

**Program**

The 5th International Conference on Engineering, Physics, MEMS-Biosensors

and Applications (ICEBA2024)

*November 11&12, 2024;*

*Ho Chi Minh City and Vinh Long Province, Vietnam*

**\*November 10th (Sunday) at HoChiMinh city**

.12:00-18:00. Registration

.17:00-18:00. Meeting of Program Committee and Chair/co-chair session of ICEBA2024 at Ky Hoa Hotel (238, 3 thang 2 Street, District 10, Ho Chi Minh city);

. 18:00-20:00. ICEBA2024 welcome dinner (Plenary invited speakers, international guests, VIPs, Program Committee…) at Ky Hoa Hotel.

**\*November 11th (Monday) at Ho Chi Minh city and Vinh Long Province**

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| **Time** | **Contents/Program** | **Note** | |
| 07:30-07:45 | Registration (Check list, nameplate, Abstract & Program,…) | Lobby of conference room: No.1 Auditorium, University of Science, HCM city, Vietnam. | |
| **1.OPENING CEREMONY &PLENARY SESSION**  **No.1 Auditorium, 227 Nguyen Van Cu Str., District 5, HCMC** | | | |
| 08:00-08:10 | **1. Introduce Guests (MC)** | | Introduce by MC (Dr.Ho Thanh Huy and Ms. Hua Thi Hoang Yen) |
| 08:10-08:25 | **2.** **Welcome speeches:**  - Welcome speech from the president of VNUHCM-US*;*  - Speech from Co-General Chairs of ICEBA2024;  *Prof. Takahito Ono (Tohoku Univ, Japan);*  - Speech from Program Chair of ICEBA2024  *Assoc. Prof. Huynh Van Tuan (Dean of FPEP, VNUHCM-US)* | |
| 08:25-08:40 | **3. Offer the gifts for invited speakers**  . Plenary invited talks | MC:  Prof. T.Ono, Prof. T.T. Nang, Prof. S. Jan, Prof. T.Ishida, Prof. M.Toda, Prof. C.T.S.Congo, Prof. K.S. Min, Prof. K.Y.Lai and Mr. N.P.Vinh; | |
| . Invited talks | MC: All invited speakers in 8 parallel sessions | |
| 08:40-08:50 | **4. Offer the gifts for Technical supporters and sponsors ICEBA2024** | MC: SMATer (Taiwan), Synopsys Vietnam, ITO Vietnam, SEMI SEA, Redsun, Mantis, UDT,.. | |
| 08:50-09:00 | **5. The 5th Anniversary of ICEBA International Conference** | - Slide for review of ICEBA2013-2024  - Certificate of Appreciation for ICEBA2024: 11 professor/scientists/leaders and 2 units (DPEE and MTU) | |
| 09:00-09:10 | **6. MoU Signing Ceremony for the 6th ICEBA2025** (Vietnam and Taiwan) | VNUHCM-US (Vietnam), ToU (Japan), NCU-DOP (Taiwan) | |
| 09:10-09:20 | **Coffee break** | Lobby | |
|  | **7. Plenary invited talk Session:** 15 min for talk and 5 min for discussion  *Chair: Prof. Masaya Toda (Tohoku University, Japan)*  *Co-Chair: Assoc. Prof. Nguyen Van Hieu (VNUHCM, Japan)* | | |
| 09:20-09:40 | **. Plenary #1 (code: PL.01-01):**  **Prof. Tran Tri Nang**  *University of Minnesota, USA* | Four-side buttable CMOS imaging modules for CT systems | |
| 09:40-10:00 | **. Plenary #2 (code: PL.01-02):**  **Prof. Takohito Ono**  *Tohoku University, Japan* | Micro/Nanomechanical Sensors for Health and IoT | |
| 10:00-10:20 | **. Plenary #3 (code: PL.01-03):**  **Mr. Nguyen Phuc Vinh-MSc**  *ARA, Synopsys, Vietnam* | Edge Artificial Intelligence (AI) Mega Trends and AI Solutions in IC Design Automation | |
