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MSB 2026

Int'l Symposium on Microscale Separations & Bioanalysis

May 10-13, 2026
Daejeon, Korea

공동주최

사단법인 한국분석과학회 THE KOREAN SOCIETY OF ANALYTICAL SCIENCES

충남대학교 Chungnam National University

협찬

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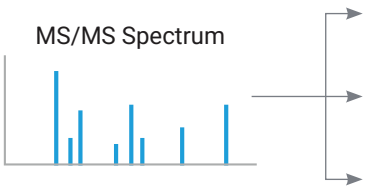
Enhancing Unknown Identification with MH Explorer and Complimentary SIRIUS with CSI:FingerID

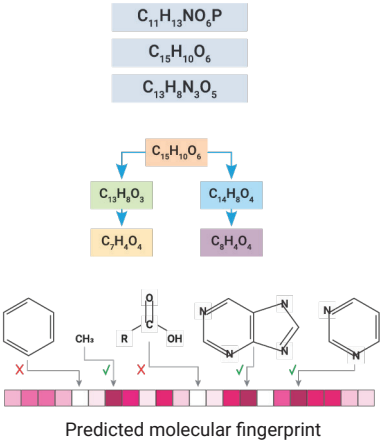
Identification without reference to spectrum or RT information

Expand your identification workflows using SIRIUS with CSI:FingerID, an advanced AI-based tool designed to unlock the full potential of your mass spectrometry data. CSI:FingerID leverages deep kernel learning and supervised learning models to predict structural features (molecular fingerprints) of unknowns from high-resolution tandem mass spectra. This enables a direct correlation between spectra and molecular structures. Unlike traditional spectral library searches that are limited, CSI:FingerID expands unknown identification by leveraging extensive structural databases. Agilent has contributed more than 10,000 spectra to train the AI models behind CSI:FingerID.

Predicting the molecular fingerprint



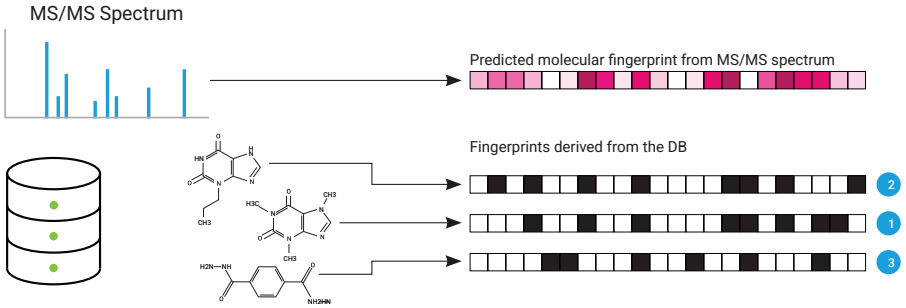
1. **Molecular formula (MF) generation**
2. **MF annotation and ranking**
3. **AI-based "fingerprint" (vector) prediction**



Predicted molecular fingerprint

Molecular formulas are generated from high-resolution unknown MS/MS spectrum using either de novo, database-restricted (e.g., PubChem), or bottom-up strategies. A molecular "fingerprint" (vector) is predicted for each candidate structure using advanced AI algorithms.

Identification without reference spectra



The predicted molecular fingerprint of the unknown is compared to the molecular fingerprints of structures derived from the structural DB, ranking candidates to identify the unknown.

CSI:FingerID is consistently among top performers in the prestigious annual Critical Assessment of Small Molecule Identification (CASMI) contest delivering automatic, fast, and superior identification of true unknowns.

SIRIUS, hosted by Bright Giant, also includes CANOPUS which predicts compound classes from the molecular fingerprint predicted by CSI:FingerID without any database search involved.

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Trusted Answers

MSB 2026 Program Book

Contents

Dear Colleagues,

It is our great pleasure to invite you to the 42nd International Symposium on Microscale Separations and Bioanalysis (MSB 2026), which will be held from May 10 to 13, 2026, at Chungnam National University in Daejeon, Korea.

MSB has long served as a premier forum for scientists, engineers, and innovators dedicated to advancing analytical separation science. MSB 2026 will continue this tradition by providing a dynamic platform for exploring fundamental principles, breakthrough microscale technologies, and emerging directions across the full breadth of bioanalytical science.

The symposium will gather researchers from around the world to discuss current scientific challenges, unmet technological needs, and future goals spanning **capillary electrophoresis, liquid chromatography, micro- and nanofluidics, mass spectrometry, single-cell analysis, metabolomics, proteomics, nucleic acids, and more**.

Within this broad scientific landscape, MSB 2026 will also place special emphasis on the rapidly advancing area of **glycan analysis**, widely regarded as one of the most demanding and complex frontiers in modern analytical chemistry. The structural diversity of glycans, their subtle isomerism, and their critical biological functions continue to drive innovation in high-resolution separations, multidimensional workflows, and integrative multi-omics strategies. This focused theme will enrich, not replace, the diverse scientific topics traditionally featured at MSB.

Through plenary lectures, keynotes, oral and poster presentations, and opportunities for collaboration, MSB 2026 aims to foster scientific excellence, inspire new ideas, and strengthen connections across our global community.

We look forward to welcoming you to Daejeon—Korea's leading hub of science and technology—and to sharing an exciting and memorable symposium experience with you.

With warm regards,

Doo Soo Chung
Chair, MSB 2026
Department of Chemistry
Seoul National University

MSB 2026 Scientific Committee

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MSB 2026 Local Organizing Committee

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Youjin Seo	-	KIT	Youjin.seo@kitox.re.kr	

MSB 2026 Scientific Topics

- Advances in Capillary electrophoresis and Liquid Chromatography Separations
- Artificial Intelligence and Machine Learning in Bioanalysis
- Biosensors and Point-of-Care Bioanalysis
- Coupling of Separation and Mass Spectrometry
- Environmental Analysis
- Food Analysis
- Glycan Analysis
- Micro and Nanofluidics in Bioanalysis
- Nanotechnology in Bioanalysis
- New Trends in Mass Spectrometry Analysis
- Novel Instrumentation in Chemical Separations
- Pharmaceutical Analysis
- Principle of Separation Science
- Proteomics/Metabolomics/Glycomics
- Sample Preparation for Bioanalysis

2026 MSB Plenary speakers

PLENARY SPEAKERS

Frantisek Foret
Institute of Analytical Chemistry
Czech Republic

Carlito Lebrilla
University of California, Davis
USA

Nianqiang Wu
University of Massachusetts
USA

Hyun Joo An
Chungnam National University
Korea

Akihide Hibara
Institute of Science Tokyo
Japan

Presentation time

Plenary: 40 min, Keynote: 25 min, Invited: 20 min, Oral: 10 min, Flash Talk: 3 min

Day 1	**10 May (Sun)**		
12:00	**Registration (Baekma Hall)**		
13:00-14:30	**Workshop 1 (3 h)** **Computational Modeling of Electrokinetic Separations by COMSOL Software**	**Workshop 2 (1.5 h)** **Korean Hangul in 20 minutes**	**Workshop 3 (1.5 h)** **Gas Chromatography**
14:30-15:00		Coffee Break	
15:00-16:30		**Workshop 4 (1.5 h)** **Korean Culture**	**Workshop 5 (1.5 h)** **Liquid Chromatography**
16:30-16:50	Opening Ceremony (Baekma Hall)		
16:50-17:30	**Plenary Lecture I: Carlito Lebrilla (University of California, Davis)** **Chair: Hyun Joo An (Chungnam National University)**		
17:30-17:35	**SCIEX Award Introduction**		
17:35-18:15	**SCIEX Award: Alexander Ivanov (Northeastern University)** **Chair: Rawi Ramautar (Leiden Academic Centerfor Drug Research)**		
18:20-20:00	Welcome Reception (Inno-Factory)		

