

| | 【BMFSA2025】 Dec. 13th, Sat : Day 1 | | | 【ICCMEH2025】 Dec. 13th, Sat : Day 1 | |
|-------------|--|--|--|---|--|
| Time | Room A (Lecture Room 1) | Room B (Lecture Room 2) | Room C (Terminal Room1) | Room D (Seminar Room 3) | Room E (Seminar Room 4) |
| 8:30 | BMFSA2025 & ICCMEH2025 Registration 8:30~ (Entrance Area) | | | | |
| 10:00-10:20 | | | | Opening Ceremony (Room C) Chair: Masaaki Tamagawa (Kyutech) | |
| 10:20-10:30 | | | | Break | |
| 10:30-11:30 | | | | ICS-K1:Keynote Speech 1 (Room C) Chair:Kamarul Arifin Ahmad(UPM) | |
| | | | | Performance Evaluation of Single Pad Externally Adjustable Fluid Film Bearing <i>Prof. Satish Shenoy B</i> (Department of Aeronautical and Automobile Engineering, MIT, MAHE, India) | |
| 11:30~13:00 | Lunch | Board of Directors and Council of BMFSA 11:30~12:30, Room B | | Lunch (Lunch Box) | Committee Meeting of ICCMEH(Seminar Room 4) 11:30~12:30, Room E |
| | Hall and Lounge | | | | |
| | BMF1-A1: Education, Cognition and Learning Support Chair: Satoru Takagi (Waseda Univ.) | BMF1-B1: Sports Engineering and Human Motion Chair: Fumihiko Mori (Tamagawa Univ.) | BMF1-C1: Fuzzy Theory and Optimization Chair: Hiroaki Uesu (Kanazawa Inst. Tech.) | ICS1-D1:Industrial Application by CFD Chair:Mohamad Zuber (MAHE) | ICS1-E1: Biomechanics Chair:Adi Azriff Basri(UPM) |
| | A002 Comparison of Group Cognitive Structures Based on Learners' Awareness Survey and Considerations for Teaching Methods <i>Yuna OKUYAMA, Satoru TAKAGI</i> | B003 A Preliminary Study on the Standardization of Movement Speed in Blind Football <i>Masato OTAKE, Yasukazu HASHIGUCHI, Ryoji ISANO, Shuji SAKAMOTO, Akihito KOAKUTSU</i> | A004 A Triple-Layer Hybrid Optimization Algorithm for Optimization Problems <i>Shoma ISHII, Toshihiko WATANABE</i> | ICCMEH23 CFD-Based Design Optimization of a C-D Rocket Nozzle Using the Response Surface Methodology Approach on Exhaust Plume Characteristics and Thrust profile <i>Izzat Najmi Mohd Yaacob (Department of Aerospace Engineering, Faculty of Engineering, Universiti Putra Malaysia)</i> | ICCMEH19 Numerical Investigation of the Impact of Arterial Stiffness on Hemodynamics in the Carotid Artery Using a Multiphase Flow Model <i>Sai Kireeti (Department of Mechanical and Industrial Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education)</i> |
| 13:00-14:00 | A003 Exploring Students' Perception of Instructional Material Structures through Fuzzy Theory-Based Analysis <i>Taisei YAMAGA, Satoru TAKAGI</i> | A019 Racket Head Acceleration as an Indicator of Upper Limb Movement Efficiency: The Potential for Relaxation Level Assessment Using a Single IMU <i>Haruki MARUME, Hideaki ORII and Hideaki KAWANO</i> | A005 Convergence Acceleration for RRT Using Heuristic Optimization Techniques <i>Wenhao HUANG, Toshihiko WATANABE</i> | ICCMEH21 Effect of Turbulence on the Steady-State Lubrication Performance of Four-Pad Adjustable Bearings under Different L/D Ratios <i>Girish Hariharan (Department of Mechanical & Industrial Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, India)</i> | ICCMEH24 Mechanical Characterization of the Human Ascending Aorta Using a Transversely Isotropic Fung-Type Hyperelastic Model with Initial Tangent Moduli under Force-Controlled Biaxial Testing <i>Hiroshi Yamada (Department of Biological Functions Engineering, Kyushu Institute of Technology)</i> |