| 10:20-10:40 | **. Plenary #4 (code: PL.01-04):**  **Prof. Schulz Jan**  *Jade University of Applied Sciences,Wilhelmshaven, Germany* | The influence of tides on LoRa communications in self meshing sensor nodes in coastal and near shore waters | |
| 10:40-11:00 | **. Plenary #5 (code: PL.01-05):**  **Prof. Takekazu Ishida**  *Osaka Metropolitan University, Japan* | High-resolution imaging using superconducting sensor under pulsed neutrons | |
| 11:00-11:10 | **Summary of 5 PL talks** | Prof. Masaya Toda (Tohoku University, Japan) | |
| 11:10-11:20 | **Closing the plenary session and remark the program ICEBA2024** | Assoc. Prof. N. V.Hieu, General Co-chair ICEBA | |
| **Lunch time (11:30-12:45)** | | | |
| **2. TRANSPORTATION FOR Vinh Long Province (MTU)** | | | |
| **. 13:00-13:30.** Pick up byLimousine bus of Conference (Bus 01, Bus02, Bus03 at main gate of University of Science);  **. 13:30-15:30.**Departurefor Vinh Long Province (110 km);  *.* **15:30-16:00.** Check in hotel.  **. 16:00-16:30.** City tour meeting point at Kinh Thay Cai bridge(14km far from MTU), Vinh Long Province  **. 16:40-18:00.** Sightseeing tour in Vinh Long city.  ***.* 18:30-21:00.** Conference ‘s Welcome dinner*.* | | | |
| **\*November 12nd (Tuesday)** **at Vinh Long Province and HoChiMinh city** | | | |
| **1. PARALLEL SESSION: 07:30-10:15**  Location: Mien Tay Construction University, Vinh Long Province  *Invited talk: 15 min (12 min for talk and 3 min for discussion);*  *Oral presentation****:*** *12 min (10 min for talk and 2 min for discussion).* | | | |
| **Session 1. Engineering Physics and Electrical & Electronic Engineering**  **Room 101, Science Research Building - Campus B, Mien Tay Construction University**  *- Chair and Co-chairs:*  *. Assoc. Prof. Le Vu Tuan Hung (VNUHCM-University of Science, Vietnam);*  *. Prof. Kun Yu Lai (National Central University, Taiwan);*  *. Assoc. Prof. Vo Luong Hong Phuoc (VNUHCM-University of Science, Vietnam);*  *- Secretary: Nguyen Duy Khanh-MSc (VNUHCM-University of Science, Vietnam);*  Link online: meet.google.com/ara-wbgm-dib | | | |
| *Schedule* | *Name of invited speakers* | *Title of talks* | |
| 07:30-07:45 | **Invited talk S1-01-I**  Prof. Le Vu Tuan Hung *VNUHCM-US, Vietnam* | The high performance SERS substrate based on semiconductor and nano nanoparticles metal for detecting banned chemical trace in food, drug, and cosmetic. | |
| 07:45-08:00 | **Invited talk S1-02-I**  Prof. Chi-Hsien Huang  *MCUT, Taiwan* | Biosensors fearuting an atomic layered graphene oxide/graphene composite | |
| 08:00-08:15 | **Invited talk S1-03-I (online)**  Assoc. Prof. Nguyen Hoang Nam  *University of Science, VNU Hanoi, Vietnam* | Preparation and Biomedical application of Iron-based functional nanoparticle | |
| **Coffee break (15 mins)** | | | |
| 08:30-08:42 | **Oral S1-01-O**  Thi Kim Thao Nguyen, Van Tuan Le and Luong Hong Phuoc Vo | Application of MIKE 21/3 Coupled Model FM for selecting a suitable coastal protection scheme for Hiep Thanh commune, Tra Vinh province (Vietnam) | |