Day 2	**11 May (Mon)**		
09:00-9:40	**Plenary Lecture II: Frantisek Foret (Institute of Analytical Chemistry)** **Chair: Doo Soo Chung (Seoul National University)**		
09:50-11:40	**Session 1** **Separation I**	**Session 2** **Biomolecules in Cells**	**Session 3** **Glycan analysis**
	Chair: Bi-Feng Liu **(Huazhong U. of Science & Technology)** **Hugh I. Kim (Korea University)**	**Chair: Muhammad Shiddiky** **(Charles Sturt University)** **Dukjin Kang (KRISS)**	**Chair: Atit Silsirivanit** **(Khon Kaen University)** **Jong-Seo Kim** **(Seoul National University)**
	(KL) David Chen (University of British Columbia)	(KL) Alexandra Ros (Arizona State University)	(KL) Chi-Kung Ni (Academia Sinica)
	(KL) Andras Guttman (University of Pannonia)	(KL) Aaron Wheeler (University of Toronto)	(KL) Jaehan Kim (Chungnam National University)
	(KL) Hervé Cottet (Institut des Biomolécules Max Mousseron)	(KL) Dukjin Kang (KRISS)	(IN) Boyoung Lee (IBS)
		(IN) Il-Hwan Kim (KRISS)	(OR) Chenchen Liu (Kyushu University)
			(OL) Rebeka Török (University of Pannonia)
11:40-13:00	Lunch (Youngtop Hall)		
13:00-14:00	**Flash Talks (Baekma Hall)**		
14:00-15:50	**Session 4** **Advanced glycoproteomics**	**Session 5** **Instrumentation**	**Session 6** **Diagnosis**
	Chair: Andras Guttman **(University of Pannonia)** **Boyoung Lee (IBS)**	**Chair: Haiyang Li** **(Dalian Institute of Chemical Physics)** **Jongcheol Seo (POSTECH)**	**Chair: David Chen** **(University of British Columbia)** **Je Hyun Bae** **(Chungnam National University)**
	(KL) Jae Young Kim (Gachon University)	(KL) Hyomin Lee (POSTECH)	(KL) Muhammad Shiddiky (Charles Sturt University)

	(KL) Atit Silsirivanit (Khon Kaen University)	(KL) Chang Min Choi (KBSI)	(KL) Bi-Feng Liu (Huazhong University of Science and Technology)
	(IN) In-Seok Yeo (Pai Chai University)	(KL) Jongcheol Seo (POSTECH)	(IN) Hugh I. Kim (Korea University)
	(IN) Unyong Kim (Chung-Ang University)	(IN) Seunggyu Kim (Korea University)	(IN) Je Hyun Bae (Chungnam National University)
			(OR) Vladimir Sladkov (JCLab/CNRS)
15:50-16:30	Coffee Break & Corporate Seminar (Daedeok Hall)		
16:30-18:20	**Session 7 Microfluidics I**	**Session 8 Sample Preparation I**	**Session 9 Hyphenation with Mass Spectrometry**
	Chair: Hong Heng See (University of Technology Malaysia) Nae Yoon Lee (Gachon University)	**Chair: Gábor Járvás (University of Pannonia) Sunyoung Bae (Seoul Women's University)**	**Chair: Karen Waldron (Université de Montréal) Chang Min Choi (KBSI)**
	(KL) Manabu Tokeshi (Hokkaido University)	(KL) Yong Seok Choi (Dankook University)	(KL) Victor González-Ruiz (CEU-San Pablo University)
	(IN) Youngung Seok (Chonnam National University)	(KL) Sunyoung Bae (Seoul Women's University)	(KL) Haiyang Li (Dalian Institute of Chemical Physics)
	(OR) Dariush Bahrami Eisaabadi (Vrije Universiteit)	(KL) Sureyya Ozcan (METU)	(KL) Eric Corley (West Virginia University)
		(KL) In-Hyeok Park (Chungnam National University)	(OR) Linnan Li (Shanghai U. of Traditional Chinese Medicine)
			(OR) Miguel Fernandez Garcia (Universidad San Pablo-CEU)

Day 3	**12 May (Tue)**		
09:00-9:40	**Plenary Lecture III: Akihide Hibara (Institute of Science Tokyo) Chair: Hye Jin Lee (Kyungpook National University)**		
09:50-11:40	**Session 10 Bioanalysis**	**Session 11 Microfluidics II**	**Session 12 Omics I**
	Chair: Tomasz Baczek (Medical University of Gdansk) Yun Pyo Kang (Seoul National University)	**Chair: Takayuki Kawai (Kyushu University) Joonseok Lee (Hanyang University)**	**Chair: Alexandra Ros (Arizona State University) Jae-Young Kim (Chungnam National University)**
	(KL) Jong-Seo Kim (Seoul National University)	(KL) Sang Kyung Kim (KIST)	(KL) Ryan Kelley (Brigham Young University)
	(KL) Dong-Kyu Lee (Chung-Ang University)	(KL) Govert Somsen (Vrije Universiteit Amsterdam)	(KL) Jin Young Kim (KBSI)
	(KL) Jae Kyoo Lee (Seoul National University)	(OR) Leilei Shi (College of Charleston)	(KL) Jae-Young Kim (Chungnam National University)
	(IN) Yun Pyo Kang (Seoul National University)	(OR) Thi My Chi Nguyen (Chungnam National University)	(OR) Francisco Ruperez (Universidad San Pablo-CEU)
	(OR) Vitsarut Primpray (Chulalongkorn University)	(OR) Jisu Lim (Chungnam National University)	(OR) Sung-Jin Kim (Chungnam National University)
11:40-13:00	Lunch (Youngtop Hall)		
13:00-14:00	**Poster Session I (Odd-Numbered)**		
14:00-15:50	**Session 13 Biosensors and Point-of-Care Diagnosis**	**Session 14 Separation II**	**Session 15 Integrated Glycoanalytical Platforms**

	Chair: Govert Somsen (Vrije Universiteit Amsterdam) Hye Jin Lee (Kyungpook National University)	**Chair: Ryan Kelley (Brigham Young University) Tae-Young Kim (GIST)**	**Chair: Chi-Kung Ni (Academia Sinica, Taiwan) Jin Young Kim (KBSI)**
	(KL) Hisakage Funabashi (Hiroshima University)	(KL) Reine Nehmé (Université d'orléans)	(KL) Jana Lavicka (Czech Academy of Sciences)
	(KL) Yi-Lun Ying (Nanjing University)	(KL) Sunghwan Kim (Kyungpook National University)	(KL) Takayuki Kawai (Kyushu University)
	(KL) Yumi Yoshida (Kyoto Institute of Technology)	(KL) Tae-Young Kim (GIST)	(KL) Gábor Járvás (University of Pannonia)
	(KL) Seiya Tsujimura (University of Tsukuba)	(IN) Xiaohui Lin (Dalian University of Technology)	(OR) Ji Eun Park (Chungnam National University)
	(OR) Junhee Yu (Chungnam National University)		
15:50-16:30	Coffee Break & Corporate Seminar (Daedeok Hall)		
16:30-18:20	**Session 16 AI and Emerging Technology**	**Session 17 Food Analysis**	**Session 18 Environmental Analysis**
	Chair: Guowang Xu (Dalian Institute of Chemical Physics) Han Bin Oh (Sogang University)	**Chair: Sureyya Ozcan (METU) Sunghwan Kim (Kyungpook National University)**	**Chair: Victor González-Ruiz (CEU-San Pablo University) Kun Cho (KBSI)**
	(KL) Hyoung Seop Kim (National Institute of Environmental Research)	(KL) Byungjoo Kim (KRISS)	(KL) Jaehak Jung (KIAST)
	(KL) Han Bin Oh (Sogang University)	(KL) Cheong-Tae Kim (Nongshim)	(KL) Yun Gyong Ahn (KBSI)
	(KL) Dongha Shin (Inha University)	(IN) Hyung Min Kim (Chungnam National University)	(KL) Kun Cho (KBSI)
	(KL) Keunhong Jeong (Sogang University)	(OR) Mooseob Kim (Shanghai U. of Traditional Chinese Medicine)	(KL) Jaebeom Lee (Chungnam National University)
		(OR) Indramemdi Khoris (Chungnam National University)	(OR) Magdalena Andelini (University of Orleans)
19:00-21:00	Banquet (ICC Hotel)		

