NBSIS 2017

Poster Session

■ Venue : ICC Jeju 3F Lobby

■ Time schedule : February 22 (Wednesday), 17:50 ~ 19:20 ■ Chair : Prof. Dong-Soo Shin (Hanyang University)

ID	Title	Presenter	Affiliation
PO-001	Conductive Colloidal Microparticles-Arrayed Sensing Platform for Detecting Blood Glucoses	Ms. Song-Ee Choi	Hanyang University, South Korea
PO-002	Fabrication of Liquid-filled Tunable Lens with Antireflective Structure for Endoscope Camera	Mr. Sang-In Bae	Korea Advanced Institute of Science and Technology, South Korea
PO-003	Comprehensive Study on the Application of Graphene and its Derivatives in Optical Sensing	Ms. Kyungwha Chung	Ewha Womans University, South Korea
PO-004	Rapid Optical Biopsy via Multichannel Confocal Microscopy	Mr. Juehyung Kang	Hanyang University, South Korea
PO-005	Analysis of Skin Penetration of Cosmetics Using in vivo Confocal Raman Spectroscopy	Ms. Jihui Jang	COSMAX, South Korea
PO-006	Co-expression of Stimuli-responsive and Surface- adhesive Fusion Proteins with Tyrosine Hydroxylase in E. coli	Mr. Jae Hee Lee	Hanyang University, South Korea
PO-007	Surface Modification Chemistries of Poly(methyl methacrylate) as Oligonucleotide-immobilization Substrates for Solid-phase Amplification and Detection	Mr. QUANG NGHIA PHAM	Gachon University, South Korea
PO-008	Multi-wavelength Photoacoustic Source Using Stimulated Raman Scattering Effect at a 300 kHz of Repetition Rate	Ms. Soon-Woo Cho	Pusan National University, South Korea
PO-009	Electrochemiluminescence Resonance Energy Transfer- Based Biosensors	Dr. Lingling Li	Nanjing University, China
PO-010	Retroreflective Janus Microparticle as an Optical Signaling Probe for Nonspectroscopic Affinity Biosensing	Dr. Yong Duk Han	Ajou University, South Korea
PO-011	2D Micro-patterning of Cholesteric Liquid Crystal Microcapsules for a Temperature-Responsive Color Display Sensor	Ms. Bohyun Kim	Hanyang University, South Korea
PO-012	Uniform Biphasic Janus Microparticles for Patterned 2D Colloidal Registry	Mr. Sang Woo Han	Hanyang University, South Korea
PO-013	Smartphone-associated Optical Sensing Platform by Employing Chromogenic Light Interference	Mr. Hyeong Jin Chun	Ajou University, South Korea

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PO-014	Optical Spectroscopy Method for Evaluating Noble Selective Tumoricidal Nanolipoplex - LIMLET	Ms. Sujin Jung	Hanyang University, South Korea
PO-015	Intravascular Optical Coherence Tomography and Fluorescence Lifetime Imaging Catheter for Diagnosing Coronary Artery Disease (CAD)	Mr. Min Woo Lee	Hanyang University, South Korea
PO-016	Study on Ceramide Behavior through Raman Imaging	Ms. Minjoo Noh	COSMAX, South Korea
PO-017	Stimuli-responsive Complexes of Graphene Oxide- based Polyelectrolyte Block Copolymer Brushes and Gold Nanorods	Mr. Hyunki Kang	Hanyang University, South Korea
PO-018	Surface Modification Mediated by Polydopamine Coating for the Immobilization of DNA	Ms.Thi Ngoc Diep Trinh	Gachon University, South Korea
PO-019	Folate Receptor-mediated Targeting of Cancer Cell by Three Photon Imaging	Mr. Seung Won Jun	Pusan National University, South Korea
PO-020	In-vivo Fluorescence Imaging of Targeting Proteoliposome Conjugated with EGF-BAM Complex as a Homing Molecule	Ms. Hyunmin Ryu	Hanyang University, South Korea
PO-021	Highly Sensitive Time-resolved Fluorescence Immunosensing Platform for Cardiac Troponin I Detection	Mr. Ka Ram Kim	Ajou University, South Korea
PO-022	Stretchable Electrochemical Sensor Using Printed Carbon Electrode Modified with GO/SWNT Composite on Mogul-patterned Stretchable Substrate	Ms. Han-Byeol Lee	Sungkyunkwan University, South Korea
PO-023	Fabrication of Gradient Generating Microdroplet- based Chips for a Fast and Sensitive Bioanalysis	Mr. Jinhyeok Jeon	Hanyang University, South Korea
PO-024	Near-field Scanning Optical Microscopy of Localized Near-fields on Plasmonic Nanostructures	Mr. Kiheung Kim	Yonsei University, South Korea
PO-025	Multimodal Nonlinear Imaging of Cell Division in Arabidopsis Thaliana Root Cell	Mr. Bumjoon Jang	Yonsei University, South Korea
PO-026	Development of Time-resolved Fluorescence (TRF) Measurement Device for Lateral Flow Assay (LFA)	Dr. Kook-Nyung Lee	Korea Electronics Technology Institute, South Korea
PO-027	A Wellness Software Platform with Smart Wearable Devices and the Demonstration Report for Personal Wellness Management	Mr.Won-Seok Kang	Daegu Gyeongbuk Institute of Science & Technology, South Korea

