**Schedule of Presentations: Poster Session**

**Biomedical Electronics/Biomedical Optoelectronics**

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| **Nov. 1 (Friday) 12:30~14:00 1F Lobby of the Dept. Chemical** | | | |
| **Poster No.** | **Paper No.** | **Presenter** | **Title** |
| PG2-1 | G2-005 | **Ching-Han Huang**  National Yang Ming Chiao Tung University | CMUT ultrasound transducers testing and evaluations |
| PG2-2 | G2-007 | **Thi-Thuyet Truong**  National Cheng Kung University | Low-intensity pulsed ultrasound promotes motor neuron cell growth by activating serine/threonine kinase protein kinase B and calcium-dependent transcription factors in the presence of various inhibitors |
| PG2-3 | G2-022 | **Jia-Jung Wang**  I-SHOU University | Reduction of Motion Artifacts in Single-Arm ECG Using the Wavelet Transform and the Wiener Filters |
| PG2-4 | G2-024 | **Yu-Hsuan Shih**  National Taiwan University | Pattern Generator for Vestibular Evoked Myogenic Potential Examination |
| PG2-5 | G2-025 | **Yun-Chen Kuo**  I-SHOU University | Application of multidimensional TOF sensors for skin morphology during cupping treatments |
| PG2-6 | G2-043 | **Yi-Hsiang Chuang**  National Cheng Kung University | Developing a Confocal High Frequency Ultrasound Imaging System for Sonodynamic Therapy |
| PG2-7 | G4-007 | **Chun-Wei Chang**  National Cheng Kung University | Minimizing Interference in SARS-CoV-2 Variant Detection Using Gold Nanoparticle-Enhanced SERS |
| PG2-8 | G4-017 | **Chia-Yu Chang**  National Central University | 基於虛擬現實之情緒選擇過程中EEG頻譜與亂度分析 |
| PG2-9 | G4-021 | **Chun-Hao Huang**  Chang Gung Memorial Hospital, Linkou | Development of a Microfluidic Technology-Based Biochip for Degradation Analysis of Bioceramic Bone Materials |
| PG2-10 | G4-024 | **陳佳微**  National Yang Ming Chiao Tung University | Electrically Monitoring Osteogenic Differentiation of Human Dental Pulp Stem Cells Using Electric Cell-Substrate Impedance Sensing |
| PG2-11 | G4-033 | **Siswoyo Prasetyo**  Medical Imaging and Radiological Science | Assessment of Local Phase Velocity Imaging (LPVI) for Tissue Stiffness Measurement: A Comparative Study of Single and Combined Frequency Reconstructions |
| PG2-12 | G4-038 | **Yuno Komachi**  Teikyo University, Japan | Shielding effect of scatter radiation protective cream |

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| **Nov. 2 (Saturdy) 9:40~11:10 1F Lobby of the Dept. Chemical** | | | |
| **Poster No.** | **Paper No.** | **Presenter** | **Title** |
| PG2-1 | G2-004 | **Chun-Wei Wu**  Taipei Medical University | Temporal Interfering Stimulation for Treatment of Neurogenic Bladder Dysfunctions in Spinal Cord Injury |
| PG2-2 | G2-006 | **You-Jyun Liu**  National Yang Ming Chiao Tung University | Comparative Frequency Spectral Signal Analysis of Medical Ultrasound Lung Movements Using Fast Fourier Transform, Continuous Wavelet Transform, and Hilbert-Huang Transform |
| PG2-3 | G2-010 | **Kuo Jui-En**  National Yunlin University of Science and Technology | Development of RF Sputtered Bandgap-tunable Aluminum Gallium Oxide Deep-UV Photodetector |
| PG2-4 | G2-011 | **S.H. Lu**  Chung Yuan Christian University | Two-Electrodes ECG Signals Measured on the Neck and Near the Ears |
| PG2-5 | G2-015 | **Chien-Hsun Lin**  National Cheng Kung University | Induction of Calcium ion influx in endothelial cells by vortex-focused ultrasound. |
| PG2-6 | G2-021 | **Jia Jung Wang**  I-Shou University | Identification of Knee Osteoarthritis Using the Deep Learning Technology. |
| PG2-7 | G2-047 | **Dong-Huan Li**  National Tsing Hua University | Powell-Light Sheet Microscopy with Large-Aperture Objective |
| PG2-8 | G4-005 | **Yi-Han Chiang**  Leadtek Research, Inc. | Heart Sound Denoising Filter Based on Generative Adversarial Networks |
| PG2-9 | G4-010 | **Kuan-Po Huang**  Chang Gung University | Microfluidic chip for single-cell metabolomic analysis |
| PG2-10 | G4-027 | **江俊澤**  長庚大學 | 開發三維共培養微流體晶片探討纖維母細胞對癌細胞的侵襲能力和基因表達之影響 |
| PG2-11 | G4-029 | **Chia-Ling Chiang**  National Taiwan University | Challenges in Surface Plasmon Resonance Detection Limits: Precision Measurements Based on Fluid Control and Light Wavelength Stability |
| PG2-12 | G4-032 | **Cheng-Feng Tsai**  National Chung Hsing University | Analyzing Human Breast Cancer and Osteosarcoma Cell Growth Using Impedimetric Cell-Based Biosensors |