Day 4	**13 May (Wed)**		
9:00-9:40	**Plenary Lecture IV: Nianqiang Wu (University of Massachusetts) Chair: Manabu Tokeshi (Hokkaido University)**		
9:50-11:40	**Session 19 Sample Preparation II**	**Session 20 Omics II**	**Session 21 Separation III**
	Chair: Reine Nehmé (Université D'orléans) Jeongmi Lee (Sungkyunkwan University)	**Chair: Jana Lavicka (Institute of Analytical Chemistry) Min-Sik Kim (DGIST)**	**Chair: Xiaohui Lin (Dalian University of Technology) Jaebeom Lee (Chungnam National University)**
	(KL) Karen Waldron (Université de Montréal)	(KL) Guowang Xu (Dalian Institute of Chemical Physics)	(KL) Thanh Duc Mai (Université Paris-Saclay)
	(KL) Hong Heng See (University of Technology Malaysia)	(KL) Min-Sik Kim (DGIST)	(KL) Chengxi Cao (Shanghai jiao Tong University)
	(KL) Jeongmi Lee (Sungkyunkwan University)	(KL) Rawi Ramautar (Leiden Academic Center for Drug Research)	(KL) Myriam Taverna (Université Paris-Saclay)

	(KL) Tomasz Baczek (Medical University of Gdansk)	(IN) Youngshik Choe (Korea Brain Research Institute)	(OR) Seung-Hyun Oh (Chungnam National University)
11:40-13:00	Lunch (Daedeok Hall)		
13:00-14:00	**Poster Session II (Even-Numbered)**		
14:00-14:40	**Plenary Lecture V: Hyun Joo An (Chungnam National University)** **Chair: Frantisek Foret (Institute of Analytical Chemistry)**		
14:40-15:30	Closing Ceremony (Daedeok Hall, Lucky draw included)		

Program of MSB 2026

May 10~13, 2026, Chungnam National University, Daejeon, Korea

May 10, 2026 (Sunday)

	Workshop 1	
13:00-16:00	**Computational Modeling of Electrokinetic Separations by COMSOL Software** Bohuslav Gaš (Charles University)	
	Workshop 2 **Korean Language & Culture Experience**	
13:00-14:30	**First Step in Hangul**	
	Workshop 3	
13:00-14:30	**Gas Chromatography, from Beginner to Expert in 90 Minutes** Young In Chromass	
14:30-15:00	**Coffee break**	
	Workshop 4 **Korean Language & Culture Experience**	
15:00-16:30	**Korean Calligraphy & Culture**	
	Workshop 5	
15:00-16:30	**Basic Principles and Applications of Liquid Chromatography** Agilent	
16:30-16:50	**Opening Ceremony**	*Baekma Hall*
	Plenary Lecture I Chair: Hyun Joo An (Chungnam National University)	*Baekma Hall*
16:50-17:30	**Revealing Role of Glycans in Cell-Cell Interactions** Carlito Lebrilla (University of California, Davis)	
17:30-17:35	**SCIEX Award Introduction**	*Baekma Hall*
	SCIEX Award Chair: Rawi Ramautar (Leiden University)	*Baekma Hall*
17:35-18:15	**Ultralow Flow Separations Enhance MS Sensitivity for Diverse Molecular Modalities in Limited Biological Samples** Alexander Ivanov (Northeastern University)	
18:20-20:00	**Welcome Reception**	*Inno-Factory*

May 11, 2026 (Monday)

	Plenary Lecture II *Baekma Hall* Chair: Doo Soo Chung (Seoul National University)
09:00-09:40	**Epitachophoresis - Principles and Applications for DNA and Protein Concentration** Frantisek Foret (Institute of Analytical Chemistry)
	Separation I Chair: Bi-Feng Liu (Huazhong U. of Science & Technology) *Hall 1* Hugh I. Kim (Korea University)
09:50-10:15	**(KL) Capillary Electrophoresis Frontal Analysis for Affinity Evaluation of Biomolecules** David Chen (University of British Columbia)
10:15-10:40	**(KL) Quo Vadis Capillary Gel Electrophoresis** Andras Guttman (University of Pannonia)
10:40-11:05	**(KL) Understanding and Optimizing Separation Efficiency of Intact Proteins in CE and CE-MS** Hervé Cottet (Institut des Biomolécules Max Mousseron)
	Biomolecules in Cells Chair: Muhammad Shiddiky (Charles Sturt University) *Hall 2* Dukjin Kang (KRISS)
09:50-10:15	**(KL) Exploiting the Microenvironment for Bioanalysis** Alexandra Ros (Arizona State University)
10:15-10:40	**(KL) Digital Microfluidic Tools for Single-Cell-Omics Analysis** Aaron Wheeler (University of Toronto)
10:40-11:05	**(KL) Quantitative Proteomic Analysis of Cerebral Organoid-Derived Extracellular Vesicles to Underpin the Maturation of Organoids** Dukjin Kang (KRISS)
11:05-11:25	**(IN) Scrub Typhus Patient Immune System Recognizes Recombinant Proteins from the Disease Vector, Leptotrombidium Pallidum** Il-Hwan Kim (KRISS)
	Glycan Analysis Chair: Atit Silsirivanit (Khon Kaen University) *Hall 3* Jong-Seo Kim (Seoul National University)
09:50-10:15	**(KL) Structural Identification of Carbohydrate Isomers Using Logically Derived Sequence Tandem Mass Spectrometry** Chi-Kung Ni (Academia Sinica)
10:15-10:40	**(KL) Analysis of Human Milk Glycome** Jaehan Kim (Chungnam National University)
10:40-11:00	**(IN) Targeting Protein Sialylation in Depression: Mechanisms and Therapeutic Potential** Boyoung Lee (IBS)
11:00-11:10	**(OR) High-Recovery Glycan Analysis Enabled by Online Electrokinetic Desalting in Capillary Electrophoresis** Chenchen Liu (Kyushu University)
11:10-11:20	**(OR) AI-Supported Serum N-Glycan Profiling for Early Monitoring of Chemotherapy Efficacy in Lung Cancer** Rebeka Török (University of Pannonia)
11:40-13:00	**Lunch** *Youngtop Hall*
13:00-14:00	**Flash Talks** *Baekma Hall* Chair: Je Hyun Bae (Chungnam National University)
	Advanced Glycoproteomics Chair: Andras Guttman (University of Pannonia) *Hall 1* Boyoung Lee (IBS)
14:00-14:25	**(KL) Neu5Ac Overexpression on Gene-Edited Porcine RBCs: Implications for Siglec-1-Mediated Immune Recognition in Xenotransfusion** Jae Young Kim (Gachon University)
14:25-14:50	**(KL) Targeting Glycans for Diagnosis and Treatment of Human Diseases** Atit Silsirivanit (Khon Kaen University)

