

Date : 12 Feb 2026

Session : Analytical Chemistry

Room : G7

Time	Presentation Code	Topic	Presenter	Section
14.30-14.55	AC-K-01	Enhancing Educational Quality of Organic Chemistry Laboratory: In-Class Characterization of Synthetic Compounds by College Students in General Organic Chemistry Laboratory with Ambient Ionization Mass Spectrometry	Prof. Jentaie Shiea	Oral 1A Chairman : Prof. Wenwan Zhong Co-Chair : Asst.Prof.Dr. Itthipon Jeerapan
14.55-15.15	AC-I-01	Machine learning and NIR spectroscopy for quality assurance of agricultural crops: Current limitations and solutions	Assoc.Prof.Dr. Sila Kittiwachana	
15.15-15.30	AC-O-01	Performance improvement of a portable NIR spectrometer for sweetness analysis of corn based on calibration transfer methods	Ms. Chevaporn Chudoung	
15.30-15.45	AC-O-02	Papain as a Model for Protease Activity detection using Microwave-Synthesized Fluorescent Carbon dots	Ms. Wannapa Phunswat	
15.45-16.00	AC-O-03	Development of a Low-Cost Open-Source Ion Mobility Spectrometry Platform with Integrated Flexible Drift Tube and Various Ionization Techniques for Pharmaceutical Analysis	Dr. Nattapong Chantipmanee	
16.00-16.10	Coffee Break			
16.10-16.25	AC-O-04	Design and invention of ultra-low reagent/sample optical sensors toward real-world green analytical applications	Assoc.Prof.Dr. Napaporn Youngvises	Oral 1B Chairman : Assoc.Prof. Duangjai Nacapricha Co-Chair : Dr. Nunnapus Laitip
16.25-16.40	AC-O-05	Engineered zero-valent iron sorbents for carbamate insecticide extraction	Dr. Prapha Arnnok	
16.40-16.55	AC-O-06	Polydopamine/Polyacrylic Acid-Coated Reed Diffuser Sticks: An Eco-Friendly Micro-Solid Phase Extractor for Antibiotics	Ms. Suwatchanee Maneeratanachot	

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16.55-17.10	AC-O-07	Green Peptide Extraction and Modification from Mulberry Leaves by Microwave-Assisted Enzymatic Hydrolysis	Ms. Titinun Ubolsaard	
17.10-17.25	AC-O-08	Development of method for Nickel (II) determination in water samples by cloud point extraction (CPE) with FAAS detection	Ms. Patthamaporn Inthamad	

Date : 12 Feb 2026				
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Time	Presentation Code	Topic	Presenter	Section
14.55-15.15	AC-I-02	Electrochemistry of laser-induced graphene electrodes with data-driven design for enhanced electrochemical sensing	Asst.Prof.Dr. Pumidech Puthongkham	Oral 1A Chairman : Assoc.Prof.Dr. Jaroon Jakmunee Co-Chair : Dr. Chawin Srisomwat
15.15-15.30	AC-O-09	A Next-Generation Instant-Use Electrochemical Platform for Field Detection of Hydrophobic and Water-Insoluble Analytes	Dr. Kanokwan Charoenkitamorn	
15.30-15.45	AC-O-10	Synergistic core-shell Au-PtNPs/g-C ₃ N ₄ heterostructure modified screen-printed carbon electrode for enhanced electrochemical detection of diclofenac in water samples	Ms. Piyathida Thaipukdee	
15.45-16.00	AC-O-11	Forensic applications of nanostructured screen-printed electrodes: Electrochemical and SERS-based approaches	Dr. Thinnapong Wongpakdee	
16.00-16.10	Coffee Break			
16.10-16.25	AC-O-12	Ultrasensitive and rapid detection of illicit Δ^9 -tetrahydrocannabinol using an immobilization-free aptamer based electroluminescent display	Dr. Chawin Srisomwat	Oral 1B Chairman : Assoc.Prof.Dr. Maliwan Amatatongchai Co-Chair : Assoc.Prof.Dr. Sila Kittiwachana