| 08:42-08:54 | **Oral S1-02-O**  Thanh Minh Nguyen, Chung Tran and Hong Phuoc Vo Luong | Thi Kim Thao Nguyen, Van Tuan Le and Luong Hong Phuoc Vo | |
| 08:54-09:06 | **Oral S1-03-O**  Duc Anh Nguyen and Hong Phuoc Vo Luong | Forecasting and assessing water demand and rice production in an giang in 2024 by using the cropwat and oryza models | |
| 09:06-09:18 | **Oral S1-04-O**  Duy Thanh Cu, Meng-Fu Chi and Chien-Cheng Kuo | A Novel Approach to Semiconductor Manufacturing Equipment Corrosion Protection: Fluoride Passivation of Y₂O₃ and YAG Films | |
| 09:18-09:30 | **Oral S1-05-O**  Duy Thanh Cu, Meng-Fu Chi and Chien-Cheng Kuo | A Novel Approach to Semiconductor Manufacturing Equipment Corrosion Protection: Fluoride Passivation of Y₂O₃ and YAG Films | |
| 09:30-09:42 | **Oral S1-06-O**  Huy Kim Nhat, Thuy Doan Khanh Huynh, Fan-Ching Chien and Kun-Yu Lai | DNA Test Using Nitride Surface-Enhanced Raman Spectroscopy and Machine Learning | |
| 09:42-09:54 | **Oral S1-07-O**  Thuy Doan Khanh Huynh, Huy Kim Nhat, Fan-Ching Chien and Kun-Yu Lai | Cancer Diagnosis with Human Blood Plasma Using Nitride Surface-Enhanced Raman Spectroscopy | |
| **Session 2. Medical Physics and Nuclear Engineering**  **Room 102, Science Research Building - Campus B, Mien Tay Construction University**  *- Chair and Co-chairs:*  *. Prof. T. Ishida (Osaka Metropolitan University, Japan);*  *. Dr. Vo Hong Hai (VNUHCM-**University of Science, Vietnam)*  *- Secretary: Hua Thi Hoang Yen- MSc (VNUHCM-University of Science, Vietnam)*  Link online: meet.google.com/ara-wbgm-dib | | | |
| 07:30-07:45 | **Invited talk S2-01-I**  Dr. MD Abdul Momin  *(University of Pittsburgh, United States)* | Toward the Fabrication of Wearable Devices for Biomedical Applications: Human Activity and Cardiovascular Monitoring | |
| 07:45-08:00 | **Invited talk S2-02-I (online)**  Asst. Prof. Vu The Dang  *(Osaka Metropolitan University, Japan)* | Transmission of Metals with Negative and Positive Scattering Length Density for Neutrons Using CB-KID Sensor | |
| 08:00-08:12 | **Oral S2-02-O**  Yen Thi Hoang Hua and Liet Dang Van | Denoising Techniques for Enhanced Mammogram Analysis | |
| **Coffee break (15 mins)** | | | |
| 08:27-08:39 | **Oral S2-02-O**  Thanh Nhan Huynh, Hoang Minh Le, Duy Thong Nguyen, Thien Thanh Tran and Van Tao Chau | Use Machine Learning to classify materials based on gamma scattering spectra | |
| **Session 3. Semiconductor Technologies, Materials, Devices and Related**  **Room 303, Science Research Building - Campus B, Mien Tay Construction University**  *- Chair and Co-chair:*  *. Assoc. Prof. Vu Thi Hanh Thu (VNUHCM-US, Vietnam)*  *. Prof. Satoru Noguchi (Osaka Metropolitan University, Japan)*  *- Secretary: Tran Kim Chi-MSc (VNUHCM-University of Science, Vietnam)*  Link online: meet.google.com/ara-wbgm-dib | | | |
| 07:30-07:45 | **Invited talk S3-01-I**  Prof. Satoru Noguchi  (*Osaka Metropolitan University, Japan)* | Development of Pulsed Magnetic Field Environment up to 50T below 1K | |