14:50-15:10	**(IN) Glycosylation Profiling and Purification of Serum Haptoglobin for Biomarker Applications** In-Seok Yeo (Pai Chai University)
15:10-15:30	**(IN) DeepY: Neural Network-Driven Similarity Assessment of Monoclonal Antibody Biosimilars** Unyong Kim (Chung-Ang University)
	Instrumentation Chairs: Haiyang Li (Dalian Institute of Chemical Physics) *Hall 2* Jongcheol Seo (POSTECH)
14:00-14:25	**(KL) Droplet Microfluidic Instrumentation for Compartmentalized Bioanalysis** Hyomin Lee (POSTECH)
14:25-14:50	**(KL) Domestic Development of a ToF-SIMS Platform for Spatial Separation-Enabled Imaging Mass Spectrometry of Organic Surface Molecules** Chang Min Choi (KBSI)
14:50-15:15	**(KL) Ion Mobility Spectrometry for the Structural Characterization of Biomolecules and Biomolecular Assemblies** Jongcheol Seo (POSTECH)
15:15-15:35	**(IN) Beyond Microphysiological Systems: An In Vitro/In Silico Hybrid System for Predicting Subcutaneous Drug Transport** Seunggyu Kim (Korea University)
	Diagnosis Chairs: David Chen (University of British Columbia) *Hall 3* Je Hyun Bae (Chungnam National University)
14:00-14:25	**(KL) A Universal Device for Early, Rapid, and On-the-Go Molecular Diagnostics Across Fields** Muhammad Shiddiky (Charles Sturt University)
14:25-14:50	**(KL) Microfluidics Towards Exosomes Analysis and Applications to Cancer Diagnosis** Bi-Feng Liu (Huazhong University of Science and Technology)
14:50-15:10	**(IN) Study of Cancer Cell Plasticity Induced by Chemotherapeutic Stimulation** Hugh I. Kim (Korea University)
15:10-15:30	**(IN) Selective Electrochemical Reactions Enabled by Structure of Nanoporous Electrodes** Je Hyun Bae (Chungnam National University)
15:30-15:40	**(OR) Complexation of Tb(III) with Selected Hydroxamic Acids in Aqueous Solutions at Near-Physiological pH** Vladimir Sladkov (JCLab/CNRS)
15:50-16:30	**Coffee Break & Corporate Seminar** *Daedeok Hall*
	Microfluidics I Chair: Hong Heng See (University of Technology Malaysia) *Hall 1* Nae Yoon Lee (Gachon University)
16:30-16:55	**(KL) Paper-Based Microfluidic Platforms for Field Detection of Chemical Threats** Manabu Tokeshi (Hokkaido University)
16:55-17:15	**(IN) Microfluidic Integration for Point-of-Care Molecular Diagnostics** Youngung Seok (Chonnam National University)
17:15-17:25	**(OR) Polymeric AC-Electrokinetic Microfluidic Chip for Vortex-Enhanced Liquid Chromatography** Dariush Bahrami Eisaabadi (Vrije Universiteit)
	Sample Preparation I Chairs: Gábor Járvás (University of Pannonia) *Hall 2* Sunyoung Bae (Seoul Women's University)
16:30-16:55	**(KL) Matrix-Aware Sample Preparation Strategy across Matrix Complexity: From Plasma to Complex Food and Herbal Matrices** Yong Seok Choi (Dankook University)
16:55-17:20	**(KL) Strategic Sample Preparation for Revolutionizing Human Skin Volatilomics** Sunyoung Bae (Seoul Women's University)
17:20-17:45	**(KL) Beyond the Spotlight: Navigating the Limits of Proteomic Analysis** Sureyya Ozcan (METU)

17:45-18:10	**(KL) Preparation, Photoreactivity, and Structural Modulation of Metal–Organic Frameworks Based on Symmetric and Asymmetric Olefinic Ligands** In-Hyeok Park (Chungnam National University)
	Hyphenation with Mass Spectrometry Chairs: Karen Waldron (Université de Montréal) *Hall 3* Chang Min Choi (KBSI)
16:30-16:55	**(KL) Metabolomics and CE-MS: From a Couple's Fight To a Honeymoon** Victor González-Ruiz (CEU-San Pablo University)
16:55-17:20	**(KL) Rapid Determination of Intraoperative Blood Propofol/Cipofol Concentration by Dopant-Enhanced VUV Photoionization Ion Mobility Spectrometry** Haiyang Li (Dalian Institute of Chemical Physics)
17:20-17:45	**(KL) Microscale Separations Coupled to Mass spectrometry through Vibrating Sharp-Edge Spray Ionization** Eric Corley (West Virginia University)
17:45-17:55	**(OR) Innovative Ambient Ionization Mass Spectrometry Approaches for the Comprehensive Characterization of Natural Medicines** Linnan Li (Shanghai U. of Traditional Chinese Medicine)
17:55-18:05	**(OR) Benchmarking a Commercial Dielectric Barrier Discharge Ion Source in Bacterial Lipidomics** Miguel Fernandez Garcia (Universidad San Pablo-CEU)

May 12, 2026 (Tuesday)

	Plenary Lecture III *Baekma Hall* Chair: Hye Jin Lee (Kyungpook National University)
09:00-09:40	**Toward Screening of PFAS-Biomolecule Interactions: Chromatography with Sub-Nanolayer Fluoroalkyl-Silane Modification** Akihide Hibara (Institute of Science Tokyo)
	Bioanalysis Chair: Tomasz Baczek (Medical University of Gdansk) *Hall 1* Yun Pyo Kang (Seoul National University)
09:50-10:15	**(KL) Subcellular Spatial Proteomics by Super-Resolution Proximity Labeling** Jong-Seo Kim (Seoul National University)
10:15-10:40	**(KL) Single-Cell Imaging of Lipid Unsaturation via Nanoscale Secondary Ion Mass Spectrometry Palladium-Catalyzed Deuteration** Dong-Kyu Lee (Chung-Ang University)
10:40-11:05	**(KL) Microdroplet Based Mass Spectrometry: From Interfacial Chemistry to Advanced Molecular Analysis** Jae Kyoo Lee (Seoul National University)
11:05-11:25	**(IN) A Ubiquinol Quantification Method Based on an Isotope Correction Algorithm** Yun Pyo Kang (Seoul National University)
	Microfluidics II Chair: Takayuki Kawai (Kyushu University) *Hall 2* Joonseok Lee (Hanyang University)
09:50-10:15	**(KL) Bridging Solid and Liquid: Permeable Hydrogel Microparticles for Advanced Molecular Diagnostics** Sang Kyung Kim (KIST)
10:15-10:40	**(KL) Advancing Microfluidic Capillary Electrophoresis-Mass Spectrometry for Quality Assessment of Pharmaceutical Antibodies** Govert Somsen (Vrije Universiteit Amsterdam)
10:40-10:50	**(OR) Exploiting Fixture-induced Resonance for Enhanced Impedance Spectroscopy Sensitivity** Leilei Shi (College of Charleston)
10:50-11:00	**(OR) Sequence-Selective and Label-Dree DNA Sensing via Magnetoplasmonic Core-Satellite Nanostructures** Thi My Chi Nguyen (Chungnam National University)
11:00-11:10	**(OR) Di-Carboxylate Linker-Driven Structural Diversity and Solid-State Structural Conversion of Coordination Polymers** Jisu Lim (Chungnam National University)

	Omics I Chair: Alexandra Ros (Arizona State University) *Hall 3* Jae-Young Kim (Chungnam National University)
09:50-10:15	**(KL) Advanced Sample Preparation and Separations Drive Down the Cost of In-Depth Proteome Profiling to $10 per Sample** Ryan Kelley (Brigham Young University)
10:15-10:40	**(KL) LC-MS/MS Based Site Specific N-Glycopeptide Analysis for Clinical Scale Serum Glycoproteomics** Jin Young Kim (KBSI)
10:40-11:05	**(KL) System-Level Proteomic Profiling of MASTL-mediated Signaling in Gastric Cancer** Jae-Young Kim (Chungnam National University)
11:05-11:15	**(OR) Benchmarking Complementary MS Platforms for High-Coverage Profiling of the Polar Metabolome in Liver Tissue** Francisco Ruperez (Universidad San Pablo-CEU)
11:15-11:25	**(OR) Secretome Profiling to Elucidate MASTL Function in Gastric Cancer-associated Fibroblasts** Sung-Jin Kim (Chungnam National University)
11:40-13:00	**Lunch** *Youngtop Hall*
13:00-14:00	**Poster Session I (Odd-Numbered)**
	Biosensors and Point-of-Care Diagnosis Chair: Govert Somsen (Vrije Universiteit Amsterdam) *Hall 1* Hye Jin Lee (Kyungpook National University)
14:00-14:25	**(KL) Bioanalysis Based on a Homogeneous Assay Utilizing DNA Nanotweezers as Biosensing Molecules** Hisakage Funabashi (Hiroshima University)
14:25-14:50	**(KL) Nanopore Electrochemistry for Single Peptide Sensing** Yi-Lun Ying (Nanjing University)
14:50-15:15	**(KL) Electrolyte-Responsive Smart Liposomal Systems: A New Mechanistic Basis for Drug Delivery** Yumi Yoshida (Kyoto Institute of Technology)
15:15-15:40	**(KL) Designing Electrode Materials for Enzyme-Based Electrochemical Biosensors** Seiya Tsujimura (University of Tsukuba)
15:40-15:50	**(OR) Charge-Controlled Dopamine Detection Using SAM-Functionalized Nanoporous Gold** Junhee Yu (Chungnam National University)
	Separation II Chairs: Ryan Kelley (Brigham Young University) *Hall 2* Tae-Young Kim (GIST)
14:00-14:25	**(KL) Miniaturized Near-Native Enzymatic Assays for Kinetic and Affinity Analysis Using Capillary Electrophoresis and Microscale Thermophoresis** Reine Nehmé (Université d'Orléans)
14:25-14:50	**(KL) Assessing the Impact of Tire-Derived Chemicals in Particulate Matter via LC-MS Analysis** Sunghwan Kim (Kyungpook National University)
14:50-15:15	**(KL) Unraveling Lignin Depolymerization: A Novel *in silico* Approach for Discovering Unknown Degradation Products** Tae-Young Kim (GIST)
15:15-15:35	**(IN) A Transfer Learning Framework for Retention Time Prediction in Metabolomics: Integrating Molecular and Chromatographic Parameter Representations** Xiaohui Lin (Dalian University of Technology)
	Integrated Glycoanalytical Platforms Chairs: Chi-Kung Ni (Academia Sinica) *Hall 3* Jin Young Kim (KBSI)
14:00-14:25	**(KL) Advancing CE/LIF and CE-MS Analysis of Glycans by Improving Detection Sensitivity** Jana Lavicka (Institute of Analytical Chemistry)
14:25-14:50	**(KL) Ultra-Sensitive Bioanalysis by Dual-Stacking Capillary Electrophoresis** Takayuki Kawai (Kyushu University)

