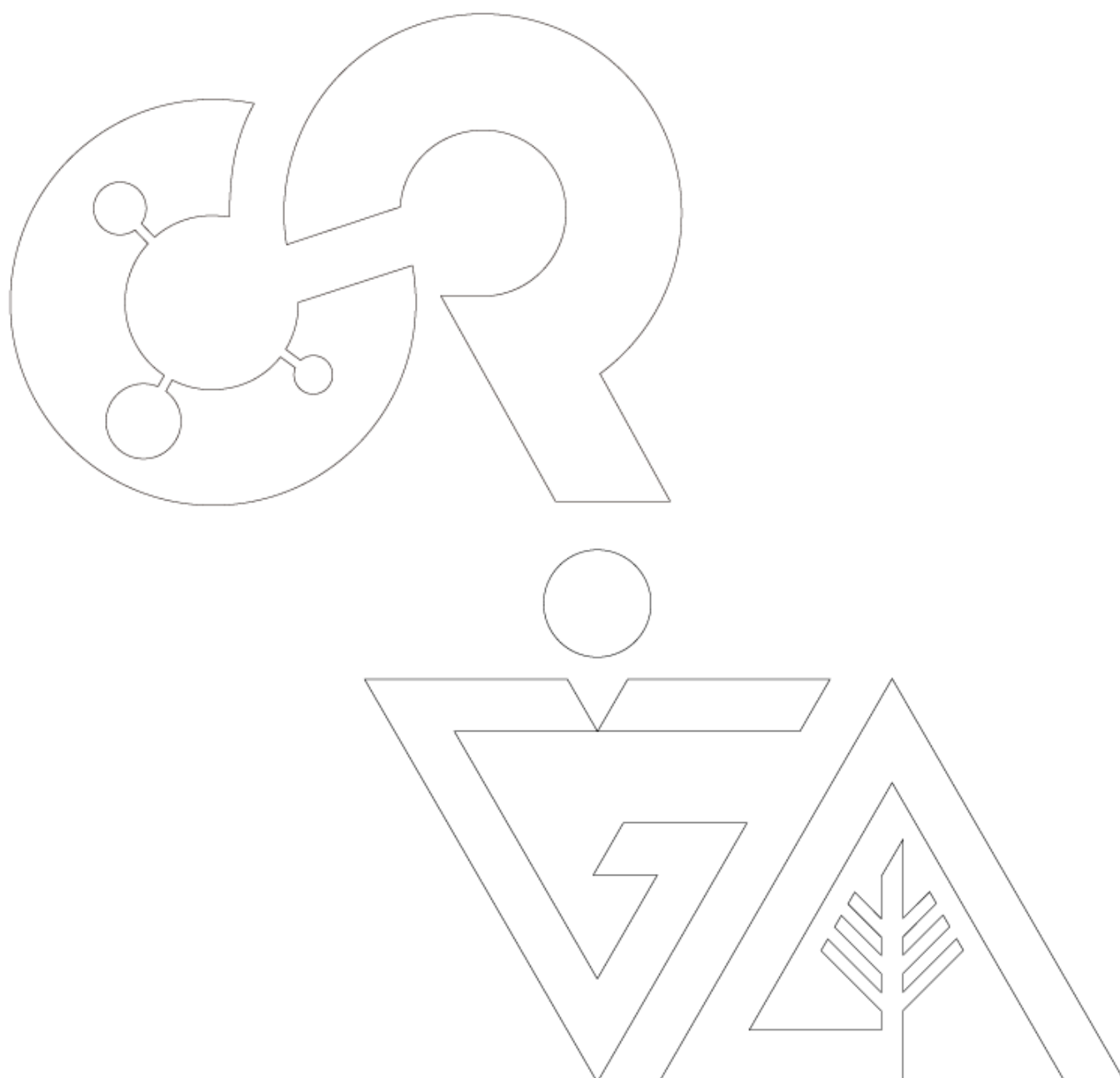

EVERGREEN

Volume.09

Issue.04 December 2022

Joint Journal of
Novel Carbon Resource Sciences & Green Asia Strategy



Editorial Board for
Evergreen – Joint Journal of Novel Carbon Resource Sciences & Green Asia Strategy

