

pISSN 2685-0338 eISSN 2685-1695

JESR

Volume 3, Issue 1, June 2021

JOURNAL OF ENGINEERING AND SCIENTIFIC RESEARCH



Publisher :

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

JESR

Journal of Engineering
and Scientific Research

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

pISSN: 2685-0338; eISSN: 2685-1695

<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>

Patron

[Prof. Suharno](#), [Scopus Author ID: 56100133200] Dean, Faculty of Engineering, Universitas Lampung, Indonesia

[Dr. Irza Sukmana](#), [SCOPUS ID: 35757952700] Vice Dean I, Faculty of Engineering, Universitas Lampung, Indonesia

Chief Editor

[Dr. Shirley Savetlana](#), [Scopus Author ID: 57195418122] Universitas Lampung, Department of Mechanical Engineering, Indonesia

Managing Editor

[Dr. Misfa Susanto](#), [Scopus Author ID: 55820056300] Universitas Lampung, Department of Electrical Engineering, Indonesia

Editorial Board

[Dr. Uceu Fuad Hasan R. Suhuddin](#), [Scopus Author ID: 34977716900] Helmholtz-Zentrum Geesthacht, Geesthacht, Germany

[Dr. Basem A.J.A. Abu Izneid](#), [Scopus Author ID: 55444125900] University of Business and Technology, Jeddah, Saudi Arabia

[Dr. Qais Ali Al-Nuzaili](#), [Scopus Author ID: 35232401400] Al-Nasser University, Yaman

[Dr. Taha Abd El Rahman](#), [Scopus Author ID: 55480844200] Université de Sherbrooke, Sherbrooke, Canada

[Dr. Lilis Hermida](#), [Scopus Author ID: 36607996000] Universitas Lampung, Department of Chemical Engineering, Indonesia

IT Support

[Gigih Forda Nama](#), [Scopus Author ID: 57189242992] Universitas Lampung, Department of Informatics, Indonesia

[Ing. Hery Dian Septama](#), [Scopus Author ID: 56695336500] Universitas Lampung, Department of Informatics Engineering, Indonesia

[Mr Afri Yudamson](#), [Scopus Author ID: 56596848500] Universitas Lampung, Department of Electrical Engineering, Indonesia

[Mr Zulmiftah Huda](#), Universitas Lampung, Department of Electrical Engineering, Indonesia

Editorial Team	i
Table of Contents	ii
Preface	iii
 Dashboard Monitoring of Atmospheric Corrosion Sensor in Materials Metal Using Laravel Framework.....	 1
Frequency Stability Control in Low - Inertia Power System Using Virtual SynchronousGenerator.....	7
The Effect of Basalt Material Composition and Rice Husk Ash on The Characterizationof Paving Block.....	13
The Evaluation of Thin-Plate Low Carbon Steel in Spot Welding with Non- Destructive Test (NDT) and Destructive-Test (DT): Pressure Effect.....	20
Rapidness Characteristics of Ultrasonic Wave Propagation on Eggs Using HC- SR04 Module.....	26
The Utilization of Kepyar Castor Oil (Ricinus Communis) and Alumina Silica Catalyst in Alcoholysis Process.....	32
Feasibility Study of Solar Power Plant in the Rectorate Building of Lampung University Using the Ongrid System.....	36
Mechanical properties improvement of Self Compacting Concrete (SCC) using polypropylene fiber.....	42

The 1st edition of JESR 3rd volume consists of several articles from various institution from different countries. This issue comes with 8 articles from inter- and multidisciplinary engineering works. Most of the articles are original research in the field of electrical engineering, mechanical and industrial engineering, civil engineering and applied science. Research article in biomedical engineering and architect are also included in the contribution.

We believe this 1st edition will contribute wider in the area of engineering and scientific research, industrial innovation and community development.

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

Your sincerely,

Editorial Boards