| 07:45-08:00 | **Invited talk S3-02-I**  Asst. Prof. Dr. Gaopeng Xue  *(Harbin Institute of Technology, China)* | Glass-Based Micro-Hotplate with Low Power Consumption and TGV Structure | |
| 08:00-08:15 | **Invited talk S3-03-I**  Assoc. Prof. Dr. Le Huu Phuoc  (*Ming Chi University of Technology,Taiwan*) | Recent advances in half-Heusler thermoelectrics | |
| 08:15-08:30 | **Invited talk S3-04-I**  Assoc. Prof. Dr. Tran Quang Trung  *(VNUHCM- University of Science, Vietnam)* | Faculty of Physics and Engineering Physics – Developing the field of semiconductor technology for training and research | |
| **Coffee break (15 mins)** | | | |
| 08:45-08:57 | **Oral S3-01-O**  Nhan Nguyen Trong, Quynh Trang Ton Nu, Gia Bao Nguyen Tran and Hanh Thu Vu Thi | Fabrication and Research the AgNCs/AuNSs@PP Nanostructures for SERS Platform | |
| 08:57-09:09 | **Oral S3-02-O**  Nguyen Tran, Khanh Pham, Hieu Pham, Danh Nguyen, Giang Huynh, Bao Nguyen and Trung Tran | Building and programing of scara robot wafer manipulation for the sample manufacturing process using STM32 microcontrollers | |
| 09:10-09:22 | **Oral S3-03-O**  Anomalous Hall Effect in Co and Co (0001)/TMs interface: first-principles study | Thi Ly Trinh, Bui Trung Kien Nguyen and Duc Cuong Do | |
| 09:22-09:34 | **Oral S3-04-O**  Thanh Tan Cuong Mai, Thanh Huy Ho, Nguyen Toan, Chi Nhan Nguyen and Van Hieu Nguyen | The study of heat sink for the optimal power of ThermoElectric Generator (TEGs) in the Aquaponic farm | |
| **Session 4A. MEMS, Biosensors, Biomedical Engineering and Application**  **Room 103, Science Research Building - Campus B, Mien Tay Construction University**  *- Chair and Co-chair:*  *. Assoc. Prof. Nguyen Van Toan (Tohoku Univ, Japan)*  *. Prof. Congo Tak Ching (NCHU, Taiwan)*  *- Secretary**: Nguyen Thi Tu Trinh-MSc (VNUHCM-University of Science, Vietnam)* | | | |
| 07:30-07:45 | **Invited talk S4A-01-I**  Assoc. Prof. Dr. Naoki Inomata  *(Tohoku University, Sendai, Japan )* | Microfabricated Thermometers: Focusing on Cellular Measurement Applications | |
| 07:45-08:00 | **Invited talk S4A-02-I**  Dr. BK Lok  *(SEMI Southeast Asia, Singapore)* | Introduction to SEMI Technology Communtities | |
| 08:00-08:15 | **Invited talk S4A-03-I**  Asst. Prof. Dr. Truong Thi Kim Tuoi  *(Tohoku University, Sendai, Japan )* | Advanced Cooling and Heating Systems Utilizing Nanofluids | |
| 08:15-08:30 | **Invited talk S4A-04-I**  Assoc. Prof. Dr. Nguyen Van Toan  *(Tohoku University, Sendai, Japan )* | Nanoengineering Nanoporous Silicon Material for Thermal Energy Harvesting | |
| **Coffee break (15 mins)** | | | |
| 08:45-08:57 | **Oral S4A-01-O**  Trieu Le Ngoc, Sang Nguyen Thi Minh, Minh Truong Van, Khiem Le Hong and Son Nguyen An | Novel solution to improve the moss bag technique in environmental biological monitoring | |
| 08:57-09:09 | **Oral S4A-02-O**  Phuong Le Ngoc Nam, Tung Ho Quang, Linh Nguyen Khanh, Truc Do Thi Thanh, Duong Thai and Doanh Tieu Tu | Graphene nanoribbons coated on porous stainless steel as membrane for air purification and antibacterial ability with low voltage | |