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PO-028	Thermally-triggered Self-assembly of Elastin and Resilin Fusion Proteins	Ms. Aamna Basheer	Hanyang University, South Korea
PO-029	Anisotropic Bimetal Nanorod Clusters-Polymer Hybrid Nanostructures for Biophotonics	Ms. Eun Young Hwang	Hanyang University, South Korea
PO-030	Fluorescence Detection Device Using Smart Phone Camera for Point-of-care Testing (POCT)	Dr. Kook-Nyung Lee	Korea Electronics Technology Institute, South Korea
PO-03 I	Concorrent Analysis of Biomarkers for Reliable Diagnostics of Oral Squamous Cell Carcinoma	Ms. Mingi Jung	Hanyang University, South Korea
PO-032	Theoretical Analysis of Optical Conveyor Belt with Plasmonic Nanodisk Array	Mr. Changhun Lee	Yonsei University, South Korea
PO-033	A SERS Based Lateral Flow Assay Biosensor for the Simultaneous Detection of Dual Nucleic Acids	Ms. Xiaokun Wang	Hanyang University, South Korea
PO-034	SERS-based Micro-droplet assays of Yersinia Pestis Fraction I Antigens Using Sequential Merging and Splitting	Mr. Namhyun Choi	Hanyang University, South Korea
PO-035	Development of Simple and Sensitive Colorimetric Sensor Array for Breathing Gas Diagnostics	Mr. SANDURU K THAMARAI	Gachon University, South Korea
PO-036	Simulation and Fabrication of Silicon Nitride Nanoantenna Metasurface	Mr. Jung-Woo Park	Korea Advanced Institute of Science and Technology, South Korea
PO-037	Feasibility Study Using Biomimetic Virus Based Colorimetric Sensor for Discrimination of Geographical Origins of Diverse Agricultural Products	Ms. Daun Seol	Hanyang University, South Korea
PO-038	Detection of Endocrine Disruptor by Colorimetric NanoAptasensor	Dr. Eun-Hee Lee	Ewha Womans University, South Korea
PO-039	Bio Sensing for Gray Leaf Spot Disease of Capsicum annum Leaves Using Optical Coherence Tomography	Ms. Hyojin Kim	Kyungpook National University, South Korea
PO-040	Controlled Synthesis of Asymmetric Bimetallic Nanoparticles	Ms. Eun Young Hwang	Hanyang University, South Korea
PO-041	Electrodeposition of Gold Nanodendrites on Three- dimensional Nickel Foam for SERS Substrate	Mr.Tung Duy Vu	Hanyang University, South Korea