| | A010 A Study on Tourist Guide Texts Created by Generative AI <i>Yoshiyuki MATSUMOTO, Naruki SHIRAHAMA</i> | B010 A Fundamental Study on an Upper Limb Joint Angle Estimation System for Complex Movements <i>Yusuke GOTO, Eiichi INOHIRA</i> | A006 Evaluation of Fuzzy Correlation Coefficients Based on Random Resampling Data <i>Hiroaki UESU, Norihiro SOMEYAMA, Kimiaki SHINKAI, and Shuya KANAGAWA</i> | ICCMEH08 Fundamental Study on the Improvement of Antifouling Performance of Ship Hulls Using Vibrating Shark Skin <i>Sawa Danjo (Department of Mechanical Engineering, Kyushu Institute of Technology)</i> | ICCMEH03 Effects of different surface coatings on taper junctions of partial hip implants: A finite element wear study <i>Satish Shenoy B((Department of Aeronautical and Automobile Engineering, MIT, MAHE)</i> |
| 14:00-14:10 | Break | | | | |
| | BMF1-A2: Medical Treatment, Nursing and Health Sciences Chair: Hiroko Noto (Kyushu Univ.) | BMF1-B2: Welfare, Parasports and Social Systems Chair: Yasukazu Hashiguchi (Nihon Univ.) | BMF1-C2: AI and Emotional Information Processing Chair: Naruki Shirahama (Shimonoseki City Univ.) | ICS1-D2:Biomedical Devices 1 Chair: Nobuo Sakai (Kyutech) | ICS1-E2:Data Analysis by Sensor Chair: Kazuto Takashima (Kyutech) |
| | B001 A Fundamental Investigation of Thrombus Formation Around Peripheral Intravenous Catheters for Infants Using Flow and Structural Analyses <i>Yuko MIYAMURA, Masaaki TAMAGAWA</i> | A015 Mental Disorders and Criminal Responsibility <i>Toru YUKIMASA</i> | A001 Analysis of Emotional Understanding Characteristics and Persona Diversity in Large Language Models <i>Naruki SHIRAHAMA, Naofumi NAKAYA, and Satoshi WATANABE</i> | ICCMEH07 Explicit Dynamics and CFD Modelling of Blood Leakage Phenomena Following Needle Injection <i>Adi Azriff Basri(Department of Aerospace Engineering, Faculty of Engineering, Universiti Putra Malaysia)</i> | ICCMEH02 Comparative Analysis of Shear Stress Distribution and Bending Performance in Multi-Geometry Soft Pneumatic Finger <i>Hrishikesh P Shastri (Department of Mechanical and Industrial Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education)</i> |
| 14:10-15:10 | B002 Actual Conditions of Diurnal Fatigue and Health Needs Associated with Day-Shift Nursing Work <i>Azusa YOSHIMURA, Ami KATO, Akari SAEKI, Kaori KUDO, Chie SHIMOYAMA, Asami UENO, Nobuko Hashiguchi, Hiroko NOTO</i> | B004 A Literature Review on Coach Development in Parasports <i>Yasukazu HASHIGUCHI, Masamitsu ITO, Ryoji ISANO, Takayuki KOYAMA, Wakaki UCHIDA</i> | A008 The Relationship between the Spectral Slope Index of Sound Signals and Comfort <i>Koki BANDO, Taro KATO, and Mitsuaki FURUI</i> | ICCMEH05 Evaluation of Influence of Various Parameters on Penetration Accidents during Endovascular Treatment <i>Hiroto Hidaka(Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology)</i> | ICCMEH01 Shape-Memory Polymer-Based Force Sensor with Programmable Sensitivity via Structural and Stiffness Modulation <i>Sourav Roy (Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology, Kitakyushu)</i> |
