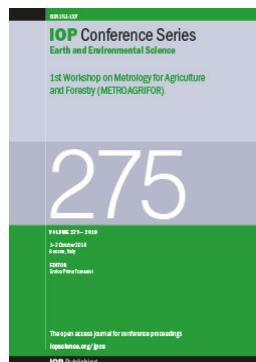
Recent progress and suggestions on waste management strategy in Kalisalak village, Batang regency

MA Budihardjo, S Sumiyati, DR Sawitri... - ... Series: Earth and ..., 2023 - iopscience.iop.org

In a developing country like Indonesia, waste management remains one of the main problems faced due to a lack of coordination between various stakeholders and budget limitations to implement advanced waste management methods. The Batang regency is no exception, where overall waste reduction and waste recycling percentage (out of total generated waste) are only 0.61% and 0.08% respectively. One of its villages, Kalisalak village, is a religious agritourism village that has a lot of economic potential in various ...

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Jakarta, 16-17 November 2022 (Virtual Conference)



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Prof. Dr. Eng. Made Suangga
Department of Civil Engineering,
BINUS University



Assoc. Prof. Dr. Agus Pulung Sasmito
Mining Engineering, McGill University,
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Assoc. Prof. SMN Arosha Senanayake, PhD
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+62 (21) 534 5830 ext. 2343

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Dr. Suryadi, M.Eng.
suryadi2@binus.edu

[Official email](#)
iceed@binus.edu

CALL FOR PAPER

The 6th ICEED 2022 is an international forum to provide an environment that encourages interplay between scientific and technological issues for academicians, researchers, practitioners, and students from various related fields of civil engineering, architecture, food technology, industrial engineering, and computer engineering to gain current knowledge and technology, and to form a broad network that in turn can facilitate any possible collaboration. Full-papers describing original work on the indicated conference topics of interest are cordially invited.

IMPORTANT DATES

Full paper submission	15 September 2022 30 September 2022 15 October 2022
Notification of acceptance	15 October 2022 25 October 2022
Payment deadline	8 November 2022
Camera ready paper submission	10 November 2022
Conference date	16-17 November 2022

PUBLICATION

All accepted and presented papers will be submitted for publication in Scopus-indexed proceeding, namely the IOP Conference Series: **Earth and Environmental Science** or Springer Book Series: Lecture Notes in Electrical Engineering (LNEE).

REGISTRATION INFORMATION

Participants		Categories		
		Professional	Student	2nd paper
Local	Presenter	IDR 3,000,000	IDR 1,800,000	IDR 1,800,000
	Non Presenter	IDR 1,800,000	IDR 1,800,000	-
Inter-national	Presenter	USD 250	USD 150	USD 100
	Non Presenter	USD 100	USD 150	-

*Student ID is required for verification

CALL FOR SUBMISSION

Prospective authors with an interest in the indicated conference topics are cordially invited to submit their full paper(s) electronically. All full paper submissions will be selected through a double-blind peer review process based on technical, quality, and presentation criteria. Only accepted and presented papers will be submitted for publication in the IOP Conference Series: Earth and Environment Science (EES) for Topic of Interest 1 and in the Springer Book series: Lecture Notes in Electrical Engineering (LNEE) for Topic of Interest 2.

CONFERENCE TOPICS

TOPIC OF INTEREST 1

All accepted and presented papers will be **submitted** for publication in the **IOP Conference Series: EES**.

Sustainable Infrastructure Management and Technology.

- Sustainable infrastructure management and, Virtual Environmental Planning and Management System
- Eco hydraulic, sustainable water management, and water supply
- The ecological treatment system for wastewater
- Sustainable transportation management
- Sustainable structural engineering
- Environmental Sustainability in Digital Transformation
- Sustainable Geotechnical engineering
- Integrated coastal zones management
- Water energy and sustainable water resources management
- Energy efficiency and management in Industry 4.0
- Sustainable energy and environment
- Green infrastructure economic framework
- Policy in sustainable infrastructure
- Health, safety, and environmental management in construction project

Eco-Architecture Planning and Design

- Building material and construction.
- Digital architecture (relate to Earth and Environment aspects).
- Eco-architecture design.
- Green architecture and environment.
- Innovative architectural design (relate to Earth and Environment aspects).

Innovative Food Technology.

- Food Innovation
- Food biotechnology and bio-processing
- Eco-friendly food packaging
- Green technologies in food production and processing
- Food Security and Functional Foods

TOPIC OF INTEREST 2

All accepted and presented papers will be **submitted** for publication in the **SPRINGER**.

- Internet of things.
- Edge computing.
- Cloud computing.
- Smart devices.
- Wearable devices.
- Wireless system.
- Cyber security.
- Computer network.
- Mobile application technology
- Mobile robotics.
- Industrial automation.
- Artificial intelligence.
- Computer vision.
- Natural language processing.
- Digital farming.
- Renewable energy.
- Application of computer science and engineering.
- Smart City,
- Smart Building,
- Virtual and Augmented Reality
- Usability Engineering
- Industrial digital transformation
- Industrial metaverse
- Industrial data science and engineering
- Advanced manufacturing systems
- Smart manufacturing
- Sustainable and renewable energy



All accepted and presented papers of Topic of Interest-1 and Topic of Interest-2 will be submitted for publication in the IOP Conference Series: EES and Springer Book Series: LNEE, respectively.