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PO-042	Hydrophobic Coating of Cellulose Nanofiber-based Microchannels	Mr. Sungchul Shin	Seoul National University, South Korea
PO-043	Selective Monitoring of H ₂ O ₂ Release from a Mechanically Stimulated Single Hela Cell Using Prussian Blue Modified au Nanowire Electrode	Mr. Raekeun Gwak	Korea Advanced Institute of Science and Technology, South Korea
PO-044	Novel Wash-free On-chip Assay for the Detection of Prostate Cancer Marker Using SERS Spectroscopy	Mr. Ziyi Cheng	Hanyang University, South Korea
PO-045	Skin Optical Properties for Wearable Biometric Applications	Ms. Haena Kim	KETI (Korea Electronics Technology Institute), South Korea
PO-046	Field-portable Bufferless Gel Electrophoresis Chip for Rapid DNA Separation	Mr. Abdurazak Aman	Sungkyunkwan University, South Korea
PO-047	Phage Display Identification of Peptide Ligands and Their Immunodiagnostic Analysis Using SPR	Ms. Soi Yun	Hanyang University, South Korea
PO-048	Formation of the Multicellular Tumor Spheroids Using a Microfluidic Device	Dr. Sang Woo Lee	Asan Medial Center, South Korea
PO-049	Development of an LSPR-based Optical Fiber Aptasensor for in situ Measurement of OTA	Mr. Bobin Lee	Gwangju Institute of Science and Technology, South Korea
PO-050	Composite Nanostructures of Thermo-responsive Block Copolymer-grafted Graphene Oxides and Metallic Nanoparticles for Biophotonics	Mr. Hyunki Kang	Hanyang University, South Korea
PO-051	Enhanced Cell Attachment via Surface Collagen Treatment	Mr. Huy Phuoc Quang Nguyen	Gachon University, South Korea
PO-052	Linewidth Study of Gain Switched Wavelength-swept Laser	Mr. Gyeong Hun Kim	Pusan National University, South Korea
PO-053	Intravital Wide-area Imaging of Mammalian Deep Brain Tissue by Needle-shaped Side-view Confocal Endomicroscope	Ms. Eunji Kong	Korea Advanced Institute of Science and Technology, South Korea
PO-054	Forensic Phone:Age Estimation of a Bloodstain with Colorimetric Analysis Using a Smartphone	Mr. Joonchul Shin	Yonsei University, South Korea
PO-055	Investigation of Optical Processes in InGaN-Based Light-Emitting Diodes Using Electroreflectance and Photocurrent Spectroscopies	Mr. Gyeong Won Lee	Hanyang University, South Korea

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PO-056	Targeted Imaging of Ovarian Cancer Cells Using Anti- cancer Antigen 125 Aptamer	Mr. Gae Baik Kim	Hanyang University, South Korea
PO-057	A PTB to Measure Concentration of Salivary CRP Using Photothermal Effect	Mr. Seung Hyeon Lee	Yonsei University, South Korea
PO-058	Solid-state Dewetting of Concurrently Deposited Au-Ag Alloy Film for Visible Wavelength Plasmonic Resonance Tuning	Mr. Charles Hwang	Korea Advanced Institute of Science and Technology, South Korea
PO-059	Three-dimensional Structure of <i>Orientia Tsutsugamushi</i> in Human Eschar by High-voltage Electron Microscopy (HVEM)	Ms. Hyun-Joo Ro	Korea Basic Science Institute, South Korea
PO-060	Development of Paper-localized Surface Plasmon Resonance Sensing for Point-of-care Sensing	Ms. Su-ji Ha	Gwangju Institute of Science and Technology, South Korea
PO-061	Integration of Upright and Inverted Light Microscopes in a Scanning Electron Microscope	Dr. In-Yong Park	Korea Research Institute of Standard and Science, South Korea
PO-062	Polydimethylsiloxane (PDMS) Microchip Fabricated with Anodic Aluminum Oxide Substrate for On-chip PCR and Subsequent SERS-based DNA Detection	Mr. Buu Minh Tran	Gachon University, South Korea
PO-063	Multi-channel SPR Imaging System Based on Micro- mirror-based 3D Printing Technique	Ms. Jaeyeon Lee	Kyung Hee University, South Korea
PO-064	Silk Fibroin/Gelatin Methacrylate Composite Hydrogel as a 3D Printing Bio-Ink	Mr. Donghyeok Shin	Seoul National University, South Korea
PO-065	Enrichment and Photothermal Lysis of the Airborne Bacteria Using Herringbone Microfluidic Chip with Concanavalin A	Mr. Kirok Kwon	Yonsei University, South Korea
PO-066	Compactly Packaged Endomicroscopic Catheter Using an Electrothermal MEMS Fiber Scanner	Mr.Yeong-Hyeon Seo	Korea Advanced Institute of Science and Technology, South Korea
PO-067	SERS-based Lateral Flow Assay Sensor for Rapid and Sensitive Detection of Autoantibody against Citrullinated Peptide	Dr. Hyangah Chon	Hanyang University, South Korea
PO-068	Preparing Highly Luminescent Biocompatible Gold Nanoclusters via Surface Modification	Ms. Kyunglim Pyo	Yonsei University, South Korea
PO-069	Use of Peroxidase-Mimic Nanozymes for Colorimetric Immunoassays	Mr. Youngwon Ju	Kyung Hee University, South Korea