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Time	Presentation Code	Topic	Presenter	Section
16.25-16.40	AC-O-13	Functional Composite Ink Coupled with an Electropolymerized Dopamine Film for Simultaneous Determination of HVA and VMA	Ms. Ananyaporn Anekrattanasap	
16.40-16.55	AC-O-15	A green ratio derivative spectrophotometric method for determining dexamethasone sodium phosphate in extemporaneous eye drop formulations	Mr. Phatharaphisit Suphakijudomkarn	
16.55-17.10	AC-O-16	Label-free detection of parphenylenediamine (PPD) on Human Hair Samples using Droplet Stretching Assay	Prof. Naresh Kumar Mani	

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08.30-08.55	AC-K-02	Extracellular vesicle sub-populations as liquid biopsy biomarkers for early disease diagnosis	Prof. Wenwan Zhong	<p style="text-align: center;">Oral 2</p> <p style="text-align: center;">Chairman : Assoc.Prof.Dr. Katrin Loeschner</p> <p style="text-align: center;">Co-Chair : Dr. Kanokwan Charoenkitamorn</p>
08.55-09.15	AC-I-03	Design and development of novel capture receptors based on molecular imprinted polymer combined with aptamer (MIP-aptamer) for cancer biomarker sensing application	Assoc.Prof.Dr. Maliwan Amatatongchai	
09.15-09.30	AC-O-18	Smartphone-Assisted Green Pectin/BCG Film Sensor for GABA Detection	Ms. Rungthiwa Niamlaoong	
09.30-09.45	AC-O-19	Application of inductively coupled plasma mass spectrometry (ICP-MS) for investigation of nanoparticle interactions with clinically relevant compounds	Ms. Hathaichanok Karanasophonphun	
09.45-10.00	AC-O-20	Taylor Dispersion Analysis Based on Light Scattering for Sizing Non-UV Absorbing Nanoparticles	Mr. Supanut Prom-in	
10.00-14.30	Break			

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14.30-14.55	AC-K-03	Analytical readiness for nano-enabled food safety: The role of single particle ICP-MS	Assoc.Prof.Dr. Katrin Loeschner	Oral 3 Chairman : Prof. Jentaie Shiea Co-Chair : Asst.Prof.Dr. Pumidech Puthongkham
14.55-15.15	AC-O-25	Establishment of National Measurement Capability for Nanoparticle Number Concentration by spICP-MS: Participation in CCQM K166 Comparison	Dr. NUNNAPUS LAITIP	
15.10-15.25	AC-O-26	LC-MS identification of plastic monomer compositions in commercial resins used for 3D-printed denture fabrication	Dr. Pipob Suwanchaikasem	
15.25-15.40	AC-O-27	Analysis of metal-doped core/shell nanoplastics under environmental conditions for understanding their behavior and transformation	Mr. ITTIKORN PERMPOOL	

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08.55-09.15	AC-I-04	Innovations at the Forefront of the Global Future of On-Body and On-Demand Electrochemistry	Asst.Prof.Dr. Itthipon Jeerapan	Oral 2 Chairman : Assoc.Prof.Dr. Napaporn Youngvises Co-Chair : Dr. Nattapong Chantipmanee
09.15-09.30	AC-O-21	Innovative polymer-based electrochemical platform for detecting ESAT-6 in human blood for pulmonary tuberculosis diagnosis	Mr. Xiu-An Ye	
09.30-09.45	AC-O-22	A unified mismatch-driven DNA–metal-ion nanocomplex platform for electrochemical and colorimetric sensing of mpox virus	Dr. Abdulhadee Yakoh	
09.45-10.00	AC-O-23	Net-patterned electrodes for high-performance electrochemical detection of monkeypox virus	Dr. Wanwisa Deenin	
10.00-10.15	AC-O-24	Electrochemical Immunosensing of Dengue Biomarkers Using An Ionic Liquid–Graphene Electrode	Ms. Chanakarn Sangsum	

