

JESR

Journal of Engineering
and Scientific Research

**JOURNAL OF ENGINEERING AND SCIENTIFIC RESEARCH
(JESR)**

pISSN: 268-0338; eISSN: 268-1695

<http://jesr.eng.unila.ac.id>

Publisher :

Faculty of Engineering, University of Lampung
Jl. Soemantri Brojonegoro No.1 Bandar Lampung – Indonesia
<http://eng.unila.ac.id>

Chief Editor

[Dr. Joni Agustian](#), [Scopus Author ID: 36672480200] Universitas Lampung, Department of Chemical Engineering, Bandar Lampung, Indonesia

Editorial Board

1. [Prof. Dr. Zuchra Helwani](#), [Scopus Author ID: 26657280800] Universitas Riau, Department of Chemical Engineering, Indonesia
2. [Prof. Dr. Moses Aderemi Olutoye](#), [Scopus Author ID: 25823260600] Chemical Engineering Department, Federal University of Technology, Minna, Niger State, Nigeria
3. [Prof. Azlina Harun Kamaruddin](#), [Scopus Author ID: 6507845299] University Science Malaysia, Malaysia
4. [Dr. Anwaruddin Hisyam](#), [Scopus Author ID: 55502562300] Universiti Malaysia Pahang
5. [Dr. Irza Sukmana](#), [SCOPUS ID: 35757952700] Universitas Lampung, Department of Mechanical Engineering, Bandar Lampung, Indonesia
6. [Dr. Asad Muhammad Khan](#), [Scopus Author ID: 24385669700] Department of Chemistry, COMSATS University Islamabad, Abbottabad Campus
7. [Dr. Hazwani Suhaimi](#), [Scopus Author ID: 56467928900] Universiti Brunai Darussalam
8. [Dr. Maizirwan Mel](#), [Scopus Author ID: 23668032700] International Islamic University Malaysia, Malaysia
9. [Dr. John Lau Sie Yon](#), [Scopus Author ID: 55790082100] Curtin University, Malaysia
10. [Dr. Shirley Savetlana](#), [Scopus Author ID: 57195418122] Universitas Lampung, Department of Mechanical Engineering, Bandar Lampung, Indonesia
11. [Dr. Sudibyo, M.Sc.](#), [Scopus Author ID: 55247442800] Lembaga Ilmu Pengetahuan Indonesia (LIPI)
12. [Dr. Misfa Susanto](#), [Scopus Author ID: 55820056300] Universitas Lampung, Department of Electrical Engineering, Bandar Lampung, Indonesia
13. [Dr. Lilis Hermida](#), [Scopus Author ID: 36607996000] Universitas Lampung, Department of Chemical Engineering, Bandar Lampung, Indonesia
14. [Dr. Khairudin Khairudin](#), Universitas Lampung, Department of Electrical Engineering, Bandar Lampung, Indonesia
15. [Dr. Eng. Aziz Muhammad](#), [Scopus Author ID: 56436934500] Tokyo Institute of Technology, Japan

Editorial Team.....	i
Table of Contents	ii
Preface	iii
The Potentials of Improving Mineral Source Additional Values in Lampung Province – A Preliminary Study	1
The Improvement of Paclitaxel Cytotoxicity using Nanocellulose based Nature Resources... 7	7
Production and Characterization of Scaffold made of Hydroxyapatite and Pectin From Green Cincau Leaf (<i>Premna Oblongifolia Merr</i>)	12
The Engine Performance Characteristics of an IDI Diesel Engine Fueled by Soybean Oil Methyl Esters	17
Superior Supercapacitors based on Biowaste Materials.....	25
The Influence of Geographical Factors on Extreme Rainfalls in Lampung Province	33
Modeling Stock Return Data using Asymmetric Volatility Models : A Performance Comparison based on the Akaike Information Criterion and Schwarz Criterion	39
Reusability Study of Sulfated Zirconia Functionalized SBA-15 Catalyst for Biolubricant Oil Production from Oleic Acid	44

This is the inaugural issue of JESR contains several articles in the field of engineering and applied science research. We would like to endow our grateful, for public attention, consideration and suggestions regarding the manuscript quality of this inaugural issue.

This issue contains 8 research articles on interdisciplinary works. Most of the articles are industrial research in the field of geophysical engineering, agriculture, chemical engineering, and applied sciences. A review paper in biomedical science is also included. We believe this issue, and forward, JESR will contribute in scientific and technology world as well as engineering developemnt and needs. During the processing of the publications, we received tremendous supports and services from the reviewers and all contributors, in which we expressed our appreciation and grateful.

We do hope this issue will provide some significant for the readers.

We are getting better, but we have to get better.

Best regards,

Editorial Boards