| 09:10-09:22 | **Oral S4A-03-O**  Akane Kobayashi, Kenji Nakamura and Takahito Ono | Motor Status Measurement Using A Highly Sensitivity Magnetic Sensor | |
| 09:22-09:34 | **Oral S4A-04-O**  Anh Le, Danh Nguyen, Thanh Nguyen, Nguyen Tran, Giang Le and Trung Tran | Gas sensing properties of the MIL-100(Fe)/rGO composite | |
| 09:34-09:46 | **Oral S4A-05-O**  Thien-Luan Phan, Tun Yu Huang, Hsing-Ju Wu, Minh-Khue Ha, Ha Anh T. Nguyen, Ngoc Luan Tran, Anh-Hao Huynh-Vo, Nguyen Van Hieu and Congo Tak Shing Ching | Instant Identification of Glucose in Saliva Using Microelectrodes with Impedance Analysis | |
| **Session 4B. MEMS, Biosensors, Biomedical Engineering and Application**  **Room 104, Science Research Building - Campus B, Mien Tay Construction University**  *- Chair and Co-chair:*  *.* *Prof. Masaya Toda (Tohoku Univ, Japan)*  *. Assoc. Prof. Nguyen Van Hieu (IPTC-VNUHCM, Vietnam)*  *- Secretary: Ms. Nguyen Ngoc Thao Nhi (VNUHCM-University of Science, Vietnam)* | | | |
| 07:30-07:45 | **Invited talk S4B-01-I**  Nguyen Van Hieu  *(BiSAE Lab, VNUHCM-University of Science, Vietnam)* | The DMF of Lab-On-A-Board for Biomedical Engineering studies | |
| 07:45-08:00 | **Invited talk S4B-02-I**  Dr. Khairul Fadzli Samat  *(Fakulti Teknologi dan Kejuruteraan Industri dan Pembuatan,*  *Universiti Teknikal Malaysia Melaka, Malaysia)* | Impact of Graphene and Nanocellulose Incorporation on Bismuth Telluride Nanocomposite Film for Micro Thermoelectric Generator | |
| 08:00-08:15 | **Invited talk S4B-03-I**  Dr. Sura Nguyen  *(Tecnologico de Monterrey, Mexico)* | Synthesis and characterization of hierarchical suspended carbon fiber structures decorated with carbon nanotubes | |
| 08:15-08:27 | **Oral S4B-01-O**  Ting-Yi Shen, Ngoc-Luan Tran | The Impact of Transcutaneous Vagus Nerve Stimulation on Depression in College Students | |
|  | **Coffee break (15 mins)** | | |
| 08:45-08:57 | **Oral S4B-02-O**  Viet Huynh, Tuan Huynh | A Multi-Input Convolutional Neural Network to RecognitionTask Based on Electroencephalogram Signals | |
| 08:57-09:09 | **Oral S4B-03-O**  Nhi N.T. Nguyen, Ho Thanh Huy, Thien Luan Phan, Nguyen ChiNhan, Nguyen Van Hieu, Congo Tak Shing Ching | Noninvasive, Nondestructive In Ovo Chicken Egg GenderDetection Using Machine Learning Decision Tree Model | |
| 09:10-09:22 | **Oral S4B-04-O**  Hoa Bui | Control robot arm by EEG signal aided by artificialintelligence | |
| 09:22-09:34 | **Oral S4B-05-O**  Cuong Le, Tuan Huynh, Trang Doan, Thuan Nguyen | 3D prior electrically resisitivity model building formagnetotelluric inversion using neural network algorithm tothe Kevitsa mineral deposit, Finland | |
| 09:34-09:46 | **Oral S4B-06-O**  Huy Tran Do, Viet Quoc Huynh, Tuan Van Huynh, Thinh Xuan Huynh | Application of machine learning method and artificialneural network architectures in emotion classificationusing electroencephalogram | |