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Presentation Code	Topic	Presenter
AC-P-01	Method Validation for Determination of Mercury in Powdered Polyaluminium Chloride by Mercury Analyzer	Dr. Supanan Anuchai
AC-P-02	Using flow field-flow fractionation and single particle ICP-MS for investigation of nanoparticles transformation under in vitro gastrointestinal conditions	Mr. Thanakit Kongngam
AC-P-03	Development of ¹⁹ F NMR-based sensor with an intramolecular internal standard strategy for metal ions detection	Mr. MYO NAING WIN
AC-P-04	Method validation for determination of Mercury by Flow Injection Cold Vapor Atomic Absorption Spectrometry	Ms. Waramporn Boonyaporn
AC-P-05	Method validation for determination of Iron and Zinc in Drinking water by Flame atomic absorption spectrophotometer	Ms. Supavadee Suriyamat
AC-P-06	Miniaturized Microwell Titration for Rapid Determination of Titratable Acidity in Beverages	Ms. PHATCHANAMON JANTIVAS
AC-P-07	Semi-quantitative Determination of Iodate in Iodized Salt by a Rapid Microwell Redox Titration Platform	Ms. Tanaporn Sribunpeng
AC-P-08	Development of immunosensor for detection of neomycin using gold nanoparticles	Ms. Jiratha Rongnacorn
AC-P-10	Development of a Portable Sensor Device for Rapid Methanol Detection in Alcoholic Beverages	Ms. Luksika Janchai
AC-P-11	Detection of Restricted Substances in Cosmetics Using a Custom-Built Low-Temperature Plasma Coupled Ion Mobility Spectroscopy (LTP-IMS) System	Ms. Yada Phoomjun
AC-P-14	Development of an automated sequential injection system for total protein determination in whey protein using bicinchoninic acid assay	Mr. Rattiwat Kamta
AC-P-15	Preliminary Optical Characterization of a Paired Emitter-Detector Diode (PEDD) Platform for Future Sulfur Monitoring in Petroleum Fuels	Ms. Yada Kaewphumhae

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Presentation Code	Topic	Presenter
AC-P-16	Cu/Ag Nanocluster-Derived Nanozyme for Real-Time Salivary α -Amylase Detection in Stress Screening	Dr. Siraprapa Boobphahom
AC-P-17	A Low-Cost Paper-Based Tool for Field Screening of Aflatoxin B1 and Ochratoxin A	Ms. Ploychaya Chuchuaysuwan
AC-P-18	Colorimetric paper-based device for corticosteroids detection in cosmetic products	Dr. Atchara Lomae
AC-P-20	Flow injection amperometric sensors for rapid and sensitive detection of uric acid	Assoc.Prof.Dr. Jaroon Jakmunee
AC-P-22	Development of a Low-Cost Copper Tape Electrochemical Sensor for Nitrate Detection	Mr. Sorrawich Kanchanangkoonphan
AC-P-23	Hg(II) Detection in Simulated Seawater Using a Ring-Disk Gold Electrode	Ms. Papitchaya Buakaew
AC-P-24	Determination of Nitrite Content in Plasma-Activated Water using Flow Injection Analysis with Amperometric Detection	Ms. Songporn Thipprasert
AC-P-26	Determination of potassium, sodium and total alkalies in portland cement, fly ash, admixtures and water for concrete by a simple flow injection flame-photometric system	Ms. Chanakarn Chucheepchuenkamol
AC-P-27	Synthesis of Fluorescent Carbon Dot from Cassava Peel for Visualization of Latent Fingerprint	Mr. Chanathip Amonthamsatid
AC-P-28	Origami paper-based analytical device for semi-quantitative endpoint detection via spot counting in titrimetric analysis	Ms. Anongnad Teprak
AC-P-29	Fingernail Sensor-Based Dip-Type μ PAD for On-Site Colorimetric Detection of γ -Hydroxybutyric Acid in Drinks	Dr. Kanjana Kunpatee
AC-P-30	A paper device for determination of hydrogen sulfide based on fluorescence quenching of gold nanoclusters-immobilized cellulose nanofibrils nanocomposite film	Asst.Prof.Dr. Nathawut Choengchan