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PO-070	Precisely Temperature-Controllable Versatile Molds for 3D-Hierarchical Structure via Step and Repeat Process	Mr. Young Jin Jo	Sungkyunkwan University, South Korea
PO-071	Image of the Micro-Computed Tomography and Atomic-Force Microscopy of Bone in Ovariectomized Rats	Ms. Gyeong-Ji Kim	Sogang University, South Korea
PO-072	Systemic Cellular Delivery of Protein Nanoparticles Prevents Acetaminophen-induced Hepatotoxicity and Liver Injury	Dr. Min Sang Lee	Sungkyunkwan University, South Korea
PO-073	Electrochemical Deposition of Gold-platinum Alloy Nanoparticles on Single-walled Carbon Nanotube Films for Sensitive Hydroxylamine Detection	Dr. Yanfang Geng	Hanyang University, South Korea
PO-074	Tactile Sensing Signal Processing for Pressure and Temperature Sensing Process	Mr. Kyungsoo Kim	Daegu Gyeongbuk Institute of Science & Technology, South Korea
PO-075	Ultrastable-Stealth Large Gold Nanoparticles with DNA Directed Biological Functionality	Mr. Jun Hyuk Heo	Sungkyunkwan University, South Korea
PO-076	A Physically Transient Form of Highly Sensitive Biocompatible Dopamine Sensor	Mr. Hyun-Seung Kim	Korea University, South Korea
PO-077	Highly Sensitive SERS-based Lateral Flow Immunoassay for the Detection of TSH	Ms. Suji Choi	Hanyang University, South Korea
PO-078	Maskless Fabrication of Micro-photonic Device on an Optical Fiber Tip for Miniaturized All-fiber Probe	Mr. Jae-Beom Kim	Korea Advanced Institute of Science and Technology, South Korea
PO-079	Energy Transfer Sensitization in Fluorophore- conjugated Gold Nanoclusters	Ms. Sook Young Yoon	Yonsei University, South Korea
PO-080	Fabrication of Tapered Multimode Fiber Functionalized with Silane-PEG-Biotin for Protein-Avidin Detection	Mr. Mohd Azmir Mustapa	University of Putra Malaysia, Malaysia
PO-081	Plasmonic Aptasensor Coupled with Berberine as a Universal Platform for Ultrasensitive Detection of Small Molecules	Dr. Jin-Ho Park	APRI, South Korea
PO-082	Near-infrared Light Based Photothermal Stimulation of Cultured Neurons Using Gold Nanofilm Chip	Mr. Jeewoong Lee	Korea Advanced Institute of Science and Technology, South Korea
PO-083	Broadband Light Source of Plasmon-coupled CdSe Quantum Dots for Optical BioSensing	Mr. Quinton A. Rice	Hampton University, United States