14:50-15:15	**(KL) The Evaluation of the Glucose Unit Calculation** Gábor Járvás (University of Pannonia)
15:15-15:25	**(OR) Systematic Characterization of Immunogenic Glycan Epitopes in Transgenic Pig Models Using Isomer-Specific PGC-based LC-MS/MS** Ji Eun Park (Chungnam National University)
15:50-16:30	**Coffee Break & Corporate Seminar** *Daedeok Hall*
	AI and Emerging Technology Chair: Guowang Xu (Dalian Institute of Chemical Physics) *Hall 1* Han Bin Oh (Sogang University)
16:30-16:55	**(KL) Comparative Evaluation of Fingerprint- and Graph-Based Modeling Approaches for Aquatic Ecotoxicity Prediction** Hyoung Seop Kim (National Institute of Environmental Research)
16:55-17:20	**(KL) AI Applications in Identifying Illegal Drugs Using Mass Spectrometry Data** Han Bin Oh (Sogang University)
17:20-17:45	**(KL) Artificial Raman Expert (ARE): Autonomous Heuristic Reasoning for Adaptive Raman Spectroscopic Analysis Using Localized Large Language Models** Dongha Shin (Inha University)
17:45-18:10	**(KL) AI-based Analytical Techniques for the Identification of Unknown Chemical Agents** Keunhong Jeong (Sogang University)
	Food Analysis Chairs: Sureyya Ozcan (METU) *Hall 2* Sunghwan Kim (Kyungpook National University)
16:30-16:55	**(KL) Development of ID-LC/MS Methods for the Accurate Analysis of Mycotoxins in Foods** Byungjoo Kim (KRISS)
16:55-17:20	**(KL) Potential Critical Errors in Food Quality and Safety Assessment and Their Mitigation Strategies** Cheong-Tae Kim (Nongshim)
17:20-17:40	**(IN) Simultaneous Determination of UV Stabilizers and Brominated Flame Retardants in Korean Foods: Implications for Dietary Risk Assessment** Hyung Min Kim (Chungnam National University)
17:40-17:50	**(OR) A Harmonized Identification Analysis Method of Asian Ginseng, American Ginseng and Notoginseng** Mooseob Kim (Shanghai University of Traditional Chinese Medicine)
17:50-18:00	**(OR) Incorporation of Quantum Dots and Hapten on MOFs for Food Toxin Monitoring** Indramemdi Khoris (Chungnam National University)
	Environmental Analysis Chairs: Victor González-Ruiz (CEU-San Pablo University) *Hall 3* Kun Cho (KBSI)
16:30-16:55	**(KL) Global Trends in Microplastics Regulations and Advances in Analytical Methods** Jaehak Jung (KIAST)
16:55-17:20	**(KL) Spatial Characteristics of Atmospheric Polycyclic Aromatic Compounds in Northeast Asia Using GC/MS** Yun Gyong Ahn (KBSI)
17:20-17:45	**(KL) Multi-Platform Mass Spectrometry Reveals Molecular Complexity of Plastiglomerates** Kun Cho (KBSI)
17:45-18:10	**(KL) Electron Perturbation for Chiral DNA Point Mutation** Jaebeom Lee (Chungnam National University)
18:10-18:20	**(OR) From Microfluidics to Microdroplets for Molecularly Imprinted Polymers (MIP) Synthesis for Environmental Applications** Magdalena Andelini (University of Orleans)
19:00-21:00	**Banquet** *ICC Hotel*

May 13, 2026 (Wednesday)

	Plenary Lecture IV *Baekma Hall* Chair: Manabu Tokeshi (Hokkaido University)
09:00-09:40	**Opto-Microfluidic Lab-on-Chip Systems for Microscale Separation and Point-of-Care Testing of Blood** Nianqiang Wu (University of Massachusetts)
	Sample Preparation II Chair: Reine Nehmé (Université d'Orléans) *Hall 1* Jeongmi Lee (Sungkyunkwan University)
09:50-10:15	**(KL) Glutaraldehyde-Crosslinked Enzymes for On-Surface Digestion of Proteins** Karen Waldron (Université de Montréal)
10:15-10:40	**(KL) Solid-State Electrokinetic Migration in Polymer Inclusion Membranes** Hong Heng See (University of Technology Malaysia)
10:40-11:05	**(KL) Emerging Deep Eutectic Solvents in Sample Preparation Methods** Jeongmi Lee (Sungkyunkwan University)
11:05-11:30	**(KL) From Discrete Brain Regions to Living Plants: Microscale SPME Enabling Region-Specific and in vivo Cannabinoid Bioanalysis** Tomasz Baczek (Medical University of Gdansk)
	Omics II Chair: Jana Lavicka (Institute of Analytical Chemistry) *Hall 2* Min-Sik Kim (DGIST)
09:50-10:15	**(KL) New Annotation Methods for High-Resolution Mass Spectrometry-Based Nontargeted Metabolomics** Guowang Xu (Dalian Institute of Chemical Physics)
10:15-10:40	**(KL) Temporal Proteome Dynamics of Hematopoietic Stem Cells During Aging** Min-Sik Kim (DGIST)
10:40-11:05	**(KL) Capillary Electrophoresis-Mass Spectrometry for Metabolomics: A 20-Year Journey of Innovation in Method Development and Microscale Bioanalysis** Rawi Ramautar (Leiden University)
11:05-11:20	**(IN) Microhole-Based Single-Cell Proteomics Reveals Spatial Neuroimmune Landscape in Alzheimer's Disease** Youngshik Choe (Korea Brain Research Institute)
	Separation III Chair: Xiaohui Lin (Dalian University of Technology) *Hall 3* Jaebeom Lee (Chungnam National University)
09:50-10:15	**(KL) Multiple-Regime On-Line Preconcentration for High-Performance CE-LIF of Biomolecules and Nanoparticles with Heterogeneous Mobilities** Thanh Duc Mai (Université Paris-Saclay)
10:15-10:40	**(KL) Novel Techniques of Isoelectric Focusing for Separation of Proteins, Viruses and Cells** Chengxi Cao (Shanghai jiao Tong University)
10:40-11:05	**(KL) Capillary Electrophoresis Approaches for Intact Extracellular Vesicles: Stability and Physicochemical Insights** Myriam Taverna (Université Paris-Saclay)
11:15-11:25	**(OR) Secretome-Based Dissection of the Mechanism of Dasatinib in Gastric Cancer-Associated Fibroblasts** Seung-Hyun Oh (Chungnam National University)
11:40-13:00	**Lunch** *Daedoek Hall*
13:00-14:00	**Poster Session II (Even-Numbered)**
	Plenary Lecture V *Daedoek Hall* Chair: Frantisek Foret (Institute of Analytical Chemistry)

14:00-14:40	**Glycan Isomers as a New Lens on Brain Disorders** Hyun Joo An (Chungnam National University)
14:40-15:30	**Closing Ceremony** *Daedoek Hall*

Flash Talks (May 11, 2026 (Monday), Baekma Hall)

