Southeast Asia Workshop on Aerospace Engineering (SAWAE 2019)

IOP Conference Series: Materials Science and Engineering Volume 642

Kuala Lumpur, Malaysia 29 – 30 August 2019

ISBN: 978-1-5108-9842-4 ISSN: 1757-8981 Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

This work is licensed under a Creative Commons Attribution 3.0 International Licence. Licence details: http://creativecommons.org/licenses/by/3.0/.

No changes have been made to the content of these proceedings. There may be changes to pagination and minor adjustments for aesthetics.

Printed with permission by Curran Associates, Inc. (2020)

For permission requests, please contact the Institute of Physics at the address below.

Institute of Physics Dirac House, Temple Back Bristol BS1 6BE UK

Phone: 44 1 17 929 7481 Fax: 44 1 17 920 0979

techtracking@iop.org

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA Phone: 845-758-0400 Fax: 845-758-2633 Email: curran@proceedings.com Web: www.proceedings.com

Table of contents

Volume 642

Southeast Asia Workshop on Aerospace Engineering (SAWAE 2019)

29–30 August 2019, Kuala Lumpur, Malaysia

Accepted papers received: 10 September 2019 Published online: 24 October 2019

Preface

Preface

Peer review statement

Papers

Case Study on Aerodynamics Stability of Bixel Wing-In-Ground Effect Craft

Afifi.A Pua'at, Zulkifli Matdaud, Amzari Zhahir, Mohamed Tarmizi Ahmad and Aziz Hassan....1

Experimental Study on the Effect of Two Equal-Sized Holes Lying at Different Angles in a CFRP Plate under Bending

Phacharaporn Bunyawanichakul, Paiboon Limpitipanich and Pongwit Siribodhi.....15

Study and Evaluation of a Solar Floating Traction under Severe Wind Conditions

Pongwit Siribodhi and Phacharaporn Bunyawanichakul.....24

Application of Structural Similitude for Scaling of a Pressure Vessel

Beenish Batul, Abeera Sohail, Ahmad Aizaz and Zukhraf Jamil.....34

Stabilizing Attitude Control For Mobility Of Wing In Ground (WIG) Craft - A Review

Z. Matdaud, A. Zhahir, Afifi. A Pua'at, Aziz Hassan and M.T. Ahmad.....42

A CFD Analysis of Wingtip Devices to Improve Lift and Drag Characteristics of Aircraft Wing

Fatima Najeeb Khan, Beenish Batul and Ahmad Aizaz.....53

Experimental Analysis of Coir Fiber Sheet Reinforced Epoxy Resin Composite

HO Van Quy and Song Thanh Thao Nguyen.....62

Investigation of aircraft engine performance utilizing various alternative fuels

Mahammadsalman Warimani, M.H. Azami, Mark Savill, Yi-Guang Li, S. A. Khan and Ahmad Faris Ismail.....74

Design and Manufacture of Miniature Testing Machine for Composite Materials

Le Nhan Nguyen, HO Van Quy, Song Thanh Thao Nguyen and Thi Hong Hieu Le.....84