

E-ISSN : 2715-6958
P-ISSN : 2721-5342

Volume 6, Issue 2, December 2024

AVIA

International Journal of
**Aviation Science and
Engineering**

Publisher

Faculty of Mechanical and Aerospace Engineering
Institut Teknologi Bandung, Indonesia



AVIA Editorial Boards

Editor in Chief

Taufiq Mulyanto, [SCOPUS ID: 35234289500] Institut Teknologi Bandung, Indonesia

Managing Editor

Khairul Ummah, [SINTA ID: 6676442], Institut Teknologi Bandung, Bandung, Indonesia

Editor

Rachid Kadouche, [SCOPUS ID: 56024094300] University of Sherbrooke, QC – Canada

Joy Rizki Pangestu Djuansjah, [SCOPUS ID: 25936213100] Al-Imam Muhammad Ibn Saud Islamic University, Saudi Arabia

Djarot Widagdo, [SCOPUS ID: 6504366673] Institut Teknologi Bandung, Indonesia

Behzad Fotovati, [SCOPUS ID: 57201686502] University of Memphis, TN – United States

Ainul Ghurri, [SCOPUS ID: 40461353600] Udayana University, Bali, Indonesia

Firman Hartono, [SCOPUS ID: 56966719000] Institut Teknologi Bandung, Bandung, Indonesia

Denni Kurniawan, [SCOPUS ID: 24724455500] Universiti Teknologi Brunei, Brunei Darussalam

IT Support

Christian Reyner, Institut Teknologi Bandung, Indonesia

Fauzi Ibrahim, Universitas Lampung, Indonesia

AVIA Editorial Office

DOPP Research Group FTMD – ITB Labtek II, 2nd Floor, Jl. E-ITB / Jl. Ganesha 10, Bandung, 40132, Indonesia

Phone : +62 812-2025-786 | Fax : +62-22-2534099 | Website : www.ftmd.itb.ac.id | E-mail : avia@ftmd.itb.ac.id



PREFACE

We congratulate the authors on the publication of Volume 6, Issue 2, December 2024. In this issue, we highlight research findings in the field of aerospace science and other general engineering fields. AVIA aims to solicit recent research findings from the scopes of aviation sciences and technology, aerospace engineering, and all general engineering fields.

This edition consists of five scientific articles, coming from multiple contributing institutions from various countries.

AVIA Editorial office would like to thank all authors, reviewers, and contributors for their continuous support and attention. We are looking forward to receiving more articles in the following issues.

Best regards,

AVIA Editorial Board



Table of Content

AVIA Editorial Boards	ii	
Preface	iii	
Table of Content	iv	
Article 1	Active Vibration Control of a Flexible Spacecraft Structure	45
	<i>Rizqy Agung, Muhammad Kusni, Rianto Adhy Sasongko, Ridanto Eko Poetro, Leonardo Gunawan, Mahesa Akbar</i>	
	doi: 10.47355/AVIA.V6I2.133	
Article 2	Numerical Simulation of Droplet Behavior Under Varying Density Ratios Using Finite Volume-Front Tracking Method	53
	<i>Dondi Kurniawan, Yulia Venti Yoanita, Sinung Tirtha Pinindriya, Eli Kumolosari, Angga Darma Prabowo, M. Rangga Saputra</i>	
	doi: 10.47355/AVIA.V6I2.137	
Article 3	Synergy Analysis of Biomass and Polystyrene Co-Pyrolysis Products Using a Microwave-Assisted	65
	<i>Rizal Nazarrudin, Nashrul Chanief Hidayat, Maulana Wahyu Ayatullah, Anugrah Akbarsah</i>	
	doi: 10.47355/AVIA.V6I2.140	
Article 4	Sintering Behavior of Lampung Limestone-Based Hydroxyapatite for Use as a Bone Filler Material	72
	<i>R A Saputra, I Sukmana, A Hendriyanto, A Riszal, Y Hendronursito, M A Wicaksono</i>	
	doi: 10.47355/AVIA.V6I2.141	
Article 5	Analysis of Low-Noise Amplifier Design for 1 GHz IoT Water Monitoring System	79
	<i>Fadil Hamdani, Misfa Susanto, Heriansyah</i>	
	doi: 10.47355/AVIA.V6I2.143	