No.	Time	Title and Presenter
1	13:00-13:03	**Elucidating the Role of Fucosylation in Cancer-Associated Fibroblasts (CAFs) of Gastric Cancer** Chae-Hyeon Lee (Chungnam National University)
2	13:03-13:06	**Hydrogen Evolution Reaction in Nanoconfined Electrodes** Garan Kim (Chungnam National University)
3	13:06-13:09	**Influence of Ligand Design on Structural Diversity and Photoreactivity in Metal–Organic Frameworks** Gyeongeun Ahn (Chungnam National University)
4	13:09-13:12	**Electrochemical Characterization of Nanoporous Electrodes for High-Performance Supercapacitors** Gyo Seong Hwang (Chungnam National University)
5	13:12-13:15	**Ultra-Sensitive Metabolomic Profiling of Cerebrospinal Fluid by Salt-Tolerant Dual-Stacking Capillary Electrophoresis-Mass Spectrometry** Haruka Kuwagi (Kyushu University)
6	13:15-13:18	**Spatially Resolved Glycomic and Proteomic Profiling Reveals Region-Specific Sialylation Deficits in the Depressed Mouse Brain** Hee Young Jo (Chungnam National University)
7	13:18-13:21	**Optimizing Fragmentation Strategies for the Precise Mapping of Immunogenic Glycosylation Sites in Biopharmaceuticals** Juhui Baek (Chungnam National University)
8	13:21-13:24	**Dynamic Structural Behavior of Bifunctional Olefin-Based Metal–Organic Frameworks** Kyunghye Ju (Chungnam National University)
9	13:24-13:27	**CrN Nanozyme-Based Catalytically Amplified Lateral Flow Assay for Transglutaminase 2 Quantification** Mungyeong Jeong (Kyungpook National University)
10	13:27-13:30	**A Top-Down Sequencing Strategy for Trace N-Glycans Using Dual-Stacking CE-LIF with Online Exoglycosidase Digestion** Naru Iwasaki (Kyushu University)
11	13:30-13:33	**Glycomic Profiling for Quality Assessment and Validation of Patient-Derived Colorectal Cancer Organoids using nanoLC/MS** Sumin Jung (Chungnam National University)
12	13:33-13:36	**Design and Performance Evaluation of Conductive Nanopipette Electrodes for Nanoscale Electrochemical Systems** Sunyeong Hong (Chungnam National University)
13	13:36-13:39	**Fluorescence-Based Genotyping of Apolipoprotein E Single Nucleotide Polymorphisms Using Carbon Dots-coupled Recombinase Polymerase Amplification** Ting-Hsuan Chuang **(**National Chung Cheng University)
14	13:39-13:42	**Characterizing Kinase Signaling Networks Driven by ATP6AP1 in Triple-Negative Breast Cancer** Yun Jeong Seo (Chungnam National University)

Poster Session I

Poster Number	Title and Presenter
1	**Pantothenate Kinase 4 Controls Lipid Synthesis for T-cell Proliferation by Modulating Coenzyme A and Glutaminolysis** Chi Nguyen (Seoul National University)
3	**Highly Sensitive LC-MS/MS Platform for Isomer-Specific Quantitation of Chondroitin Sulfate in Mouse Retinal Tissue** Jeong Won Kim (Chungnam National University)
5	**Tempo-Based FRIPS MS Software Development and Sequencing Analysis of Monoclonal Antibody (Trastuzumab)** Eungyu Yang (Sogang University)
7	**Introduction of Discrete Spacers into the Two-Dimensional Capillary Isotachophoresis-Tandem Mass Spectrometry: Resolution Enhancement of Thiamine and Pyridoxine in Model and Real Biological Samples** Paula Cermakova (Comenius University in Bratislava)
9	**Skin Surface Lipidomics Identifies Sebaceous Lipid Dysregulation as a Key Feature of Sensitive Skin** Minkyeong Hong (Chung-Ang University)
11	**Comprehensive Gas-Phase Characterization of Therapeutic Antibodies: Native MS and CIU Reveal Subclass-specific Conformational Landscapes** Abhik Mojumdar (KBSI)
13	**Design and Performance Evaluation of Conductive Nanopipette Electrodes for Nanoscale Electrochemical Systems** Sunyeong Hong (Chungnam National University)
15	**Fluorescence-Based Genotyping of Apolipoprotein E Single Nucleotide Polymorphisms Using carbon dots-coupled recombinase polymerase amplification** Ting-Hsuan Chuang **(**National Chung Cheng University)
17	**Ion-Transfer Sensing of Perfluorooctanoic Acid at a Water–Gel Microinterface** Minh Thao Huynh Hua (Kyungpook National University)
19	**Selectivity of Electrochemical Reactions Based on Adsorption at Nanoporous Electrodes** Je Hyun Bae (Chungnam National University)
21	**Chemical Fingerprinting of Manufacturing Method and regional Differences in Sesame Oil** Eunji Jeon (KBSI)
23	**LC-MS/MS-Based Profiling of Maillard Reaction Intermediates in Doenjang and Gochujang under Variable Fermentation Conditions** Yebin An (Chungnam National University)
25	**CrN Nanozyme-Based Catalytically Amplified Lateral Flow Assay for Transglutaminase 2 Quantification** Mungyeong Jeong (Kyungpook National University)
27	**Integrated Multi-Omics Analysis Reveals OPFR-Induced Mitochondrial Dysfunction and Oxidative Stress in Caenorhabditis Elegans** Jeongjun Ahn (Chungnam National University)
29	**Ultrasound-Assisted Extraction of Caffeine from Green Tea Using COSMO-RS-Predicted Deep Eutectic Solvents: Roles of Solubilization and Cell Wall Disruption** Seoyeon Lee (Sungkyunkwan University)
31	**Comprehensive Glycoproteomic Profiling of Urinary UMOD Reveals Site-Specific Alterations in Renal Cell Carcinoma** Hahyun Lee (KBSI)
33	**Analysis of N-Glycans in Keyhole Limpet Hemocyanin: Quality Control of Modern Immunogenic Carrier Protein** Juraj Piestansky (Comenius University in Bratislava)
35	**Non-Destructive Identification of Cationic Ballpoint Ink on Document with Blotting Surface Analysis-Capillary Electrophoresis** Sunkyung Jeong (Seoul National University)
37	**A Single-Plate Strategy for Simultaneous Chemical and Biological Profiling of Natural Products via TLC-Bioautography-Ambient Mass Spectrometry** Jianxing Lv (Shanghai University of Traditional Chinese Medicine)
39	**A Quality Control Framework to Enhance Analytical Reliability in DIA-MS** Hayoung Lee (KBSI)

