

BCREC

PUBLISHING GROUP

3.2 2023
CiteScore

48th percentile

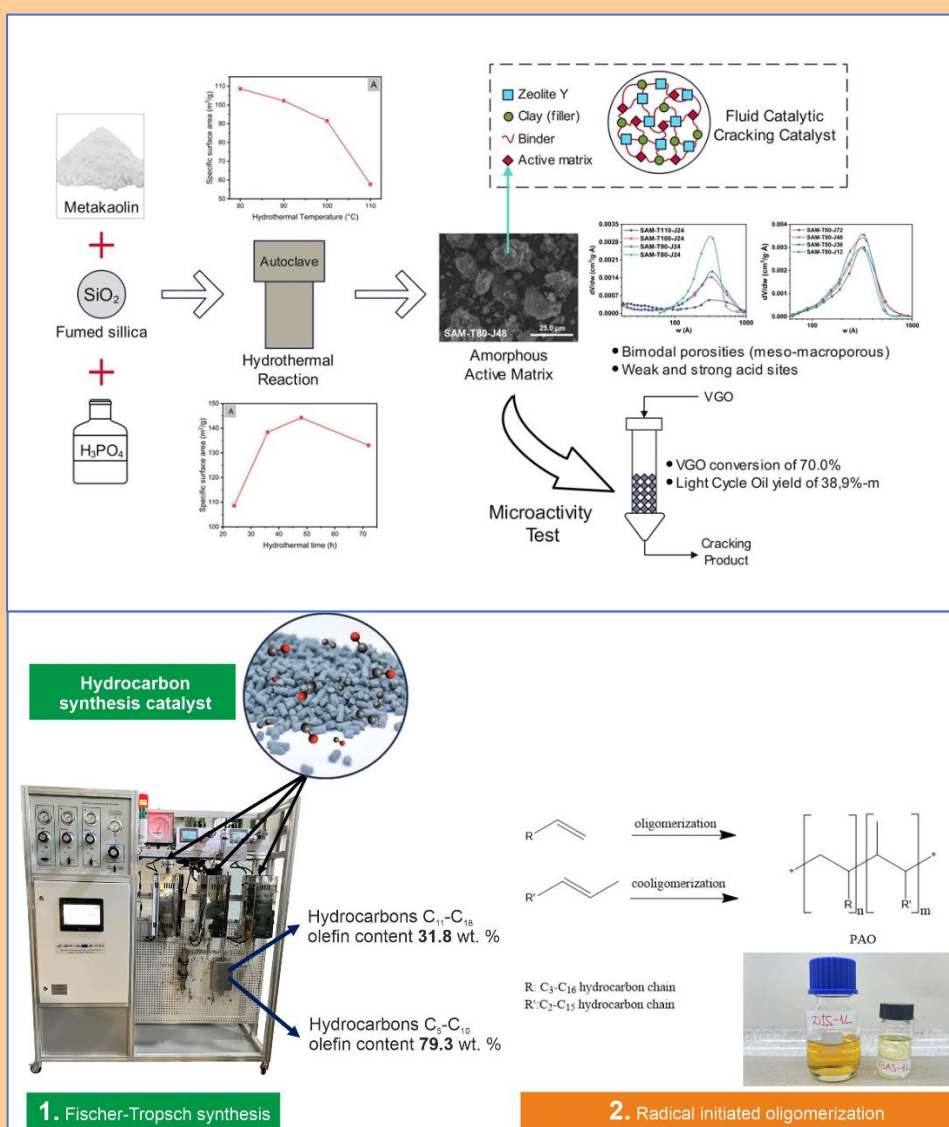
Powered by Scopus

Journal Citation Reports
2023
JOURNAL IMPACT FACTOR
1.3
Clarivate
Analytics
2024Bulletin of Chemical
Reaction Engineering and...Q3 Chemical
Engineering
(miscellaneous)
best quartileSJIR 2023
0.3
powered by scimagojr.com

e-ISSN: 1978-2993

Bulletin of Chemical Reaction Engineering & Catalysis

Volume 19, Issue 3, Year 2024 (Regular Issue: October 2024)

This issue has been published online since 23th October 2024 at: <https://journal.brec.id/index.php/brec>Bull. Chem. React. Eng.
Catal.