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| **Nov. 2 (Saturday) 14:10~15:40 1F Lobby of the Dept. Chemical** | | | |
| **Poster No.** | **Paper No.** | **Presenter** | **Title** |
| PG2-1 | G2-003 | **Chih-Ching Lee**  National Yang Ming Chiao Tung University | Fabrication of PZT/PVDF Composites Dual-Element Ultrasonic Transducer |
| PG2-2 | G2-012 | **Chih-Hsien Li**  National Cheng Kung University | Enhanced Transdermal Drug Delivery by Vortex Focused Ultrasound |
| PG2-3 | G2-013 | **Wei-Hao Chao**  National Cheng Kung University | Feasibility of Using Acoustic Vortex for Biofilm Dislodging |
| PG2-4 | G2-014 | **Chih-Yung Huang**  National Cheng Kung University | The Effects of Vortex Ultrasound on Neurite Outgrowth |
| PG2-5 | G2-017 | **Siao-Yin Lin**  National Taiwan University | Non-invasive System for Dynamic Measurement of Intracranial Pressure in Infants |
| PG2-6 | G2-018 | **Yun-Ta Sung**  National Taiwan University | Preliminary Study on the Effects of Transcutaneous Electrical Nerve Stimulation on Rat Flap Survival |
| PG2-7 | G2-020 | **Wei-Chuan Lei**  I-Shou University | An improved dry cupping system with wireless monitoring of pressure and tissue compliance during treatments |
| PG2-8 | G2-032 | **Chang-Ru Guo**  National Taiwan University | Schottky Barrier Device Based on Au/N-Doped Si/Al for Detecting Surface Plasmon Resonance-Induced Hot Electrons |
| PG2-9 | G2-048 | **Rong Jiang**  National Taiwan University | Bio-inspired cortical-basal-ganglia-thalamic network and deep convolutional neural network for PD STN local field potential classification |
| PG2-10 | G4-004 | **Chih Chin Yang**  National Kaohsiung University of Science and Technology | The Breath Monitoring Using a Nanometer Semiconductor Respirator |
| PG2-11 | G4-037 | **Tien-Tsan Hung**  I-Shou University | Sensing Enhancement Ammonia Gas Sensor Based on a Silver NanoparticleGraphene / Polypyrrole Hybrid Nanocomposite Film |

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| **Nov. 3 (Sunday) 10:10~11:20 1F Lobby of the Dept. Chemical** | | | |
| **Poster No.** | **Paper No.** | **Presenter** | **Title** |
| PG2-1 | G2-016 | **Jen-Chin Hsieh**  National Cheng Kung University | Non-invasive sciatic nerve stimulation by focused ultrasound for hematopoietic system modulation |
| PG2-2 | G2-034 | **Hsin-Yun Chang**  National Health Research Institutes | Development of the Ultrasonic Transducer for Intranasal Drug Delivery in a Rat Model |
| PG2-3 | G2-035 | **Jing-Yu Chen**  E-Da Hospital | Gait Performance in Patients with Knee Osteoarthritis after High Tibial Osteotomy |
| PG2-4 | G2-038 | **陳旻燁**  銘傳大學 | 利用低能量雷射改善原發性經痛之初步研究 |
| PG2-5 | G2-039 | **林峻崙**  逢甲大學 | 即時偵測心率異常之監測裝置開發 |
| PG2-6 | G2-040 | **Han-Sheng Huang**  National Taiwan Normal University | High-Tc SQUID based Biomagnetic Imaging system: Third Harmonic Characteristics of magnetic nanoparticle in Animal |
| PG2-7 | G2-041 | **Che-Hsien**  National Tsing Hua University | Single Fetal nucleated red blood cells (FnRBCs) Isolation by High- Density Self-Assembled Cells Array Chip System for Non- Invasive Prenatal Test |
| PG2-8 | G2-045 | **Rong-Jang Lin**  Shu-Zen Junior College of Medicine and Management | The Effect of Different Transcutaneous Auricular Vagus Nerve Stimulation (taVNS) Waveforms on Heart Rate Variability |
| PG2-9 | G2-046 | **Zi-Xian Lee**  National Kaohsiung University of Science and Technology | Nanometer Semiconductor on Biomedical Sensing of Skin Breathing |
| PG2-10 | G4-003 | **Yao-Chin Wang**  Cheng Shiu University | AI-Enhanced Anti-Reflective Films and Semiconductor Devices for Advanced Biomedical Sensing in Flexible Electronics |
| PG2-11 | G4-009 | **Hsuan-Yu Kuo**  National Kaohsiung University of Science and Technology | Pet Management System with AIoT |