41	**Retention Time Prediction of Unmodified and Modified Peptides by Machine Learning** Raisul Awal Mahmood (Kyungpook National University)
43	**Spatially Resolved Glycomic and Proteomic Profiling Reveals Region-Specific Sialylation Deficits in the Depressed Mouse Brain** Hee Young Jo (Chungnam National University)
45	**LC-MS/MS-based Integrated Omics Approach for Spatially and Cellularly Resolved Glycophenotyping of the Mouse Brain** Dongtan Yin (Chungnam National University)
47	**Dual-Isotope Kinetic LC-MS/MS Enables Redox-Preserving Coenzyme Q Profiling for Ferroptosis and Biomarker Discovery** Tae Ha Kim (Seoul National University)
49	**Ligand-Dependent Structural Diversity and Photoreactivity in Metal–Organic Frameworks** Gyeongeun Ahn (Chungnam National University)
51	**Dynamic Structural Behavior of Metal–Organic Frameworks Incorporating Bifunctional Olefin Ligands** Kyunghye Ju (Chungnam National University)
53	**A Novel Micro-HS Extraction Technique for the Determination of VOCs** Sunkyung Jeong (Seoul National University)
55	**Resolving Uronic Aciodic Isomers from Marine Polysaccharides via Derivatization-Free LC/MRM** Nari Seo (Chungnam National University)
57	**Optimizing CESI 8000 Operation on High-Sensitivity ToF Platforms via a Newly Developed Enclosed Source with Controlled Emitter Positioning** Stanislav Beloborodov (SCIEX)
59	**Quantitative Analysis of Fat-Soluble Vitamins and Sterols in Preterm Human Milk** Ayeon Woo (Chungnam National University)
61	**GC-MS/MS-Based Multi-Metabolite Profiling for Authenticity Assessment of Saw Palmetto** Yumin Lee (Sogang University)
63	**Thermal- and Photoinduced Structural Transformations in Cd(II)-Based Metal–Organic Frameworks** Kyunghye Ju (Chungnam National University)
65	**Toward Rapid On-Site Hazard Identification: AI-Assisted Mechanism Analysis and Portable Mass Spectrometry for Chemical Accident Response** Dongyoung Lim (Sogang University)
67	**Elucidating the Role of Fucosylation in Cancer-Associated Fibroblasts (CAFs) of Gastric Cancer** Chae-Hyeon Lee (Chungnam National University)
69	**Physicochemical and Volatile Profiles of Bone Broth Supplemented with Roasted Insect Oils** Yu-Jeong Han (Sungshin Women's University)
71	**Optimizing Fragmentation Strategies for the Precise Mapping of Immunogenic Glycosylation Sites in Biopharmaceuticals** Juhui Baek (Chungnam National University)
73	**Hybrid Nanocomposite-Based Voltammetric Platform for Simultaneous Detection of Benzo[a]pyrene, Pyrene, and Fluorene in Particulate Matter** Fauzan Amin (Kyungpook National University)
75	**Maternal Metabolic Alterations Associated with Gestational PM2.5 Exposure Revealed by Urinary Metabolomics and Lipidomics** Jiwon Kim (Chung-Ang University)
77	**Molar Mass Determination of Collagen Peptides Using Solid Phase Extraction (SPE) Pretreatment Method** Hee-Jin Yoo (KBSI)
79	**HPLC-Based Quantitative Analysis of 1-Deoxynojirimycin (DNJ) in Food Matrices** Sung Won Kwon (Seoul National University)
81	**Analytical Characterization of Fatty Acid Profiles in Human Milk from Pakistan by GC** Changuk Lim (Chungnam National University)
83	**Quantitative NMR Analysis Using the ERETIC Method (^{1}H & ^{51}V NMR)** Yongnam Joe (SK Innovation)
85	**Development of a Trace-Level Analytical Method for PFAS in Polymer Materials and Wastewater** Kyeonghyeon Kang (SK Innovation)

Poster Session II

Poster Number	Title and Presenter
2	**Colorimetric Strain Detection via Tunable LSPR Modulation in Magnetic Amorphous Photonic Structures** Minseo Seo (Chungnam National University)
4	**Ultra-Sensitive Metabolomic Profiling of Cerebrospinal Fluid by Salt-Tolerant Dual-Stacking Capillary Electrophoresis-Mass Spectrometry** Haruka Kuwagi (Kyushu University)
6	**Rapid and Sensitive Molecular Diagnostics Using Integrated Plasmonic Photothermal PCR and Carbon Nanotube FET Sensing** Wan-Jung Kim (Soon Chun Hyang University)
8	**Dimensionality-Dependent Solid-State Photoreactivity in Zn(II)-Based Coordination Assemblies** In-Hyeok Park (Chungnam National University)
10	**Development of an Accurate Analytical Method for Free Pantothenic Acid Using Isotope Dilution–Liquid Chromatography/Tandem Mass Spectrometry in Beef** Kyuree Tae (KRISS)
12	**Integrated Metabolite Profiling of Ligusticum striatum DC. Across Developmental Stages by LC–MS/MS and HS-SPME/GC–MS** Tung Ninh Khac Thanh (Chungnam National University)
14	**Plasma Metabolomic and Proteomic Alterations Reveal Molecular Mechanisms of Heatstroke Pathophysiology** Petra Majerova (Institute of Neuroimmunology of Slovak Academy of Sciences)
16	**Lipidomic Network in the Cortex and Hippocampus of the 5xFAD Mouse** Yun Jae Cha (Seoul National University)
18	**Characterizing Kinase Signaling Networks Driven by ATP6AP1 in Triple-Negative Breast Cancer** Yun Jeong Seo (Chungnam National University)
20	**An Electrochemical Study of Bimetal-Doped Nanozymes with Enhanced Alkaline Phosphatase-Like Activity** Simegnsh Bekele Dekebo (Kyungpook National University)
22	**A Top-Down Sequencing Strategy for Trace N-Glycans Using Dual-Stacking CE-LIF with Online Exoglycosidase Digestion** Naru Iwasaki (Kyushu University)
24	**Label-Free Quantitative Proteomics Reveals Stress-Specific Adaptive Metabolic Network Remodeling in Staphylococcus aureus** Woochan Jeong (Chungnam National University)
26	**Chelation-Assisted MALDI-MS Imaging Reveals Oxaliplatin Penetration in Peritoneal Tissue** Chaeeun Lee (Chung-Ang University)
28	**Plasmonic Heating-Driven Portable LAMP System Using a Reusable AuNR@PDMS Film for Point-of-Care Testing** Geon Park (Soon Chun Hyang University)
30	**Structural Diversity and Photoinduced [2+2] Cycloaddition in Zinc(II)-Based Metal–Organic Frameworks** Jisu Lim (Chungnam National University)
32	**Enhancing Multimedia Environmental Fate Modeling of PFAS Using a Machine Learning-Based Consensus QSAR Model** Yongbin Lee (Sogang University)
34	**Changes of Kynurenine Pathway Metabolites During the Heatstroke** Andrej Kovac (Institute of Neuroimmunology of Slovak Academy of Sciences)
36	**Glycomic Profiling for Quality Assessment and Validation of Patient-Derived Colorectal Cancer Organoids Using NanoLC/MS** Sumin Jung (Chungnam National University)
38	**Dynamic Enzyme-Controlled Plasmonic Growth Strategy for Multicolorimetric Quantification of Total Dithiocarbamate Pesticides in Food** Mohamed R. Elmasry (Soon Chun Hyang University)
40	**Liquid Extraction Surface Analysis-Capillary Electrophoresis/2C^{4}D for the Simultaneous Analysis of Small Ions on Lithium-Battery Anode Surface** Sunkyung Jeong (Seoul National University)

42	**Hydrogen Evolution Reaction in Nanoconfined Electrodes** Ga Ran Kim (Chungnam National University)
44	**Analysis of Chelating Agents after Complexation with Nickel Using Capillary Electrophoresis** Jihye Kim (KAERI)
46	**Electrochemical Characterization of Nanoporous Electrodes for High-Performance Supercapacitors** Gyo Seong Hwang (Chungnam National University)
48	**Analytical Performance Evaluation of IMR-MS for Representative Airborne Molecular Contaminants in Semiconductor Cleanroom Environments** Chae-Eun Son (Young In ACE)
50	**Beyond the Apex: Spatial Metabolic Specialization in Antarctic Mosses** Fatima Tuz Zahra (Kyungpook National University)
52	**Mapping Alkaloids with Mass Spectrometry Imaging: Application of Spatial Distribution in Medicinal Plants and Biological Samples** Huida Guan (Shanghai University of Traditional Chinese Medicine)
54	**Nanostructured Polymer/Metal Oxide Hybrid as a Platform for Electrochemical Aptasensing of Amino Acids** Jiaran Lu (Kyungpook National University)
56	**Isotope Dilution Liquid Chromatography-Tandem Mass Spectrometry Analysis for Vitamin B_{12} in Infant Formula** Hyeonwoo Yu (KRISS)
58	**Single-Crystal-to-Single-Crystal Photodimerization in Metal–Organic Frameworks: Structural Insights from Crystallographic Analysis** Gyeongeun Ahn (Chungnam National University)
60	**Ship Repair Facilities as Major Point Sources of Emerging Organic Contaminants in Marine Sediments of a Global Maritime Hub** Imran Shafique (Kyungpook National University)
62	**Single-Cell N-Glycome Analysis via Capillary Electrophoresis with Femtomolar Sensitivity** Chenchen Liu (Kyushu University)
64	**Three-Phase Direct Immersion-Single Drop Microextraction Coupled with a Commercial Capillary Electrophoresis Instrument** Sunkyung Jeong (Seoul National University)
66	**FeSe Quantum Dots: Scalable Fabrication and Biosensing Performance** Hyojin Kang (Chungnam National University)
68	**Monitoring of Glyphosate Bioremediation in Soils: Combining Molecularly Imprinted Polymers (MIP) with Indirect CE-UV Analysis** Reine Nehmé (Université d'Orléans)
70	**From Thermodynamic Theory to Liquid-Liquid Microextraction through Machine Learning-Guided Design of Hydrophobic Deep Eutectic Solvents** Jingyan Chen (Sungkyunkwan University)
72	**An Efficient Column-Switching HPLC Method for the Trace Determination of Cholecalciferol (Vitamin D3) in Complex Matrices** Jisu Im (Young In Chromass)
74	**Chemometrically Assisted Optimization of a Chiral HPLC Method for the Separation of Talazoparib and Its Enantiomer on a Chiralpak IC Column** Duygu Yeniceli (Anadolu University)
76	**Aging-Driven N-Glycome Variations in Coenorhabditis Elegans Using LC/MS/MS** Myung Jin Oh (Chungnam National University)
78	**Analysis of Heavy Metals and Trace Elements in Mussel Tissue Using the ACE 3000 ICP-MS** Seonyoung Heo (Young In ACE)
80	**Interannual Variation in Compositional and Volatile Profiles of Korean Potato Cultivars Using Multivariate Analysis for Origin Classification** Yeeun Lee (Sungshin Women's University)
82	**Assessing the Toxicity of Microplastic Additives Leached from Cigarette Filters on Caenorhabditis elegans** Phearum Dy (GIST)
84	**Charge-Selective Detection of Dopamine on SAM-Modified Nanoporous Gold** Junhee Yu (Chungnam National University)
86	**Non-targeted Analysis of Extractables and Risk Assessment of Migrants from Food Storage Bags** Ji hyeon Oh (GIST)