| | A018 Acupuncture and Moxibustion Treatment for Palmoplantar Pustulosis with Multiple Coexisting Symptoms <i>Takeshi YAMAKAWA</i> | B007 A Study on Methods for Acquiring and Analyzing Ambiguous Information in Kyudo <i>Fumihiko MORI</i> | A009 Data Augmentation Methods by Generative AI Using GAN <i>Shoki ARITA, Toshihiko WATANABE</i> | ICCMEH10 CFD and Structural Analysis for Preventing Thrombus Formation around a Peripheral Intravenous Catheter for Infants <i>Yuko Miyamura((Department of Nursing, Faculty of Fukuoka Medical Technology, Teikyo University)</i> | ICCMEH18 Comparison of Feature Combinations for Unstable Gait Recognition Using a Single Inertial Sensor and Machine Learning <i>Kodai Kitagawa (Mechanical and Medical Engineering Course, National Institute of Technology (KOSEN), Hachinohe College)</i> |
| 15:10-15:20 | Break | | | | |
| | BMF-S1: BMFSA2025 & ICCMEH2025 Keynote Lecture 1 (Remote Lecture Room 1, Academic Information Center) Chair: Masaaki Tamagawa (Kyutech) | | | | |
| 15:20-16:20 | Digital Transformation (DX) for Nursing Care Prof. Sozo INOUE (Graduate School Life Science and System Eng., Kyushu Insititute of Technology, Japan) | | | | |
| 16:20-16:30 | Break | | | | |
| | ICS-K2:BMFSA2025 & ICCMEH2025 Keynote Speech 2 (Remote Lecture Room 1, Academic Information Center) Chair: Hiroshi Yamada (Kyutech) | | | | |
| 16:30-17:30 | Physiological Mechanisms Optimizing Quiet Standing Posture Assoc. Prof. Testuya Kimura (Graduate School of Human Development and Environment, Kobe University) | | | | |
| 17:30-19:00 | Transportation to Knowledge Sharing Meeting & Banquet ① Direct bus from Kitakyusyu Science and Research Park to venue hotel (18:00 departure), ② By public transportation Kitakyusyu Science and Research Park – (bus) – JR Orio Station – (train) – JR Kurosaki Station – (on foot) – venue Kitakyusyu Science and Research Park – (bus) – Kurosaki Station – (on foot) – venue | | | | |
| 19:00-21:00 | BMFSA2025 Knowledge Sharing Meeting & ICCMEH2025 Banquet Hotel Crown Palace, Kitakyushu | | | | |

| | 【BMFSA2025】 Dec. 14th, Sun : Day 2 | | | 【ICCMEH2025】 Dec. 14th, Sun : Day 2 | |
|-------------|--|---|--|---|---|
| Time | Room A (Lecture Room 1) | Room B (Lecture Room 2) | Room F (Terminal Room2) | Room D (Seminar Room 3) | Room E (Seminar Room 4) |
| 8:30 | BMFSA2025 & ICCMEH2025 Registration 8:30~ (Entrance Area) | | | | |
| 9:00-10:20 | BMF2-A1: Self-Organizing Map Chiar: Matashige Oyabu (Kanazawa Inst.Tech.) S101 Comparison Study of the Properties of SOM and K-means Methods in Clustering Analysis Matashige OYABU | BMF2-B1: Medical Engineering Chiar: Kento Morita (Mie Univ.) B009 Evaluation of Asymptomatic Carotid Plaques Using Multimodal MRI Radiomics – Comparison Between Two Prediction Targets (Onset of Cerebral Infarction and Treatment Eligibility) – Sota YOKOYAMA, Naoya TAKASHIMA, Kei MIZOBE, Hideo ALHARA, Tomokazu HAYASHI, Tetsuya URATA, Naomi YAGI, Syoji KOBASHI | BMF2-F1: Blood Flow Analysis and Medical Decice Engineering Chiar: Eiichi Inohira (Kyutech) B005 Investigation of the Generation Mechanism of Korotkoff Sounds by Fluid-Structure Interaction Analysis Considering Vascular Elasticity Kaito SAGARA, Yuko MIYAMURA, Yoji YAMAMOTO, Takeshi Tachibana, Tetsuya KIMURA, Masaaki TAMAGAWA | ICS-K3:Keynote Speech 3 (Room C) Chair: Kazuto Takashima (Kyutech) Non-Newtonian Flow Numerical Simulation and Complication Study in a Mechanical Heart Valve Prof. Kamarul Arifin Ahmad (Department of Aerospace Engineering, Faculty of Engineering, Universiti Putra Malaysia) | |