Editor-in-Chief

Jun Tanimoto

Executive Editor

Kyaw Thu

Subject Editors

Andrew Mark Spring, Osama Eljamal, Hiroshi Furuno, Michitaka Ohtaki, Jin Miyawaki
Kiichi Hamamoto, Naoji Yamamoto

Regional Editors

Nasruddin, Agung Tri Wijayanta, Muhammad Sultan

Secretary

Mieko Inoue

Honorary Advisor

Bidyut Baran Saha

Editorial Board

Akira Harata, Aya Hagishima, Kazuhide Ito

Evergreen – Joint Journal of Novel Carbon Resource Sciences & Green Asia Strategy
Volume 9 Issue 4 (December 2022)

Published by

Transdisciplinary Research and Education Center for Green Technologies, Kyushu University
6-1 Kasuga-koen, Kasuga, Fukuoka 816-8580 Japan
Tel: +81-92-583-7823
Fax: +81-92-583-8909

Journal Website: http://www.tj.kyushu-u.ac.jp/leading/en/c_publication/evergreen.php

E-mail: evergreen@ga.kyushu-u.ac.jp

Copyright: 2022 by

Transdisciplinary Research and Education Center for Green Technologies, Kyushu University
All rights reserved. ISSN: 2189-0420 (Print) ISSN: 2432-5953 (Online)

Evergreen

Joint Journal of Novel Carbon Resource Sciences & Green Asia Strategy

Volume 09, Issue 04, December 2022

CONTENTS

Aigul R. Bizhanova, Aliya S. Koshkinbayeva, Gulmira A. Zhunisova, Gulaina Zh. Osmanova, Dinara Belkhozhayeva, Dana S. Baisymakova Regulatory Issues of Depollution in Kazakhstan	903
Helal Uddin, Munim K Barai Will Digital Revolution be Disruptive for the Inclusive Finance in Bangladesh? The Case of the Microfinance Industry	909
M. Motinur Rahman, Subrata Saha, M. Z. H. Majumder, T. Tamrin Suki, M. Habibur Rahman, Fahmida Akter, M. A. S. Haque, M. Khalid Hossain Energy Conservation of Smart Grid System Using Voltage Reduction Technique and Its Challenges	924
Ibtihal Qasim Kteew Al-Hussein, Reza Hesarzadeh, Farzaneh Nassir Zadeh The Effect of Social Responsibility Disclosure on Corporate Performance in Five Arab Countries: Evidence on the Moderating Role of Stakeholder Influence Capacity and Family Ownership	939
Umesh Gurnani, Sanjay Kumar Singh, Manoj Kumar Sain, M. L. Meena Musculoskeletal Health Problems and their Association with Risk Factors among Manual Dairy Farm Workers	950
Idris Idris, Billyanto Rustandi, Tri Ratna Sulistiyani, Ali Rahmat, I Made Sudiana Bioprospecting Ureolytic Rock Bacteria for Calcium Carbonate Precipitation Inducer	962
Saurabh Singh, Suraj Kumar Singh, Rahul Kumar, Abhishek Shrama, Shruti Kanga Finding Alternative to River Sand in Building Construction	973
Anas Islam, Shashi Prakash Dwivedi, Vijay Kumar Dwivedi, Rajat Yadav Extraction of Chromium Oxide from CCLW to Develop the Aluminium Based Composite by FSP as Reinforcement alongwith Alumina	993
Md Sazzad Hossain Ador, Sarower Kabir, Fuad Ahmed, Faiz Ahmad, Sadman Adil Effects of Minimum Quantity Lubrication (MQL) on Surface Roughness in Milling AI Alloy 383 / ADC 12 Using Nano Hybrid Cutting Fluid	1003
Sagar Sharma, Kuwar Mausam, Kamal Sharma Effects of Nanoparticles on the MRR and TWR of graphene-based Composite by Electro discharge Machining	1021

