Table of Contents

Preface

Chapter 1: Machines and Equipment Design

Bamboo Planer Machine Frame Design and Strength Analysis Using Finite Element Method	
B.J. Robbani, I.S. Irawati, R. Krisnaputra, F.I. Wikantyo and S.B. Wibowo	3
Effect of Temperature Setting on 3d Printer Machine for Chocolate Printing M. Musthofa, R. Mahardika, R.A. Nurdin, S. Siswantoro and S.B. Wibowo	11
Prototype Development for Predicting Eccentricity Based on Rotating Unbalanced Behavior of Train D. Safarudia, D. L. Mahandra, L. Dahinddia, A. Wingara, S. Darma and D. T. Brayaga.	1.7
R. Safarudin, B.L. Mahendra, I. Bahiuddin, A. Winarno, S. Darmo and B.T. Prayoga Numerical Simulation Using Slats, Slots, and Flaps in Steady Flight Conditions	17
S.S.P. Hariyadi, B. Junipitoyo, W.A. Widodo, I. Sonhaji and F.D. Pertiwi	23
Developmental Research for Industrial Image Processing in the Engineering Education to Learn SDGs	
F. Kato	33
Chapter 2: Construction and Land Use	
Evaluation of Urban Drainage System as a Flood Control in Klitren Urban Village	43
F. Hanayni and M. Sulaiman Rock Mass Classifications of Flysch Deposits for Analyses of Tunnel Behaviour and Support	43
System-A Case Study of Design Evaluation of Tunnel 6 of Jakarta-Bandung High-Speed Railway	
O. Malda, I.G.B. Indrawan and Akmaluddin	49
Application of RMR, Q, and Japanese Rock Mass Classification Systems for Design of Support Systems of the Narogong Weir Diversion Tunnel, West Java, Indonesia L. Fitriyantina, I.G.B. Indrawan and D.P.E. Putra	59
Future Disaster Risk Reduction Strategy Based on Land Use Prediction in a Surrounding Area of a Newly Developed Airport Infrastructure A. Ramadhani, L. Devi, D. Sihombing and C. Raphonita	65
Present-Day Surface Deformation along the Opak Fault, Yogyakarta, Observed Using Sentinel-1 Interferometric Wide-Swath Data	
H. Panuntun, A.S. Prasidya and G. Mahendra Integrating Class Pange Photogram metry and Augmented Paclity for Cultural Havitage	75
Integrating Close Range Photogrammetry and Augmented Reality for Cultural Heritage Architecture Visualization H. Diarthamara and N.P.P. Chintya	83
11. Diatelianiara and 14.1.1. Climitya	03
Chapter 3: Environmental Engineering, Agriculture and Food Production	
Environmentally Friendly Preparation of Tempeh from Indonesian Soybean with Dry Peeling Technique	0.1
S. Yuliani, Juniawati, S. Widowati, S. Usmiati and E. Suryana Petential of Karimuniawa Island's Plants as Antibiatia Producing Endanbutia Pastaria	91
Potential of Karimunjawa Island's Plants as Antibiotic-Producing Endophytic Bacteria Sources	
Y.I. Kumalasari, A.D. Kharisma and S. Yuwantiningsih	97
Synthesis and Characteristics of Zeolite Y (Fajasitea) from Bagasse Ash (Saccharum officinarum) Using Hydrothermal Treatment in Pb ²⁺ Metal Adsorption Nurhikmah, S.J. Rachmania and R. Darmawan	105
Authorities, S.A. Recommende and R. Dermerren	103

The Efficacy of Several Types of Organic Pesticides against Mortality of Armyworm (<i>Spodoptera frugiperda</i>) R.P. Mumpuni and A. Sholichudin	113
R.F. Mumpum and A. Shohendum	113
Chapter 4: Applied Information Technologies	
Experience of Electronic Medical Records Adoption in Primary Health Care in Indonesia D.B. Santoso, Nuryati and N. Rokhman	121
Integration of ICPC in an Electronic Medical Records Prototype for Family Physician	
Clinic Nuryati, D.B. Santoso and N. Rokhman	127
Utilizing Technology Acceptance Model (TAM) to Evaluate Data Sharing Facility of Spatial Data Infrastructures (SDIs) at the Local Government Level in Indonesia A.F. Hayuningsih and H. Sutanta	137
A Proposed User Interface Design as a Stimulus for Personality Types Confirmation I. Perdana, P.I. Santosa, N.A. Setiawan and S. Wimbarti	145
Chapter 5: Engineering Management	
Public Policy Perspectives on the Utilization of Nuclear Power Plants in Supporting Sustainable Development in Indonesia	
T. Hastuti, S. Widodo, H. Krishyana, F. Margono and H. Akbar	155
Big Data Analytics in the Supply Chain in Indonesia B. Harsanto	163
Technological and Organizational Innovation in Food and Agricultural Firms: Case Studies on MBNQA Recipients	160
B. Harsanto Performance Prediction and Design Selection of Modular Magnetorheological Valve Using	169
Meandering Flow Path Structure	
M.M.A. Hakiki, A.N. Faizin, I. Bahiuddin, N.S. Atikasari, F. Imaduddin, S.A. Mazlan, A.A. Ismail and O.K. Nyein	175