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2023

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Accepted papers received: 31 March 2023

Published online: 02 May 2023

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Sustainable Infrastructure Management and Technology

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Complex dam break simulation using the 2-D depth-averaged SPH flow model: a validation for tsunami application

Muhammad Hafiz Aslami¹, Benedict D. Rogers², Peter K. Stansby² and Andrea Bottacin-Busolin³

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Abstract

Dam break flow has a similar characteristic to the tsunami surge after the breaking wave. Therefore, it is often used in laboratory-scale experiments to study tsunamis and can be used as a benchmark for validating a numerical model. This paper presents a simulation of a complex dam break flow to validate the two-dimensional (2-D) depth-averaged Smoothed Particle Hydrodynamics (SPH) flow model which

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Developing an Inference Engine for Estimating State of Charge of the Lead Acid Battery

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Abstract. Lead acid battery efficiency is affected by huge uncertainty features. An inference engine is required to monitor the uncertainty of the battery state of charge. The objective of the research is to design an inference system to predict the lead acid battery state of charge. A Relief algorithm and Pearson correlation were applied to pre-process the real-world dataset. A fuzzy inference system was adopted to design the inference engine of the state of charge. This research found four main features which had significant impact to lead acid state of charge, including: export power, temperature, volt per cell and ampere. These features had different directions of correlation and furtherly set as inference system's output. This research had successfully developed an inference engine for lead acid state of charge with Mamdani fuzzy type and centroid defuzzification. In the future, it needs expert validation of the developed rules in the inference system.

Keywords: Artificial intelligence, Battery, Fuzzy, Inference system, Lead acid.

1. Introduction

The sustainability issues drive the growth of the battery application in technology. Sustainability forces to use a clean energy that will not threaten the future life as firstly defined in [1]. Battery technology is an alternative to develop a clean future with minimizing pollution and emission of the use of fossil energy as found today. The battery technology has been widely used in energy substitution, electronics and electric cars [2]. Battery technology to drive human being life also found a bright future, since the technology is furtherly improved, and the raw materials is widely available and it is supported by a global supply chain operations [3–5].

Even battery technology has a bright future, moreover it faces challenges in optimization. Scholars compete with time to provide high quality battery technology for sustainable energy in the future. One of the important issues that should be solved immediately is battery state of charge (SOC). SOC means the battery current status of remaining power versus current capacity [6,7]. SOC estimation meets a complex calculation since it is determined by non-linear parameters and chemical reaction in the battery



Selection and identification of antibacterial and GABA-producing lactic acid bacteria from Vietnamese fermented meat

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Abstract. This study aimed to screen the lactic acid bacteria (LAB) strain that has high potential in gamma-aminobutyric acid (GABA) production and antibacterial properties, which could be applied in Vietnamese fermented meat (*Nem chua*) fermentation. These bacterial strains were isolated from commercial *Nem chua* products and stored in the laboratory. GABA synthesized from 18 strains of LAB in the MRS media adding 3% MSG was qualitative and quantitative analyzed through thin layer chromatography (TLC) and its calibration curve equation, then antibacterial activity and lactic acid production were also tested by acidic titration method, and well diffusion method, respectively. The results showed that all LAB strains synthesized GABA with a concentration from 1.323 - 1.582 mg/mL; however, eight strains were recorded with higher potential, including VL1, XP1, TP1, HC2, CP2, LV2, TX7, and HK 162. These eight strains showed the inhibition zone to *Escherichia coli* indicator from 4.67 - 11.67 mm. Besides, they are capable of yielding lactic acid from 18.00 - 19.35 g/L after seven days of fermentation in MRS media. The strain VL1 with the highest potential was identified as *Lactobacillus plantarum*. This strain was suggested as a promising starter to be applied in the *Nem chua* fermentation process.

1. Introduction

Gamma-aminobutyric acid (GABA) is a 4-carbon amino acid that is broadly found in the natural environment and has many physiological functions, typically hypertensive and antidepressant activities [1], it acts as a metabolic role in the Krebs's cycle in plants and bacteria and as a potent inhibitory neurotransmitter in the brain and spinal cord of mammals [2,3]. GABA is found extensively in microorganisms and synthesized primarily from the α -decarboxylation of L-glutamic acid or its salts, catalyzed by the enzyme glutamic acid decarboxylase (GAD) [4]. These microorganisms include fungi, yeasts, algae, and lactic acid bacteria; lactic acid bacteria (LAB) are the largest GABA-producing sources because of the diversity of the GAD system of LAB [5].

LAB are Gram-positive bacteria that are widely used in the food industry, especially in fermented product manufacturing, and exist in the intestines of both humans and animals. LAB plays a significant role in producing important biological compounds, including organic acids, vitamins,