| | S102 A study on learning times and data processing using spherical SOM tool with simultaneous front and back display Heizo TOKUTAKA, Masaaki OHKITA, Gen NIINA, and Matashige OYABU | A011 Panoramic X-ray Image Reconstruction from Head CT Image Using Automatic Mandible Extraction with TotalSegmentator Ichi HASEGAWA, Kento MORITA, Junya HIROTA, Daisuke TAKEDA, Takumi HASEGAWA, Masaya AKASHI and | B006 Clarification of the Relationship Between Deformation and Internal Pressure of an Elastic Tube Under Intermittent Jet Flow for Blood Pressure Kota TAOKA, Yuko MIYAMURA, Yoji YAMAMOTO, Takeshi TACHIBANA, Tetsuya KIMURA, Masaaki TAMAGAWA | ICS-K4:Keynote Speech 4 (Room C) Chair: Jin Nakamura (Kyutech) | |
| | S103 Analysis of the Characteristics of Cherry Trees in the Western Part of Tottori Prefecture Using the Spherical Takeo YOSHIOKA, Masaaki OHKITA, Heizo TOKUTAKA | A012 Automatic Detection of Personally Identifiable Information Manami INOUE, Kento MORITA, Takehiro FUJII, Tatsuki SANO, Kaoru DOHI and Tetsushi WAKABAYASHI | B011 Development of a Robotic-Arm-Based Automated Puncture System Yuta TOMOHIRO, Masaaki TAMAGAWA, Yuko MIYAMURA | | |
| | | A014 Influence of Ground-Truth Labels on Mitochondrial Segmentation from Shadow-Based Imaging Taiyo SATO, Motohiro NOZUMI, Yoshitaka OHTUBO and Keiichi HORIO | | | |
| 10:20-10:30 | Break | | | Nano-enhanced Ecocomposites for High-Performance Sustainable Applications Asoc. Prof. Norkhairunnia Mazlan (Department of Aerospace Engineering, Faculty of Engineering, Universiti Putra Malaysia) | |
| 10:30-11:30 | BMF2-A2: IoT& Fuzzy System Chiar: Naofumi Nakaya (Juntendo Univ.) A016 A Stable Image Transmission Method for Low-Bandwidth Healthcare IoT using Ultra-Lightweight Image Yuto GOTO, Ryota SHIMAMURA, Riku HAMAKAWA, Hideaki ORII, and Hideaki KAWANO | BMF2-B2: Measurement and Physical Informatics Chiar: Takanori Matsuzaki (Kinki Univ.) A007 A Guitar Practice Support System for Beginners via String-Level Detection of C Chords Akishige TANAKA, Hideaki ORII, and Hideaki KAWANO | | Break | |
| | A017 A Personalized Fuzzy-Based Walking Assistance System Incorporating the Biophysical and Cognitive Characteristics of Visually Atsushi YOSHIDA, Atsushi SUGIMOTO, Hedeaki ORII, and Hedeaki KAWANO | B008 In-Hospital Verification of Radio Signal Reception Strength of Medical Telemetry Systems Shoji YAMAGUCHI | | ICS2-D3:Computational Flow Analysis Chair:Kamarul Arifin Ahmad(UPM) | ICS2-E3:Biomedical Devices 2 Chair:Adi Azriff Basri(UPM) |
| | A020 Development of a Fuzzy Irrigation Support System for Water-Stress Control in Potted Cherry Tomato Cultivation: Human-in-the-Loop Control Including a Dry-Soil Mode Tousei KURITA, Hideaki ORII, and Hideaki KAWANO | A013 Analysis of mystery on the neutron induced total reaction cross sections Masahiro NAKANO, Yuji YAMAGATA, and Yusuke UOZUMI | | ICCMEH22 Experimental study on oleic acid-stabilized SiO ₂ nanolubricants: Influence on viscosity, thermal, and lubricity properties of VG 32 based mineral oil Girish Hariharan (Department of Mechanical & Industrial Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, India) | ICCMEH11 Development of biopolymer-based organ-on-chip device using sacrificial microchannel template to study the effect of physiochemical gradient on cellular migration Rudra Nath Ghosh (Department of Biomedical Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal) |