Rajat Yadav, Shashi Prakash Dwivedi, Vijay Kumar Dwivedi Effect of Casting Parameters on Tensile Strength of Chrome Containing Leather Waste Reinforced Aluminium Based Composite using RSM	1031
Yofentina Iriani, Rindhi Afriani, Dianisa Khoirum Sandi, Fahru Nurosyid Co-precipitation Synthesis and Photocatalytic Activity of Mn-doped SrTiO₃ for the Degradation of Methylene Blue Wastewater	1039
Ari Sulistyono Rini, Yolanda Rati, Raysa Fadillah, Rakhmawati Farma, Lazuardi Umar, Yan Soerbakti Improved Photocatalytic Activity of ZnO Film Prepared via Green Synthesis Method Using Red Watermelon Rind Extract	1046
Ajay Kumar Verma, Parveen Kumar Saini Vibration Model to Detect Local Defect Characteristics of Deep Groove Ball Bearing	1056
Kiran S. Phad, Anurag Hamilton Experimental Investigation of Friction Coefficient and Wear of sheet metals used for Automobile Chassis	1067
Vikash Kumar Agrawal, H.P. Khairnar Experimental & Analytical Investigation for Optimization of Disc Brake Heat Dissipation Using CFD	1076
N. I. Ismail, M. Asyraf Tasin, Hazim Sharudin, M. Hisyam Basri, S. Che Mat, H. Yusoff & R.E.M. Nasir Computational Aerodynamic Investigations on Wash Out Twist Morphing MAV Wings	1090
Raed A. Jessam Experimental Study of Wind Turbine Power Generation Utilizing Discharged Air of Air Conditioner Blower	1103
Vineet Singh, Vinod Singh Yadav, Manoj Kumar, Niraj Kumar Optimization and Validation of Solar Pump Performance by MATLAB Simulink and RSM	1110
Neha Kumari, Sanjay Kumar Singh, Sanjay Kumar MATLAB-Based Simulation Analysis of the Partial Shading at Different Locations on Series-Parallel PV Array Configuration	1126
Mohamad Waleed AlShaar, Zakaria Al-Omari, Walid Emar, Moawiah Alnsour, Ghaida Abu-Rumman Application of PV-Thermal Array for Pumping Irrigation Water as an Alternative to PV in Ghor Al-Safi, Jordan: A case study	1140
Vipan Chand Waila, Abhishek Sharma and Mohd Yusuf Optimizing the performance of solar PV water pump by using Response Surface Methodology	1151

Erik Sugianto, Jeng-Horng Chen Hollow Wing Technique to Enhancing Conveyor Performance on Marine Debris Collection	..... 1160
Abhishek Dhiman, Gulshan Sachdeva Energy and Exergy Analysis of a Pressurized Solar Cooking System Based on a Parabolic Dish Collector	..... 1168
Hussein A. Jaffar, Ali A. Ismaeel, Ahlam Luaibi Shuraiji Review of Hybrid Photovoltaic- Air Updraft Solar Application: Present and Proposed state Models	..... 1181
Sarah Khansha Suhada, Yulia Nurliani Lukito The Dynamics of Kitchen Adaptation Based on the Cultural Spatial System in Minangkabau West Sumatra★	..... 1203
Imam Jauhari Maknun, Dyah Ayu Aurellia Yasmiin Shear Correction Factor Effect on Functionally Graded Material (FGM) Beam with Timoshenko Hencky Beam (THB) Element★	..... 1210
Wahyuaji Narottama Putra, Mochamad Iqbal Adha Widjana, Muhammad Anis, Yus Prasetyo The Effect of Transformation Temperature and Holding Time of Bainite Structure Formation on S45C Steel★	..... 1218
S. Silviana, Angga Gata Hasega, Aulia Rizqy Nur Hanifah, Afriza Ni'matus Sa'adah Synthesis of Silica Coating Derived from Geothermal Solid Waste Modified with 3-Aminopropyl Triethoxysilane (APTES) and Silver Nano Particles (AgNPs) ★	..... 1224
Khalfan Nadhief Prayoga Wicaksono, Catur Apriono Data Rate and External Lighting Variations for Bit Error Rate Measurement on A Simple Single LED Visible Light Communication System★	..... 1231
Irwin Utama, Yefta Ruben Hasian Aruan, Rochmawati, Riri Fitri Sari, Ruki Harwahyu 5 G MMWave Network Performance Evaluation with Blockage Simulation★	..... 1236
Mu'to Naimah, Farashinta Dellarosa Nanda Pratama, Muhammad Ibadurrohman Photocatalytic Hydrogen Production Using Fe-Graphene/TiO₂ Photocatalysts in the Presence of Polyalcohols as Sacrificial Agents★	..... 1244

★ The 17th QiR (Quality in Research) 2021