| **Session 5.** **Microelectronics, Embedded System and AI&IoT**  **Room 201, Science Research Building - Campus B, Mien Tay Construction University**  *- Chair and Co-chair:*  *. Dr. Nguyen Chi Nhan (VNUHCM-US, Vietnam)*  *. Dr. Luong Phuoc Toan (MTU, Vietnam)*  *- Secretary: Vo Hoang Thuy Tien- MSc (VNUHCM-University of Science, Vietnam)* | | | |
| 07:30-07:45 | **Invited talk S5-01-I**  **Ms. Tateshiro Asura**  *(Ito Group, Nippon Avionic, Japan)* | Hermetic Sealing Technology for Electronic Components by Brazing Method | |
| 07:45-08:00 | **Invited talk S5-02-I**  Dr. Tran Thien Huan  *(Saigon University, Vietnam)* | Stable Gait Optimization For Legged Robots | |
| 08:00-08:15 | **Invited talk S5-03-I**  **Dr. Tran Dinh Cuong**  *(Ton Duc Thang University, Vietnam)* | Compensation Based on CB MRAS Technique for Induction Motor Drives | |
| 08:15-08:30 | **Invited talk S5-04-I**  Dr. **Nguyen Chi Nhan**  *(VNUHCM-University of Science, Vietnam)* | A slot scheduling technique application in improving battery life cycle in IoT nodes | |
| **Coffee break (15 mins)** | | | |
| 08:45-08:57 | **Oral S5-01-O**  Assoc. Prof. Dr. **Vo Ngoc Dieu**  (VNUHCM-University of Technology, Vietnam) | An Improved Chaotic-Symbiotic Organisms Search Algorithm for Optimal Scheduling of Electric Vehicle Charging and Discharging in Distribution Systems with Integrated Distributed Generations | |
| 08:57-09:09 | **Oral S5-02-O**  Dr. **Vo Hong Hai**  (VNUHCM-University of Science, Vietnam) | Development of -Based coincidence electronic using NI MyRIO Hardware for Gama-Gamma angular correlation system. | |
| 09:10-09:22 | **Oral S5-03-O**  **Nguyen Thi Nhu Quynh**  (VNUHCM-University of Science, Vietnam) | Parkinson's Disease diagnosis by using EEG signals with IClabel and Advanced Ensemble method | |
| 09:22-09:34 | **Oral S5-04-O**  **Vo Hoang Thuy Tien**  (VNUHCM-University of Science, Vietnam) | Recognition of basic human tastes using EEG signals | |
| 09:34-09:46 | **Oral S5-05-O**  **Tran Hoang Nhut**  (VNUHCM-University of Science, Vietnam) | An AIoT-Based system for efficient classification | |
| 09:46-09:58 | **Oral S5-06-O**  **Tung Than The**  (VNUHCM-University of Information Technology) | Real-time object tracking for elderly-care robot: adptive occclusion handling and model updated | |
| 10:00-10:12 | **Oral S5-07-O**  **Tung Than The**  (VNUHCM-University of Information Technology) | Real-time object tracking for elderly-care robot: adptive occclusion handling and model updated | |
| 10:12-10:24 | **Oral S5-08-O**  **Duy Dieu Nguyen**  (VNUHCM-University of Information Technology, Vietnam) | Recognize license plates with smart cameras using SoC technology Signal | |
| **Session 6.** **Computing Science, Simulation and Modeling**  **Room 202, Mien Tay Construction University**  *- Chair and Co-chair:*  *. Assoc. Prof. Huynh Van Tuan (VNUHCM-US)*  *. Dr. Nguyen Quang Khoi (VNUHCM-US))*  *- Secretary: Phan Nguyen Thuan-MSc (VNUHCM-University of Science, Vietnam)* | | | |