Vol. 19

No. 3

Pages:
372 - 547Semarang,
October 2024e-ISSN:
1978-2993

Published by:

Masyarakat Katalis Indonesia – Indonesian Catalyst Society (MKICS)

The technical management of this journal is supported by BCREC Publishing Group and Department of Chemical Engineering, Universitas Diponegoro.

EDITORIAL TEAM**EDITOR-IN-CHIEF**

Prof. Dr. I. Istadi, Department of Chemical Engineering, Universitas Diponegoro, Indonesia; E-mail: istadi@che.undip.ac.id; (Scopus ID: [57192183616](#), WoS ID: [1581844](#))

ASSOCIATE / REGIONAL / HANDLING EDITOR FOR EUROPE AND AFRICA

Prof. Dr. Dmitry Yu. Murzin, Laboratory of Industrial Chemistry and Reaction Engineering, Abo Akademi University; Turku/Åbo, Finland (Scopus ID: [18037974700](#), WoS ID: [1716137](#))

ASSOCIATE / REGIONAL / HANDLING EDITOR FOR ASIA-PACIFIC AND AMERICA

Prof. Dr. Bunjerd Jongsomjit, Department of Chemical Engineering, Chulalongkorn University, Bangkok, Thailand, Thailand (Scopus ID: [6603065177](#))

Prof. Dr. R. Rodiansono, Department of Chemistry, Lambung Mangkurat University, Indonesia (Scopus ID: [55785853800](#), WoS ID: [397246](#))

INTERNATIONAL ADVISORY EDITORIAL BOARDS

Prof. Dr. Sebastien Leveneur, INSA Rouen Normandie, UNIROUEN, Normandie Univ, LSPC, UR4704, Rouen, F-76000, France (Scopus ID: [18836607200](#))

Prof. Dr. Joongjai Panpranot, Department of Chemical Engineering, Faculty of Engineering, Chulalongkorn University, Bangkok, Thailand (Scopus ID: [6602147398](#))

Prof. Dr. Ho-Shing Wu, Dept. of Chemical Engineering & Material Science, Yuan-Ze University, Taiwan, (Scopus ID: [7405581723](#), WoS ID: [1320968](#))

Prof. Dr. Suresh Sagadevan, Nanotechnology & Catalysis Research Centre, University of Malaya, Kuala Lumpur, 50603, Malaysia (Scopus ID: [57215091647](#))

Prof. Dr. Nurul Asikin-Mijan, Department of Chemical Sciences, Faculty of Science and Technology, Universiti Kebangsaan Malaysia, 43600 UKM Bangi, Selangor Darul Ehsan, Malaysia (Scopus ID: [56413037100](#))

Prof. Dr. Hadi Nur, Head of Integrated Laboratory, Universitas Negeri Malang (UM) E-mail: hadi.nur@gmail.com, Indonesia (Scopus ID: [6602169746](#); WoS ID: [1243523](#))

Prof. Dr. Y.H. Taufiq-Yap, Centre of Excellence for Catalysis Science and Technology, Faculty of Science, Universiti Putra Malaysia, Malaysia (Scopus ID: [56272773200](#))

Prof. Dr. Valeria Di Sarli, Institute for Research on Combustion - National Research Council of Italy (CNR), Italy (Scopus ID: [16021366800](#))

Prof. Dr. Didik Prasetyoko, Department of Chemistry, Faculty of Mathematics and Natural Sciences, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia (Scopus ID: [6507890461](#))

Prof. Dr. Is Fatimah, Department of Chemistry, Islamic University of Indonesia, Kampus Terpadu UII, Yogyakarta, Indonesia (Scopus ID: [35104706400](#))

Prof. Dr. Nor Aishah Saidina Amin, Faculty of Chemical and Natural Resources Engineering, Universiti Teknologi Malaysia, Malaysia, (Scopus ID: [35489910900](#), WoS ID: [1094527](#))

Prof. Dr. Jose E. Castanheiro, Dept. of Chemistry, University of Evora, Portugal (Scopus ID: [6506163997](#))