| 11:30-13:00 | Lunch Hall and Lounge 11:30-13:00 | | | Lunch (Lunch BOX) 11:50-13:00 Hall and Lounge | |
| 13:00-14:00 | General Meeting, Student Encouragement Award Ceremony (Remote Lecture Room 1, Academic Information Center) | | | ICS1-D3:Medical Mesurement and Simlutaion Chair: Nobuo Sakai (Kyutech) | ICS2-E3:AI and Data Analysis for Medicine Chair: Kazuto Takashima (Kyutech) |
| | | | | ICCMEH14 Effects of Jet Flow Cycles on Contactless Continuous Blood Pressure Measurement Kota Taoka (Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology) | ICCMEH09 Detection and Classification of Apical Periodontitis Lesions Using Deep Neural Network in Panoramic Radiographs V. Damodaran (Amrita Vishwa Vidyapeetham Chennai, India) |
| | | | | ICCMEH13 Development of Non-Contact Blood Pressure Measurement Method by Millimeter-Wave Radar and Jet Flow Ayumu Katayama (Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology) | ICCMEH27 Demographic and Bilateral Variations in Carotid Artery Geometry: A CT-Based Analysis of Age- and Gender-Dependent Kevin Amith Mathias (Department of Mechanical & Industrial Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, India.) |
| | | | | ICCMEH25 Patient-Specific Simulation of Obstructed Ureter: A Computational Approach to Urine Flow Dynamics Laxmikant G Keni(Department of Aeronautical and Automobile Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education) | ICCMEH12 Predicting Newborn Genetic Diseases Using DNA Sequences and Machine Learning V. Damodaran (Amrita Vishwa Vidyapeetham Chennai, India) |
| 14:00-14:10 | Break | | | | |
| 14:10-15:10 | | | | ICS2-D4: Biofluid Dynamics Chair:Adi Azriff Basri(UPM) | ICS2-E4: AI Application for Medicine Chair: Satish Shenoy B (MAHE) |
| | | | | ICCMEH15 Effects of Clearance and Wall Shear Stress on Thrombus Formation for TAVI Paravalvular Leakage Models by CFD James E. Jones III (Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology) | ICCMEH06 Deep Learning-Driven Navigation Aids for the Visually Impaired: A Systematic Review of Semantic Segmentation-Based Approaches B. Padmavathy(Department of Computer Science and Engineering, Sri Venkateshwara College of Engineering, Visvesvaraya Technological University) |
| | | | | ICCMEH20 Computational Flow Analysis of Thrombus Suppression in a Venous Valve using Concentration Transport Equation Ryuto Kozuki (Graduate School of Science and Technology, Niigata University) | ICCMEH28 Study of femtosecond laser-induced micro shock wave generation in water and pressure distribution near the focal area Kota Nakashima (Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology) |
| | | | | ICCMEH26 Hemodynamic Effects of Heart Rate Variability in the Abdominal Aorta-Renal Artery Region: A Computational Fluid Dynamics Investigation Gowrava Shenoy B (Department of Mechanical and Industrial Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal) | ICCMEH17 Early PCOS Detection and Support through a Mobile Application: Integrating Machine Learning and Lifestyle Tracking System Napa Lakshmi (School of Computer Engineering, Manipal Institute of Technology Bengaluru, Manipal Academy of Higher Education, Manipal, India) |
| 15:10-15:20 | Break | | | | |
| 15:20-15:30 | ICCMEH2025 Presentation Awards & Closing Remarks (Room C) | | | | |