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AC-P-31	A stacking paper-based analytical device for smartphone-based colorimetric speciation and simultaneous determination of iron in waters	Mr. Surachet Thongchan
AC-P-32	The test kit for the determination of antioxidant activity by measuring the distance on paper in samples	Mr. Elarun Sapkanjana
AC-P-33	Distance-based μ PADs with in-situ headspace gas diffusion for direct quantification of volatile acid-base analytes	Dr. Thitaporn Sonsa-ard
AC-P-34	Evaluation of the extraction techniques and analysis of essential oils from <i>M. koenigii</i> using GC-MS	Dr. Hogantharanni Govender
AC-P-35	Analysis of Antidepressants in Urine Using Three-Liquid-Phase Extraction Coupled with Gas Chromatography	Ms. Krittaya Asunee Na Ayuthaya
AC-P-36	Three-Liquid-Phase Extraction of Some Key Active Substances in Coffee	Ms. Supisara Thongchai
AC-P-38	Electro colorimetry gel-based sensor for drug screening	Mr. Abdulsalam kabiru saidu
AC-P-39	A melamine sponge incorporated with MIL-125 based stir bar sorptive adsorbent for the extraction of estrogens in milk samples	Ms. Nurhasima Phirisi
AC-P-40	A composite adsorbent of cotton fibers coated with chitosan adhesives incorporating Zr-MOF for the extraction and determination of parabens	Ms. Worapa Rittawa
AC-P-41	Vortex-assisted magnetic dispersive solid-phase microextraction of phenylurea herbicides using MOF-based adsorbent	Ms. Suppawan Sillapawisut
AC-P-42	Synthesis and Spectroscopic Characterization of a Thymol-Based Deep Eutectic Solvent for Green Analytical Applications	Ms. Nalinee Taweetanawikai

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AC-P-43	Quantitative analysis of cadmium in durian using digital image colorimetry compared with UV-Visible spectrophotometry	Assoc.Prof. Prinya Masawat
AC-P-44	Supramolecular solvent-assisted Cloud Point Extraction for Cadmium Determination in Water and Tea samples by FAAS	Assoc.Prof.Dr. Wipharat Chaiyasith
AC-P-45	Effective Pesticide Extraction in Water using Polystyrene-Fatty Acid Coated Popsicle Stick Sorbent	Mr. Poomrapee Panmaung
AC-P-46	Oil Palm Frond Fiber: A Natural Micro-SPE Sorbent for Phthalate Ester Extraction in Packaged Baby Food	Ms. Sadanan Muengsong
AC-P-47	Natural Pineapple Leaf Fiber as an Efficient Sorbent for PAHs in Grilled Food Samples	Ms. Satanun Peashawat
AC-P-48	Multivariate optimization for vortex-assisted dispersive liquid-liquid microextraction using solidified floating organic drop for nickel determination in water and food samples by FAAS	Ms. Kuanjira Rattakham
AC-P-49	A magnetic chiral adsorbent, Fe ₃ O ₄ , functionalized for enantio- and magnetic separation of the aspartic acid methyl ester racemate with amino glutarimide derivatives	Ms. Varaporn Paradamit
AC-P-50	Composite monolith in pipette tip for micro-solid phase extraction of neuroendocrine biomarkers followed by LC-MS	Ms. Rawisara Woensanthia

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Presentation Code	Topic	Presenter
AC-P-51	Decontamination of bisphenol A from water samples using magnetite chitosan bead adsorbent	Ms. Nurma Sulaiman
AC-P-52	Development of Smartphone-Based TLC Sensor for Military Jet Fuel Degradation Analysis	Palathip Kakanopas

