

Accredited:
SK No.: 60/E/KPT/2016

p-ISSN 0852 – 0798
e-ISSN 2407 – 5973

Reaktor

Volume 19 Number 4 December 2019

Reaktor	Vol.19	No.4	Page: 137-185	Semarang December 2019	p-ISSN 0852-0798
---------	--------	------	---------------	---------------------------	---------------------

Reaktor

p-ISSN 0852 – 0798

e-ISSN 2407 – 5973

Accredited: SK No.: 60/E/KPT/2016

Website : <http://ejournal.undip.ac.id/index.php/reaktor/>

Reaktor, Vol. 19 No. 4, December Year 2019

EDITORIAL BOARDS

Editor in Chief

- **Prof. Dr. Andri Cahyo Kumoro** (ScopusID: [22980375000](#))
Department of Chemical Engineering, Diponegoro University, Semarang, Indonesia

International Editorial Board

- **Dr. Pablo Fuciños** (ScopusID: [6506552780](#))
International Iberian Nanotechnology Laboratory, Braga, Portugal
- **Dr. Jose Antonio Vazquez** (ScopusID: [23107698900](#))
Marine Research Institute IIM-CSIS Spain, Spain
- **Dr. Mark Leaper** (ScopusID: [6602515825](#))
Department of Chemical Engineering, Loughborough University, Loughborough, United Kingdom
- **Dr. Qingchun Yuan** (ScopusID: [12792448300](#))
Aston University, Aston Materials Centre, Birmingham, United Kingdom
- **Dr. Oki Muraza** (ScopusID: [22433275900](#))
CENT & Department of Chemical Engineering, King Fahd University of Petroleum and Minerals (KFUPM), PO Box 5040 Dhahran 31261 KSA, Saudi Arabia
- **Dr. Ivan Salmeron** (ScopusID: [43861832300](#))
Universidad Autonoma de Chihuahua, Graduate Program in Food Science and Technology, Chihuahua, Mexico, Mexico
- **Dr. Suryadi Ismadji** (ScopusID: [10039423500](#))
Department of Chemical Engineering, Widya Mandala Surabaya Catholic University, Kalijudan 37, Surabaya 60114 Indonesia, Indonesia
- **Dr. Made Tri Ari Penia Kresnowati** (ScopusID: [8639247200](#))
Department of Chemical Engineering, Bandung Institute of Technology (ITB), Indonesia
- **Dr. Nita Aryanti** (ScopusID: [25639393400](#))
Department of Chemical Engineering, Diponegoro University, Semarang, Indonesia
- **Dr. Muhammad Dani Supardan** (ScopusID: [6506563268](#))
Department of Chemical Engineering University of Syiah Kuala, Indonesia
- **Dr. Dyah Hesti Wardhani** (ScopusID: [24075014500](#))
Department of Chemical Engineering, Diponegoro University, Semarang, Indonesia
- **Prof. Dr. Widayat Widayat** (ScopusID: [36715625400](#))
Department of Chemical Engineering, Diponegoro University, Semarang, Indonesia

Associate Editors

- **Dr. Dessy Ariyanti** (ScopusID: [556433413700](#))
Department of Chemical Engineering, Diponegoro University, Semarang, Indonesia
- **Dr. Aprilina Purbasari** (ScopusID: [55786077900](#))
Department of Chemical Engineering, Diponegoro University, Semarang, Indonesia
- **Dr. Ir. Nur Rokhati, MT** (ScopusID: [55625997000](#))
Department of Chemical Engineering, Diponegoro University, Semarang, Indonesia

Publisher :

Department of Chemical Engineering, Faculty of Engineering,
Diponegoro University Semarang, Indonesia
Jl. Prof. Soedarto, SH., Tembalang, Semarang, 50275
Telp. (024) 7460058; Fax. (024) 76480675
j.reaktor@che.undip.ac.id

Reaktor is published 4 (four) times a year. The editors receive scientific papers on research laboratory, review paper, simulation and problem solving in industries that related to the field of Chemical Engineering. The submitted manuscript will be reviewed by reviewers to assess the substance of the feasibility and technical writing. Registration system/Submission article already using Online system with website address is <http://ejournal.undip.ac.id/index.php/reaktor/>
Every paper published in Reaktor journal has been proof reading.

Reaktor

p-ISSN 0852 – 0798

e-ISSN 2407 – 5973

Accredited: SK No.: 60/E/KPT/2016

Website : <http://ejournal.undip.ac.id/index.php/reaktor/>

Reaktor, Vol. 19 No. 4, December Year 2019

TABLE OF CONTENTS

Anaerobic Co-Digestion of Human Excreta and Corn Stalk for Biogas Production Agus Hadiyanto, Dyah Ayu Pratiwi, and Aldila Ayu Prida Septiyani	137-144
Filter Cake Utilization as Filler of 15-15-15+5S Compound Fertilizer: Particle Size Distribution and Granule Crushing Strength Properties Kasmadi, Budi Nugroho, Atang Sutandi, and Syaiful Anwar	145-151
Prediction of Microbial Population in Sorghum Fermentation Through Mathematical Models Umi Laila, Rifa Nurhayati, Tyas Utami, and Endang Sutriswati Rahayu	152-161
The Effect of Acid Concentration (H₂SO₄) on the Yield and Functional Group during Lignin Isolation of Biomass Waste Pulp And Paper Industry Slamet Priyanto, Anansya Putri Intan, Bambang Rianto, Tutuk Djoko Kusworo, Bambang Pramudono, Edi Untoro, and Puspa Ratu	162-167
Removal of Methylene Blue of Textile Industry Waste with Activated Carbon Using Adsorption Method Maryudi, Shinta Amelia, and Siti Salamah	168-171
The Use of Natural Zeolite as A Catalyst for Esterification Reaction Between Glycerol and Oleic Acid Anggara D., Nindya Carolin C.S., Nuryoto, and Teguh Kurniawan	172-179
Effect of Intermittent Spray Pyrolysis on the Characteristics of Fluorine-Doped Tin Oxide Conductive Glass for Dye Sensitized Solar Cell Isdiriyani Nurdin, Pramujo Widiatmoko, Hary Devianto, Anastasia Yuandy, and Rendy	180-186