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PO-084	A Microfluidic Platform with Au-Ag Bimetallic Nanoparticles for Continuous Electrochemical Detection of Hydrogen Peroxide	Ms. Euna Ko	Hanyang University, South Korea
PO-085	Use of SHG Microscopy for Detection of Microenvironment Deformation in Microscale by Using DVC	Mr.Yong Guk Kang	Korea University, South Korea
PO-086	Optical Frequency-domain Imaging (OFDI) Method Based Quantitative Evaluation of ex vivo Dental Caries	Mr. Ruchire Eranga Henry Wijesinghe	Kyungpook National University, South Korea
PO-087	3D Invasion Assay on Micropillar/Microwell Chip Platform for Targeted Cancer Drug Therapy	Ms. Lily M Park	Samsung Medical Center, South Korea
PO-088	A Droplet-based Microfluidic Device for SERS Detection of HBV DNA	Mr. Hao Chen	Hanyang University, South Korea
PO-089	Confocal Endomicroscopy Using High Resolution and High Frame Rate Lissajous Fiber Scanner	Ms. Kyungmin Hwang	Korea Advanced Institute of Science and Technology, South Korea
PO-090	Smart Endoscope System for Colon Cancer Treatment	Dr. Hyunjae Lee	Seoul National University, South Korea
PO-091	Intravital Imaging of the Hepatic Lipid Droplets in Nonalcoholic Fatty Liver Disease Mouse Model	Ms. Jieun Moon	Korea Advanced Institute of Science and Technology, South Korea
PO-092	Development of Surface-enhanced Raman Spectroscopy Biosensor Based on Periodic Nanopillar Arrays and Aperiodic Nanorods	Mr. Munsik Choi	Kyung Hee University, South Korea
PO-093	DNA Amplification and Subsequent Detection of PCR Amplicon on a Chip	Ms. OANH NGUYEN	Gachon University, South Korea
PO-094	Stimuli-responsive Self-assembly of Elastin-based Fusion Proteins with Helix Blocks for Injectable Hydrogels	Ms. Aamna Basheer	Hanyang University, South Korea
PO-095	Label-free Detection of Influenza Virus Using Biomimetic Nanopillar-based Biosensor	Mr.Wang Sik Lee	Korea Research Institute of Bioscience and Biotechnology, South Korea
PO-096	Central Processing of Odor Adaptation Revealed by Event-Related Potentials (ERP)	Mr. Jisub Bae	Daegu Gyeongbuk Institute of Science and Technology, South Korea
PO-097	DNA Binding Peptide Directed Synthesis of Continuous DNA Nanowires for Analysis of Large DNA Molecules by Scanning Electron Microscope	Mr. Kyung-il Kim	Sungkyunkwan University, South Korea

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PO-098	Real-time Detection of Aflatoxin B1 Using Portable SPR	Ms. Jeong Moon	Korea Research Institute of Bioscience and Biotechnology, South Korea
PO-099	On-the-spot Smartphone Imaging-based Label-free Dual Wavelength Fluorescent Biosensor with High Sensitivity and Accuracy	Mr.Won-il Lee	Sungkyunkwan University, South Korea
PO-100	A Label-free ZnO Nanorod Fluorescent Aptasensor for Optofluidic High-content Screening	Mr.Young Min Son	Sungkyunkwan University, South Korea
PO-101	Segmented Wave Analysis of Surface Plasmon Resonance on Curved Surface	Mr. Hyunwoong Lee	Yonsei University, South Korea
PO-102	A Facile SERS Based Strategy for DNA Methylation Detection	Dr.YANGLEI OU	Huazhong University of Science and Technology, China
PO-103	Precise Dissolving Rate Control of Bio-integrated Transient Electronics Via External Near-infrared Heating	Mr. Ju Seung Lee	Sungkyunkwan University, South Korea
PO-104	Magnetophoretic Detection to Confirm the Results with the Naked Eye	Mr.Younggeun Jo	Korea Advanced Institute of Science and Technology, South Korea
PO-105	Quantification of Lard in Animal Fat Product with Simple Calculation from Raman Spectroscopy	Mr. Juyong Lee	Gwangju Institute of Science and Technology, South Korea
PO-106	Sensitivity and Signal-to-Noise Ratio Enhanced Nanoscale Crack Sensor Controlling Crack Depth	Mr. Chanho Jeong	Sungkyunkwan University, South Korea
PO-107	Ultrafast Video Imaging of Cell Division from Zebrafish Egg Using Multimodal Microscopic System	Mr. Sung-Ho Lee	Yonsei University, South Korea
PO-108	Operating Mechanism of Carbon Nanotubes Coated Colloidal Sensors	Mr. Chi Ho Lee	Hanyang University, South Korea
PO-109	High-performance SERS Nanopillar Arrays for the Sensitive Detection of Food-borne Bacteria	Dr. Juhui Ko	Hanyang University, South Korea
PO-110	Incubation-free Electrochemical Immunosensor Using a Gold-nanocatalyst Label Mediating Outer-sphere-reaction-philic and Inner-sphere-reaction-philic Species	Mr. Cheolho Kang	Pusan National University, South Korea
PO-III	Detection of Protein Biomarkers in Patient Urine for Early Diagnosis of Prostate Cancer	Mr. Jaewon Choi	Korea Institute of Science and Technology, South Korea