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Presentation Code	Topic	Presenter
AC-P-53	Optimization of Gas Chromatography-Flame Ionization Detector (GC-FID) for Alcohol Determination in Alcoholic Beverages	Mr. Pongpet Thongsepee
AC-P-54	Chemical and Physical Analysis of Kratom Leaf Extracts Encapsulated Nanoparticles for Development of Industrial Standard Draft	Ms. Jurairat Madayang
AC-P-55	Application of the CIE Colorimetric System for Monitoring the Cleaning Efficiency of Animal Glue on Artworks	Ms. Kunthida Saeli
AC-P-56	Determination of Boron in Carbon and Low-alloy Steel with Spark Atomic Emission Spectrometer	Mr. Veerapat Ramanee
AC-P-57	Development of a colorimetric sensor for hexavalent chromium (Cr(VI)) based on shape transformation of silver nanoprism	Dr. Saowanee Toonchue
AC-P-58	Ratio fluorescence sensor of molecular imprinted polymer integrated with NiCo-nanoflowers and quantum dots for the determination of pesticides	Ms. Irin Prasertvetchatont
AC-P-59	A ratiometric fluorescence sensor based on quantum dots embedded in selective polymer for the determination of isoproturon	Ms. Konchanok Sudjan
AC-P-60	A paper-based molecularly imprinted fluorescent sensor integrating quantum dots and metal-organic framework for the determination of triazine herbicide	Mr. Noppanut Longnapa
AC-P-61	A ratiometric fluorescence sensor using a molecularly imprinted polymer and metal-organic framework for the determination of propazine	Ms. Chonthicha Buachumthamrongsuk
AC-P-62	Facile and sensitive detection of lead (II) in water based on aggregation of tannic acid stabilized silver nanoparticle	Ms. Phetradar Jindaphet

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Presentation Code	Topic	Presenter
AC-P-63	Development of a Traceable Analytical Method for Atmospheric CO ₂ Quantification Using FT-IR Spectroscopy	Dr. Kanokrat Charoenpornpukdee
AC-P-64	Fluorescence-Based Visualization of Microplastics Using Nile Red Staining	Ms. Chanya Chaloeipoj
AC-P-65	One-Pot Synthesis of Multi-Branched Gold Nanostars for Plasmonic Sensing	Ms. Saranya Nirathut
AC-P-66	Authentication and Quantification of Natural Indigo Paste for Standard Development	Ms. THIRADA SUKTHAM
AC-P-67	Real-time wastewater H ₂ S monitoring using a miniaturized electrochemical sensor module	Ms. Chinnawee Viwattanakul
AC-P-68	Portable Electrochemical Sensor for the Rapid Detection of 4-Methylbenzylidene Camphor (4-MBC) using Anodically Pretreated Screen-Printed Graphene Electrodes	Mr. Passakorn kulkua
AC-P-69	Development of molecularly imprinted nanocomposite electrochemical sensor for norfloxacin detection	Ms. Thitima Thatujirangkul
AC-P-70	Development of an Integrated Electrochemical-Microfluidic Platform for Lactose Detection	Ms. Supawadee Supanirat
AC-P-71	Ready-to-use serotonin sensor using polyacrylamide gel electrolyte integrated with WS ₂ /MoS ₂ nanocomposite modified screen-printed graphene electrode	Ms. Chutimananta Tungpituckpong
AC-P-72	Distance-based analytical device for the simultaneous determination of thiocyanate and nicotine in salivary of tobacco smokers	Ms. Pattarawee Somboonyookamol
AC-P-73	A novel biosensing platform for glucose and lactate detection using Prussian Blue–poly(3,4-ethylenedioxythiophene)–gold nanoparticles nanocomposite and 3D nitrogen-doped graphene aerogel	Ms. Supapich Rompotong
AC-P-74	An origami-inspired electrochemical paper-based aptasensor for neuropeptide Y detection	Mrs. Sirajit Rayanasukha

