

CTU Journal of Innovation and Sustainable Development Can Tho University

ISSN **2588-1418** | e-ISSN **2815-6412**





Vol. 17, Special Issue (March 2025)

Engineering and Technology for Sustainable Development of the Mekong Delta (ETMD)

CTU Journal of Innovation and Sustainable Development

ISSN 2588-1418, e-ISSN 2815-6412

Vol. 17, Special Issue (March 2025)

Engineering and Technology for Sustainable Development of the Mekong Delta (ETMD)

EDITORIAL BOARD

Editor-in-Chief Tran Ngoc Hai

Deputy Editor-in-Chief Tran Thanh Dien

Section Editors

Nigel K. Downes Nguyen Chi Ngon

GIZ/CIM Integrated Expert Can Tho University, Viet Nam

Nguyen Dac Khoa Nguyen Trong Ngu

Can Tho University, Viet Nam Can Tho University, Viet Nam

Phan Dinh Khoi Nguyen Thanh Phuong

Can Tho University, Viet Nam Can Tho University, Viet Nam

Do Thanh Nghi Phuong Hoang Yen

Can Tho University, Viet Nam Can Tho University, Viet Nam

Advisory Board

Tetsu Ando Pham Thi Hong Nhung

Tokyo University of Agriculture and Technology, Japan University of Foreign Languages, Hue University, Viet Nam

Fu-Sung Chiang Kazufumi Osako

National Taiwan Ocean University, Taiwan Tokyo University of Marine Science and Technology, Japan

Le Quoc Hoi Ngo Thanh Phong

National Economics University, Viet Nam Can Tho University, Viet Nam

Atsushi Ishimatsu Yeong Yik Sung

Nagasaki University, Japan Universiti Malaysia Terengganu, Malaysia

Samir Kumar Khanal Yuii Tanaka

University of Hawaii at Manoa, USA Tokyo University of Marine Science and Technology, Japan

Nguyen Ngoc Lam **Nguyen Thanh Thuy**

Institute of Oceanography, Viet Nam VNU University of Engineering and Technology, Viet Nam

Juan Boo Liang Tran Trung Tinh

Universiti Putra Malaysia, Malaysia Can Tho University, Viet Nam

Hoang Ngoc Long Nguyen Hieu Trung

Institute of Physics, VAST, Viet Nam Can Tho University, Viet Nam

Juan J. Loor Tran Ngoc Tuan

University of Illinois, United States Shantou University, China

CSIRO, Australia

Nguyen Nguyen Minh

CONTENT

| Multi-Quality optimization in Pulsed laser cutting of thin laminated cores using the preference selection index method Nguyen Van Tai, Nguyen Van Cuong, Huynh Thanh Thuong, Nguyen Dinh Tu, Nguyen Thi Kim Khanh, Ho Jeng-Rong, and | A feasible process for recyclic anthocyanins and pectin from the war peels of purple passion fruit (<i>Passiflot edulis</i> Sims) as food additives Tran Thanh Tuan, Nguyen Anh Tu, Le Thi Ngoc Huong, Dinh Thi Tu Ngan, | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Nguyen Hoai Tan | Ngo Truong Ngoc Mai, Nguyen Thi Bich Thuyen, Ho Quoc Phong, Doan Van Hong Thien, and Nguyen Viet Nhan Hoa | | |
| operation Dinh Van Duy, and Nguyen Hoang Phuc 16 Recycling used coffee grounds as fine aggregate in alkali-activated lightweight | | | |
| non-load-bearing composites Huynh Quoc Dung, Luong Hoang Nhat Huy, Ngo Nhat Tan, Duong Thanh Hau, Nguyen Thanh Binh, Lam Tri Khang, and | Ho Quoc Phong, Nguyen Thi Bich Thuyen, Tran Thanh Men, Nguyen Van Dat, Lam Phuc Thong, Le Kien Quoc, Huynh Nhu, and Huynh Lien Huong75 | | |
| Trong-Phuoc Huynh | Optimization bio-organic fertilizer production from watermelon rind with <i>Trichoderma spp.</i> for improved <i>Brassica juncea</i> growth | | |
| Nguyen Chi Ngon | Bui Hoai Thanh, Tran Vu Bao Long, Le Van Nghia, Nguyen Tan Tan, Diep Anh Tho, Dan-Thuy Van-Pham, Nguyen Viet Nhan Hoa, Yoshiyuki Murata, Tran Thi Bich Quyen, and Doan Van Hong Thien | | |
| Do Nguyen Duy Phuong | | | |
| Rui Van Huu 53 | and Daily Huyun Guo | | |

| Impact | of | recycled | concrete | aggregate | |
|------------------------------------------------|------|-------------|-----------|-----------|--|
| particle size on the strength of soil mixtures | | | | | |
| for subgrade improvement | | | | | |
| Ho Thi K | im T | hoa, and Le | Hoang Kha | ınh 102 | |

Optimal location and size of electric vehicle charging and discharging stations in distribution networks with integrated distributed generations

Vo Minh Thien, Tran Thi Lan Anh, Nguyen Quang Ai, Tran Trung Khanh, and Vo Ngoc Dieu113

About the Journal

- 1. CTU Journal of Innovation and Sustainable Development, ISSN 2588-1418, e-ISSN 2815-6412 is published according to the publication license No. 233/GP.BTTTT dated July 10, 2023 granted by the Ministry of Information and Communications.
- 2. The Journal publishes original research articles and review articles on all aspects of innovation and sustainable development globally in such disciplines, including Engineering Technology, Computer Science, Life Sciences, Economics and Management, and Educational Sciences.
- 3. Authors must follow the Journal's regulations and guidelines for preparing and submitting manuscripts at the website: ctujs.ctu.edu.vn
- 4. The Journal frequently receives manuscripts. After the peer-review process in accordance with the Journal's regulations, the approved manuscripts are published in full text at the website: ctujs.ctu.edu.vn
- 5. For further information and making a submission, please visit the Journal's website: ctujs.ctu.edu.vn

CTU Journal of Innovation and Sustainable Development

Address: 4th floor, Can Tho University Administration Building Campus II, 3/2 street, Xuan Khanh ward, Ninh Kieu district, Can Tho city, Viet Nam. Tel: (84-292) 3872 157; Email: ctujoisd@ctu.edu.vn



Publication license No. 233 dated July 10, 2023 granted by Ministry of Information and Communications. Printed by Nhu Cuong Private Enterprise.

Address: No. 78, 30/4 street, An Phu ward, Ninh Kieu district, Can Tho city, Viet Nam.

Volume: size 19 x 26 cm, printed and registered in the first quarter of 2025.