Prof. Dr. Sibudjing Kawi, Dept. of Chemical and Biochemical Engineering, National University of Singapore, Singapore, (Scopus ID: [7006257898](#))

Prof. Dr. Rafael Molina, Estado Sólido Catálisis Ambiental, Departamento de Química, Facultad de Ciencias, Universidad Nacional de Colombia, Colombia, (Scopus ID: [7202381846](#))

Prof. Dr. Arief Widjaja, Dept. of Chemical Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia (Scopus ID: [13003143800](#))

Prof. Dr. Mostafa Barigou, School of Chemical Engineering, University of Birmingham, United Kingdom, (Scopus ID: [7003356054](#))

Prof. Dr. Anh-Tuan Vu, School of Chemical Engineering, Hanoi University of Science and Technology, Hanoi, Viet Nam (Scopus ID: [16240229300](#))

Assoc. Prof. Dr. Jinhang Dai, College of Environment and Resources, Chongqing Technology and Business University Chongqing, 400067, China (Scopus ID: [57145739300](#))

Assoc. Prof. Dr. Ghalia A. Gaber, Chemistry Department, Faculty Of Science (GIRLS), Al-azhar University, P.O. BOX: 11754, Yousef Abbas Str., Nasr City, Cairo, Egypt (Scopus ID: [57215186835](#))

Dr. Samuel Eshorame Sanni, Department of Chemical Engineering, Covenant University, P.M.B 1023, Ogun State, Ota, Nigeria (Scopus ID: [57211047073](#))

Dr. Aydin Hassani, Department of Materials Science and Nanotechnology Engineering, Faculty of Engineering, Near East University, 99138 Nicosia, TRNC, Mersin 10, Turkey (Scopus ID: [37047239400](#))

ASSISTANT EDITORS

Teguh Riyanto, Department of Chemical Engineering, Universitas Diponegoro, Indonesia (Scopus ID: [57208816811](#); WoS ID: [659132](#))

Raka Sindu Wardoyo, LPPM, Universitas Diponegoro, Indonesia
Wahyu Setiadi, Universitas Diponegoro, Indonesia

International Diversity of Editors/Editorial Board: 25 Editors in 15 countries/Regions.
Indonesia (10); Malaysia (5); Finland (1); Thailand (2); French (1); Italy (1); Portugal (1); Colombia (1); United Kingdom (1); Singapore (1); Egypt (1); Turkey (1); Nigeria (1); China (1) / Taiwan (1).
Gender Diversity Distribution of the Editors: 24% woman; 76% man.

FOCUS AND SCOPE

Bulletin of Chemical Reaction Engineering & Catalysis, an international journal, provides a forum for publishing the novel technologies related to the catalyst, catalysis, chemical reactor, kinetics, and chemical reaction engineering. Scientific articles dealing with the following topics in chemical reaction engineering, catalysis science, and engineering, catalyst preparation method and characterization, novel innovation of chemical reactor, kinetic studies, etc. are particularly welcome. However, articles concerned on the general chemical engineering process are not covered and out of the scope of this journal.

This journal encompasses *Original Research Articles*, *Review Articles* (only selected/invited authors), and *Short Communications*, including: fundamentals of catalyst and catalysis; fundamentals of chemical reaction engineering; kinetics studies of chemical reaction engineering; materials and nano-materials for catalyst; photocatalyst and photocatalysis; chemistry of catalyst and catalysis; applied chemical reaction engineering; applied catalysis; applied bio-catalysis; applied bio-reactor; membrane bioreactor; chemical reactor design (not process parameter optimization); catalyst regeneration; catalyst deactivation; surface chemistry of catalyst; bio-catalysis; enzymatic catalytic reaction (not process parameter optimization); kinetic studies of enzymatic reaction (not process parameter optimization); the industrial practice of catalyst; the industrial practice of chemical reactor engineering; application of plasma technology in catalysis and chemical reactor; and advanced technology for chemical reactors.

The manuscript articles should be submitted by online in MS Word / Open Office / PDF file format to Editorial Office through **Online Submission interface at:** <https://journal.bcrec.id/index.php/bcrec>. The Author must read the author guidelines of this journal first before submitting a manuscript.