| 07:30-07:45 | **Invited talk S6-01-I**  Dr. **Nguyen Quang Khoi**  (VNUHCM-University of Science, Vietnam) | Development of an efficient spectrum modeling of yellow phosphor with high accuracy for white LEDs applications | |
| 07:45-08:00 | **Invited talk S6-03-I**  Prof. **Md. Mahabub Hossain**  (*Hajee Mohammad Danesh Science & Technology University (HSTU)*) | Seamless real-time thermal imaging system with ESP8266 for wireless data transfer | |
| 08:00-08:12 | **Oral S6-01-O**  **Kazuyuki Hanahara**  (Iwate University, Japan) | Evaluation of Disassembling Process Inference based on Positional Relations Matrix | |
| 08:12-08:24 | **Oral S6-02-O**  **Hien Pham Xuan**  (VNUHCM-University of Science, Vietnam) | Improving the Performance of Actor-Critic PPO Model based on the Probability of Gaussian Distribution | |
| **Coffee break (15 mins)** | | | |
| 08:40-08:52 | **Oral S6-03-O**  **Anh Tran**  (Ho Chi Minh City University of Technology) | Dynamic-Discrete-Set MPC for Interface Converters in Critical DC Micro-grids with Pulsed Loads | |
| 08:52-09:04 | **Oral S6-04-O**  **Nguyen Thi Le Thuy**  (VNUHCM-University of Science, Vietnam) | Introducing a novel surface electromyography signal dataset for hand movements classification | |
| 09:04-09:16 | **Oral S6-05-O**  **Khanh Quoc Truong**  (Ho Chi Minh City University of Technology) | Enhancing Speed Response by Implementing Improved Sliding Mode Algorithm and Fuzzy Logic Law in Controlling PMSM | |
| 09:16-09:28 | **Oral S6-06-O**  **C. Si Hoang**  (VNUHCM-University of Science) | When will Axial Seamount be erupted? Data-Driven Approaches to Volcanology | |
| **Session 7. Architecture, Urban planning and Construction**  **Room 203, Mien Tay Construction University**  *- Chair and Co-chair:*  *. Dr. Wen-Yi Hung (National Central University, Taiwan)*  *. Co-chair: Dr. Truong Cong Bang (Mien Tay Constructions University, Vietnam)*  *- Secretary: Nguyen Phuoc Hoang Khang -MSc (VNUHCM-US) and Nguyen Tan Phat – MSc (MTU)* | | | |  | **Oral S6-08-O** |  |
| 07:30-07:45 | **Invited talk S7-01-I**  Prof. **Wen-Yi Hung**  *(National Central Univwersity, Taiwan)* | Innovative Approaches to Slope Stability Analysis Using Centrifuge Modeling. | |
| 07:45-07:57 | **Invited talk S7-02-I**  Assoc. Prof. Dr. **Bui Quoc Bao**  *(Ton Duc Thang University, Vietnam)*  6 | Investigation on the development of non-fired materials without cement | |
| 07:57-08:10 | **Oral S7-01-O**  Assoc. Prof. Dr. **Tran Tuan Minh**  *(Hanoi University of Mining and Geology, Vietnam)* | The effects of joint networks on the stability of two parallel tunnels. | |
| 08:10-08:22 | **Oral S7-02-O**  Dr. **Lam Ngoc Qui**  *(Mien Tay Construction University, Vetnam* | Evaluation of the pile group effect on the bearing capacity of precast reinforced concrete piles on soft soil. | |
| **Coffee break (15 mins)** | | | |
| 08:40-08:52 | **Oral S7-03-O**  Dr. **Trong Nhan Huynh**  (Mien Tay Construction University) | Evaluating urban expansion of Mekong Delta's cities: A Case Study of Tra Vinh City. | |