ID	Title	Presenter	Affiliation
PO-112	Remarkable Persistence and Durability in Nanocrack Based Sensor via On-Demand Healing	Mr. Byeonghak Park	Sungkyunkwan University, South Korea
PO-113	Clustered Bimetallic Ag-Au-Ag Nanorods for Photonics-based Biosensor Development	Mr. Ahmed Ali	Hanyang University, South Korea
PO-114	Anisotropic Elastin-based Polypeptide Nanoparticles with Electric Dipolar Compartments for Drug Delivery	Mr. Jae Sang Lee	Hanyang University, South Korea
PO-115	Modification of Vibrational Raman Modes for Nanomechanical Biosensor	Mr. Quinton A. Rice	Hampton University, United States
PO-116	Stimuli-triggered Micelle Formation of Thermosensitive Fusion Polypeptides for Growth Factor Receptor Targeting	Ms. Minjung Kang	Hanyang University, South Korea
PO-117	Numerical Analysis of Neuronal Responses for One Photon Stimulation	Mr. Geonho Choi	Ulsan National Institute of Science and Technology, South Korea
PO-118	Identification of Squid Species by Melting Temperature Shifts on Fluorescence Melting Curve Analysis (FMCA) Using Single Dual-labeled LNA Probe	Mr. Ha Jeong Song	Hanyang University, South Korea
PO-119	Ultrasensitive Colon Cancer Biomarker Detection for Initial Diagnosis	Mr. Hyunwoo Son	Korea Institute of Science and Technology, South Korea
PO-120	Real-Time Imaging of Metabolic Reprogramming and Transcription Dynamics for Differentiation Response	Ms. Linglu Yi	Beijing University of Chemical Technology, China
PO-121	A 3D-printed Microfluidic Magnetic Preconcentrator for Bacterial Pathogen Detection System in Blood with an ATP Luminometer and Antibody-conjugated Magnetic Nanoparticles	Mr. Jin Yeop Lee	Sungkyunkwan University, South Korea
PO-122	Microfluidic Platform Embedded with a Hierarchical Carbon Nanotube Three-dimensional Network Structure for Cancer Biomarker Detection	Ms. Jinhee Shim	Hanyang University, South Korea
PO-123	Study on the Quality Evaluation of the Gene Recombinant Protein Drug Using Label-free Molecular Interaction Analyzer	Dr. Joung Hee Baek	Ministry of Food and Drug Safety, South Korea
PO-124	Multispectral Optical Properties of a Sliced Brain Tissue	Mr. Sungbea Ban	Ulsan National Institute of Science and Technology, South Korea

ID	Title	Presenter	Affiliation
PO-125	Injectable Hydrogels of Elastin-Calmodulin Fusion Proteins with Dynamic Property	Mr. Jae Sang Lee	Hanyang University, South Korea
PO-126	Cell Penetrating Peptide-elastin Multi-block Copolypeptides with Stimuli-responsiveness for Theranostics	Ms. Minjung Kang	Hanyang University, South Korea
PO-127	Electric-field Responsive Anisotropic Microparticles for Advance Drug Delivery Applications	Mr. Ahmed Ali	Hanyang University, South Korea
PO-128	Self-doped Polyaniline Multifunctional Optical Probes in Confined Nanostructure for pH Sensing	Dr.Yoochan Hong	Yonsei University, South Korea
PO-129	A Fiber Optic High-temperature Pressure Sensor	Mr. Shuo Zhang	Beijing Institute of Technology, China
PO-130	Synthesis and Liposome Delivery of 5,10,15,20- tetrakis(benzo[b]thiophene) Porphyrin as Photodynamic Therapy Agent against Breast Cancer Cells	Mr. Baskaran Purushothaman	Seoul National University, South Korea
PO-131	A Novel Insulin-mimetic and Anti-inflammatory Vanadyl-Schiff Base Complex and Its Application against Diabetes Using TIRF Microscope	Mr. Jungmi Lee	Seoul National University, South Korea