PUBLICATION INFORMATION

Bulletin of Chemical Reaction Engineering & Catalysis (e-ISSN: 1978-2993).

Short journal title (abbreviation): ***Bull. Chem. React. Eng. Catal.***

Commencement of publication: January 2008.

For year 2024, 4 issues will be scheduled for publication with 14-20 articles per issue (Volume 19, Issue 1 (April), Issue 2 (August), Issue 3 (October), and Issue 4 (December)).

Bulletin of Chemical Reaction Engineering & Catalysis, initialized as BCREC, is published freely open access of fulltext PDF articles via journal website (<https://journal.bcrec.id/index.php/bcrec>).

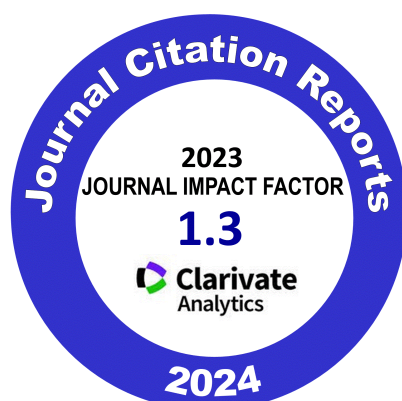
The BCREC journal is published by *Masyarakat Katalis Indonesia* - Indonesian Catalyst Society (MKICS) (<https://mkics.bcrec.id>). The technical management of this journal is supported by BCREC Publishing Group (<https://bcrec.id>) and jointly with Department of Chemical Engineering, Universitas Diponegoro.

The BCREC journal has been indexed and abstracted by: Elsevier Products (Scopus, Compendex / Engineering Village), Web of Science (Emerging Source Citation Index) by Clarivate Analytics with Journal Impact Factor (JIF), Chemical Abstract Services (CAS), CABI, ASEAN Citation Index (ACI), DOAJ, Digital Dimensions, and other reputable indexers.

Fulltext PDFs of this journal have been distributed around the world by EBSCO Publishing (Academic Search Complete, Academic Search Premiere, and Academic Search R&D packages) and ProQuest Databases started from Volume 4 Number 1 Year 2009 to present.

JOURNAL METRIC ANALYSIS (2024)

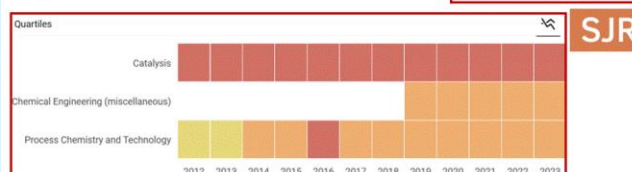
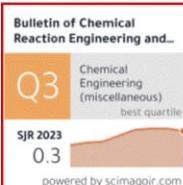
* Scopus ID	: 19900191860
* SJR Scimago (2023)	: 0.295 (Q3)
* SNIP (2023)	: 0.469
* CiteScore Scopus (2023) / Percentile	: 3.2 (Q3) / 48 th
* Journal Impact Factor (JIF) 2023 (JCR 2024)	: 1.3 (Q3)
* Journal Citation Index (JCI) 2023 (Web of Science)	: 0.22 (Q3)



Profile of BCREC in SCIMAGO JOURNAL RANKING

Bulletin of Chemical Reaction Engineering & Catalysis

Scopus coverage years: from 2009 to Present
 Publisher: Masyarakat Katalis Indonesia - Indonesian Catalyst Society (MKICS)
 ISSN: 1978-2993
 Scopus Source ID: 19900191860



Profile of BCREC in SCOPUS Database

Bulletin of Chemical Reaction Engineering & Catalysis

Scopus coverage years: from 2009 to Present
 Publisher: Masyarakat Katalis Indonesia - Indonesian Catalyst Society (MKICS)
 ISSN: 1978-2993
 Scopus Source ID: 19900191860



Metrics			
CiteScore 2023	0.295	0.469	
CiteScore Rank			
ASJC Category	Quartile	Percentile	Rank
General Chemistry	Q3	48th	210 / 408
Chemical Engineering (miscellaneous)	Q3	44th	43 / 77
Process Chemistry and Technology	Q3	40th	44 / 73
Catalysis	Q3	25th	51 / 68