| 08:52-09:04 | **Oral S7-04-O**  Dr. **Do Duy Thinh**  (Ho Chi Minh city University of Technology and Education) | Identifying Da Lat identity using Environment-behavior studies. | |
| 09:04-09:16 | **Oral S7-05-O**  Dr. **Do Duy Thinh**  (Ho Chi Minh city University of Technology and Education) | Identifying Da Lat identity using Environment-behavior studies. | |
| 09:16-09:28 | **Oral S7-06-O**  Identifying Da Lat identity using Environment-behavior studies. | Strategies to enhance capacity of a traffic intersection: case study in Nha Trang city. | |
| **2. POSTER SESSION 08:30-09:00**  **Lobby of Conference Hall, Mien Tay Construction University, Vinh Long Province** | | | |
| *- Chair:* Prof. Masaya Toda(Tohoku Univ, Japan)  *- Co-Chair: Dr. Ho Thanh Huy (VNUHCM-University of Science, Vietnam)*  *- Technical Assistant: Huynh Quoc Viet- MSc (VNUHCM-University of Science, Vietnam)* | | | |
| Session 1: S1.01-P, S1.02-P, S1.03-P, S1.04-P, S1.05-P;  Session 2: S2.01-P, S2.02-P;  Session 3: S3.01-P, S3.02-P, S3.03-P, S3.04-P, S3.05-P, S3.06-P, S3.07-P;  Session 4A: S4A.01-P, S4A.02-P;  Session 4B: S4B.01-P, S4B.02-P;  Session 5: S5.01-P, S5.02-P, S5.03-P, S5.04-P, S5.04-P;  Session 6: S6.01-P, S6.02-P, S6.03-P, S6.04-P, S6.04-P, S6.05-P.  Session 7: S7.01-P, S7.02-P, S7.03-P, S7.04-P, S7.04-P, S7.05-P. | | | |
| **3. CLOSING CEREMONY 10:30-12:30**  Location: Hall B, Mien Tay Construction University, Vinh Long Province | | | |
| **Time** | **Contents/Program** | **Note** | |
| 10:30-10:40 | **1. Introduce Guests and Remark the ICEBA2024 program** | MC (by MTU) | |
|  | **2. Plenary invited talk (cont.)**  *Chair: Prof. Tran Tri Nang (University of Minnesota, USA)*  *Co-Chair: Assoc. Prof. Nguyen Van Hieu (VNUHCM, Vietnam)* | | |
| 10:40-11:00 | **. Plenary #1 (code: PL.02-01).**  **Prof. Masaya Toda**  (Tohoku Univ, Japan) | Atmospheric Radical Detection via Nanomechanical Magnetic Cantilever | |
| 11:00-11:20 | **. Plenary #2 (code: PL.02-02)**  **Prof. Kun-Yu Lai**  (National Central Univ, Taiwan) | A Rapid Cancer Diagnosis by Nitride Surface-Enhanced Raman Spectroscopy | |
| 11:20-11:40 | **. Plenary #3 (code: PL.02-03)**  **Prof. Congo Tak Shing Ching**  (National Chung Hsing Univ, Taiwan, R.O.C) | Bioimpedance sensing for detection in various fields | |
| 11:40-12:00 | **. Plenary #4 (code: PL.02-04)**  **Prof. Kyeong- Sik Min**  (Kookmin Univ and KIEEE, Korea) | Low-power AI computing circuits with emerging memories | |
| 12:00-12:05 | **Summary of 4PL talks** | *Prof. Tran Tri Nang (University of Minnesota, USA)* | |
| 12:05-12:15 | **3. Outstanding Oral and poster presentation** | MC | |
| 12:15-12:20 | **4. Welcome for ICEBA2025 in Taiwan** | MC (by MTU)  Prof. Kun-Yu Lai (DOP, NCU, Taiwan)  Program co-chair of ICEBA2025 | |
| 12:20-12:30 | **5. Speech for closing ICEBA2024 from MTU** | Dr. Truong Cong Bang, Vice President of MTU | |
| **4. Conference gala**  \* Time: 12:30-14:00  \* Location: Mien Tay Construction University, Vinh Long Province | | | |
| **5. TRANSPORTATION FOR HOCHIMINH CITY: 14:30-16:30** | | | |