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Presentation Code	Topic	Presenter
AC-P-75	An electrochemical sensor based on ZIF-67 and copper oxide for the determination of tetracycline in pharmaceutical samples	Ms. Pattanan Chantapim
AC-P-76	Highly Sensitive Electrochemical Sensor for the Amitraz Detection based on Perylene Tetracarboxylic Acid/Mesoporous Carbon/Nafion Modified Electrode	Asst.Prof.Dr. preeyaporn reanpang
AC-P-77	AN ELECTROCHEMICAL APTASENSOR FOR CORTISOL DETECTION BASED ON DNAZYME SIGNAL AMPLIFICATION AND HAIRPIN APTAMER STRATEGY	Mr. Passakorn Pomngoen
AC-P-78	Simultaneous electrochemical determination of Pb(II) and Cd(II) using metal nanoparticle/MWCNTs-modified screen-printed carbon electrode.	Ms. Nattavipa Chuekhum
AC-P-79	Three-dimensional porous Au@Cu bimetallic nanostructure for nonenzymatic electrochemical glucose sensing	Ms. Natha Nontipichet
AC-P-80	A low-cost gold leaf electrochemical sensor for detecting formaldehyde adulteration in food	Mr. Supakron Kittikomoldej
AC-P-81	Determination of Available Soil Nitrogen Using Flow Injection Conductometry Coupled with Column Extraction	Dr. Priyapan Posri
AC-P-82	Microwell Plate with Headspace Tape-Based Colorimetric Assay for Nitrite Detection	Ms. Pichayaporn Nuihuaykaew
AC-P-83	Preliminary Study of Closed-Bipolar Electrochemiluminescence for Indirect Iron(III) Detection	Ms. Supharada Phokhabut
AC-P-84	Bismuth-Modified Stainless Steel Ring Electrodes as Economic Tools for Anodic Stripping Voltammetry of Heavy Metals	Mr. Hilmee Abdullah
AC-P-85	A sensitive electrochemical sensor for thiocyanate based on a modified screen-printed carbon electrode	Asst.Prof.Dr. Supada Khonyoung

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Presentation Code	Topic	Presenter
AC-P-86	Electrochemical Sensing of Glutathione via Thiol–Metal Interaction at Cu(II)@MIL-100(Fe) Modified Electrodes	Ms. Chanida Jakkrawhad
AC-P-87	Electrochemical Halogenation and Layer Exfoliation of Copper Phthalocyanine for Flexible Humidity Sensors	Ms. Busarakham Ngokpho
AC-P-88	Development of gold-coated screen-printed carbon electrode for voltammetric determination of cadmium	Dr. Chidkamon Thunkhamrak
AC-P-89	Flow-Based Anodic Stripping Voltammetric Detection of Hg(II) Using a Gold-Leaf Sensor	Ms. Monarada Panuwatsuk
AC-P-90	Portable Colorimetric μ PAD Integrated with 3D-Printed Microchannels for Forensic Gunshot Residue Analysis	Ms. Piyapa Junmon
AC-P-91	A simple extraction procedure and a flow injection amperometric system for determination of phosphorus in soil	Dr. Tharinee Sridara
AC-P-92	LC-MS/MS based determination of primary aromatic amines in food contact materials for food safety assessment	Dr. JUTATHIP LAPVIBOONSUK
AC-P-93	Method Development of nitrosamines determination in processed meat products by gas chromatography - mass spectrometry	Ms. Issara Petyim
AC-P-94	A Comprehensive Investigation of PFAS Contamination in Food Contact Materials, Paper Products, and Water: A Case Study	Dr. Savarin Sinaviwat
AC-P-95	Rapid detection of Infectious Spleen and Kidney Necrosis Virus (ISKNV) using lateral flow immunoassay	Ms. Kwanchanok Wajasen
AC-P-96	Enzymatic Modification of Leaf Waste-Derived Peptides Using Protease Enzymes	Ms. Nahathai Paenthong
AC-P-97	Dual applications of protein–polyphenol interactions: catechin–papain complex for biosensing and meat tenderization	Asst.Prof.Dr. Nichanun Sirasunthorn

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AC-P-98	Application of hyperspectral NIR imaging for prediction of total soluble solids (TSS) in sweet corn	Dr. Sujitra Funsueb
AC-P-99	Chemometric-Enhanced Electrochemical Sensor for Quantitative Determination of Sulfite Preservatives	Dr. Sakunna Wongsaiapun
AC-P-100	Data Wrangling for Gamma Spectroscopy Report File	Ms. Kalaya Changkrueng