Profile of BCREC in Journal Citation Report (JCR) 2024 by Clarivate Analytics - Web of Science

Bulletin of Chemical Reaction Engineering & Catalysis

Web of Science Core Collection Database: ESCI

Journal Impact Factor (JIF) 2023 : 1.3

Journal Citation Indicator (JCI) 2023 : 0.22

Category: Engineering, Chemical
 Quartile of JCI in Category: Q3 (124/171)
 Quartile of JIF in Category: Q3

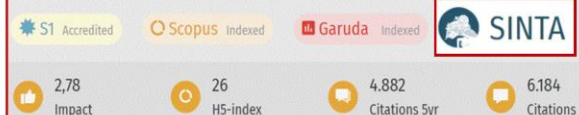


Profile of BCREC in ARJUNA-SINTA 2023

BULLETIN OF CHEMICAL REACTION ENGINEERING & CATALYSIS

Google Scholar Website Editor URL
 Departement of Chemical Engineering, Diponegoro University

P-ISSN : | E-ISSN : 19782993



INDEXING AND ABSTRACTING

Bulletin of Chemical Reaction Engineering & Catalysis (e-ISSN: 1978-2993) has been covered (indexed and abstracted) by following indexing services:

1. [Scopus - \(Elsevier\)](#)
2. [EI-Compendex - Engineering Village](#)
3. [Scimago Journal Ranking \(SJR\)](#)
4. [Emerging Source Citation Index \(ESCI\) \(by Web of Science - Clarivate Analytics\)](#)
5. [Dimensions - Digital Science](#)
6. [ASEAN Citation Index \(ACI\)](#)
7. [SINTA 1 \(Accredited Grade S1\)](#)
8. [ProQuest \(Fulltext\) Databases](#)
9. [EBSCO \(Fulltext\) Databases](#)
10. [Chemical Abstract Service](#)
11. [Google Scholar](#)
12. [Directory of Open Access Journal \(DOAJ\)](#)
13. [ResearchGate](#)
14. [ROAD ISSN \(1978-2993\)](#)
15. [WorldCat OCLC](#)
16. [CiteULike](#)
17. [Mendeley](#)
18. [SHERPA/RoMEO -](#)
19. [CrossRef Member](#)
20. [Index Copernicus](#)
21. [CABI Direct](#)
22. [SCIRUS - for scientific information](#)
23. [ULRICHSWEB Global Serial Directory](#)
24. [Garuda Kemdikbud Republic of Indonesia](#)

For detail please visit here: <https://journal.bcrec.id/index.php/bcrec/pages/view/indexing>.

TABLE OF CONTENTS

- [1] Puntharod, R., Onsomsuay, K., Pookmanee, P., & Kumchompoo, J. (2024). Exploring Alkali Hydroxide Influence on Calcium Titanate Formation for Application in Biodiesel Catalysts. *Bulletin of Chemical Reaction Engineering & Catalysis*, 19(3), 372-383. <https://doi.org/10.9767/bcrec.20165>
- [2] Ulfa, M., & Poetry, S. D. (2024). Gelatin's Effect on Iron Oxide Nanoparticle Properties and Its Use in Thermal Regeneration for Methylene Blue Photodegradation. *Bulletin of Chemical Reaction Engineering & Catalysis*, 19(3), 384-392. <https://doi.org/10.9767/bcrec.20172>
- [3] Muniandy, S. S., Soon, T. S., Pung, S. Y., & Ramakrishnan, S. (2024). Optimal Suppression of Photocatalytic Activity of Hybrid TiO₂ Particles in Epoxy Thin Film by Using Taguchi Method. *Bulletin of Chemical Reaction Engineering & Catalysis*, 19(3), 393-407. <https://doi.org/10.9767/bcrec.20164>
- [4] Dao, N. D., Lam, T. T., Van, A. D., Vu, H. T. T., & Trung, H. H. (2024). Improving Photocatalytic Efficiency with Titanium Dioxide Quantum Dots. *Bulletin of Chemical Reaction Engineering & Catalysis*, 19(3), 408-417. <https://doi.org/10.9767/bcrec.20176>
- [5] Chen, Z., Kang, X., Wang, C., & Li, Y. (2024). Optimization of TiO₂-based UV-LED Photocatalytic System for Mixed Dyes and Pharmaceutical Contaminants. *Bulletin of Chemical Reaction Engineering & Catalysis*, 19(3), 418-428. <https://doi.org/10.9767/bcrec.20180>
- [6] Nguyen, T. H., Vu, T. C., Le, T. P., Nguyen, T. H., Do, X. T., & Vu, A. (2024). Synthesis of Mesoporous ZnO • SiO₂ Nanocomposite from Rice Husk for Enhanced Degradation of Organic Substances Including Janus Green B under Visible Light. *Bulletin of Chemical Reaction Engineering & Catalysis*, 19(3), 429-441. <https://doi.org/10.9767/bcrec.20175>
- [7] Zhao, X., Yu, J., Meng, T., Luo, Y., Fu, Y., Li, Z., Tian, L., Sun, L., & Li, J. (2024). Modulation of the Microstructure and Enhancement of the Photocatalytic Performance of g-C₃N₄ by Thermal Exfoliation. *Bulletin of Chemical Reaction Engineering & Catalysis*, 19(3), 442-454. <https://doi.org/10.9767/bcrec.20189>
- [8] Hudaya, F. Y. P., Anggaswara, R. O., Gunawan, M. L., Kadja, G. T. M., & Makertihartha, I. G. B. N. (2024). Investigation on the Hydrothermal Condition in Synthesis of Active Matrix from Metakaolin: Physicochemical Properties and Intrinsic Cracking Activities. *Bulletin of Chemical Reaction Engineering & Catalysis*, 19(3), 455-469. <https://doi.org/10.9767/bcrec.20181>
- [9] Ulfa, M., Hasanah, I. U., & Setiarini, I. (2024). Fabrication of Zn and Ti-loaded Carbon-silica Composite Derived from Gelatin Template for the Photodegradation of Methylene Blue. *Bulletin of Chemical Reaction Engineering & Catalysis*, 19(3), 470-479. <https://doi.org/10.9767/bcrec.20193>
- [10] Aryani, T., Roto, R., & Mudasir, M. (2024). PbO₂/rGO Electrode as a Superior and Efficient Anode in Electrocatalytic Degradation of Safranin-O. *Bulletin of Chemical Reaction Engineering & Catalysis*, 19(3), 480-499. <https://doi.org/10.9767/bcrec.20196>
- [11] Hassan, A. A., & Shakir, I. K. (2024). Kinetic Insights into Solar-Assisted Fabrication and Photocatalytic Performance of CoWO₄/NCW Heterostructure. *Bulletin of Chemical Reaction Engineering & Catalysis*, 19(3), 500-511. <https://doi.org/10.9767/bcrec.20198>
- [12] Zolekafeli, Z., Sateria, S. F., Mohamed, A. H., Alias, S. H., Sambasevam, K. P., & Baharin, S. N. A. (2024). Removal of Tetracycline Using Tungsten Disulfide/Graphene Oxide as Photocatalyst: Effect of Light Irradiation and Kinetic Studies. *Bulletin of Chemical Reaction Engineering & Catalysis*, 19(3), 512-520. <https://doi.org/10.9767/bcrec.20204>
- [13] Permatasari, I., & Saefumillah, A. (2024). Study on the Phosphate Compound Adsorption onto MgO-KOH/Biochar Adsorbent as Binding Agent in Diffusive Gradient in Thin Film (DGT) Technique for Bioavailable Phosphate Detection. *Bulletin of Chemical Reaction Engineering & Catalysis*, 19(3), 521-538. <https://doi.org/10.9767/bcrec.20178>
- [14] Kataria, Y. V., Kashparova, V. P., Klushin, V. A., Papeta, O. P., Yakovenko, R. E., & Zubkov, I. N. (2024). Oligomerization of Fischer-Tropsch Olefins by Radical Initiation Method for Synthesizing Poly Olefin Base Oils. *Bulletin of Chemical Reaction Engineering & Catalysis*, 19(3), 539-547. <https://doi.org/10.9767/bcrec.20205>