MSB 2026 Conference

Free Workshop Sessions

Analytical Science Workshop Series

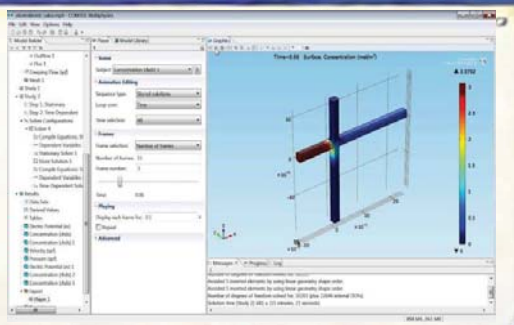
Computational Modeling • Gas Chromatography • Liquid Chromatograph

May 10, 13:00 – 16:30

13:00 – 16:30

Computational Modeling of Electrokinetic Separations by COMSOL Software

Prof. Bohuslav Gaš



13:00 – 14:30

Gas Chromatography, from Beginner to Expert in 90 Minutes

YOUNG IN Chromass

15:00 – 16:30

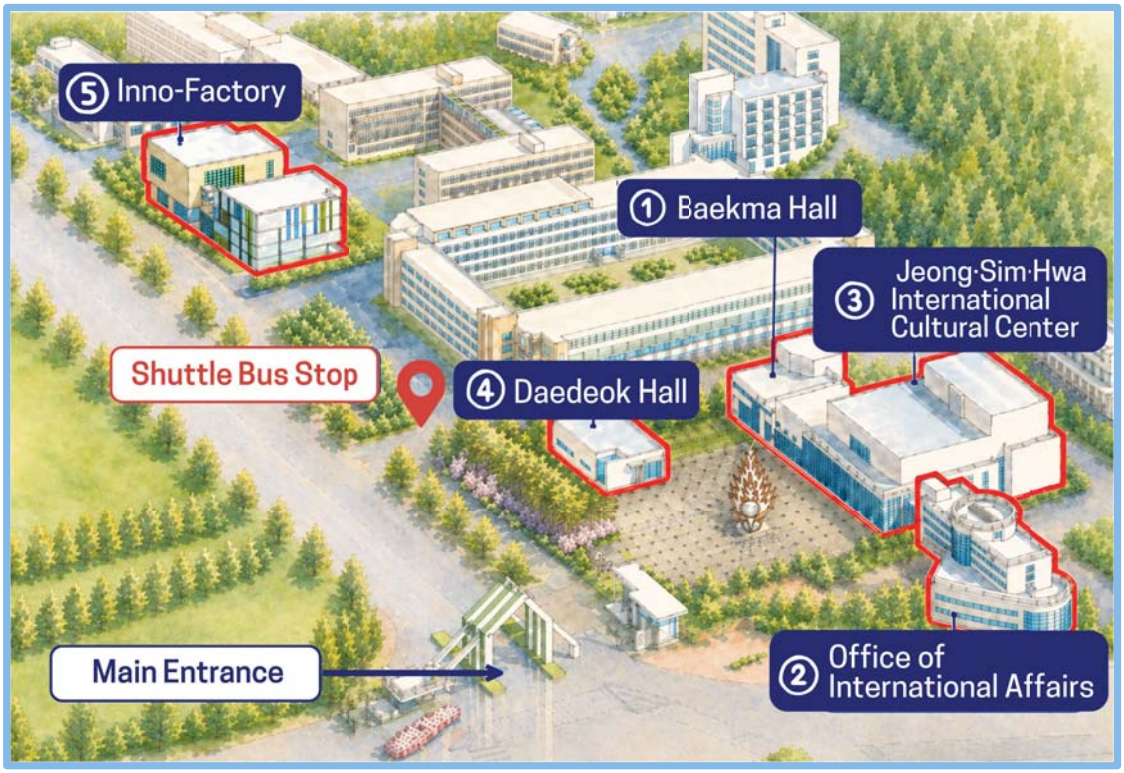
Basic Principles and Applications of Liquid Chromatography

Agilent

Workshop:
Korean Language & Culture Experience

Read Hangul (Korean alphabet) in 20 Minutes

Venue Map



1. **Baekma Hall** - Main Hall [Plenary Lecture Session]
2. **Office of International Affairs**
   - Session Hall 1-3, Presentation Upload Room [209-1]
3. **Jeong·Sim·Hwa International Cultural Center**
   - Exhibition Booth & Poster Session
4. **Daedeok Hall** - Dining Hall
5. **Inno-Factory**
   - Welcome Reception
   - Corporate-sponsored Workshop

YOUNG IN Chromass Agilent Technologies

Wi-Fi

ID: MSB2026A
PW: msb2026@a

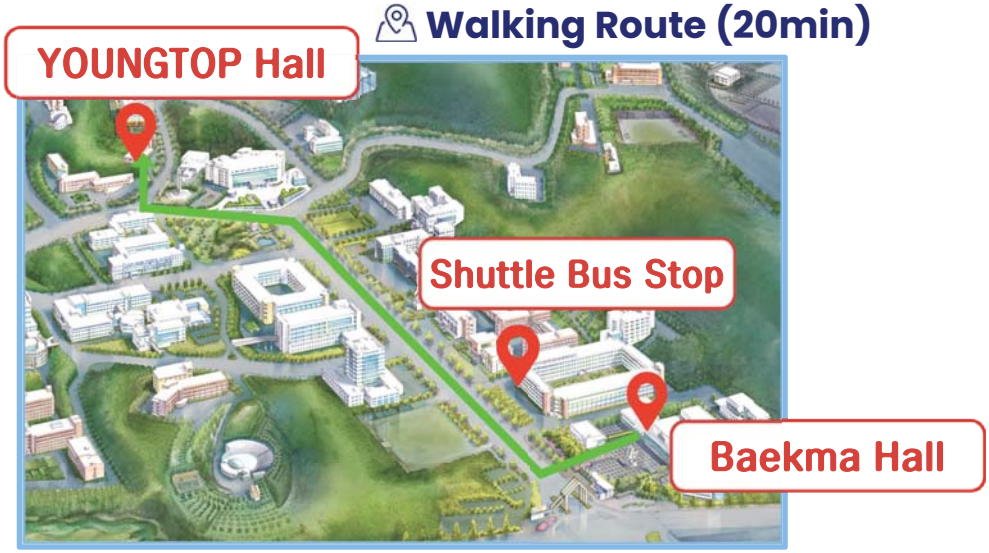
ID: MSB2026B
PW: msb2026@b

Dining Venue

Breakfast Daedeok Hall (07:30~09:00)

Lunch YOUNGTOP Hall (11:40~13:00)

Walking Route (20min)



Shuttle Bus Schedule

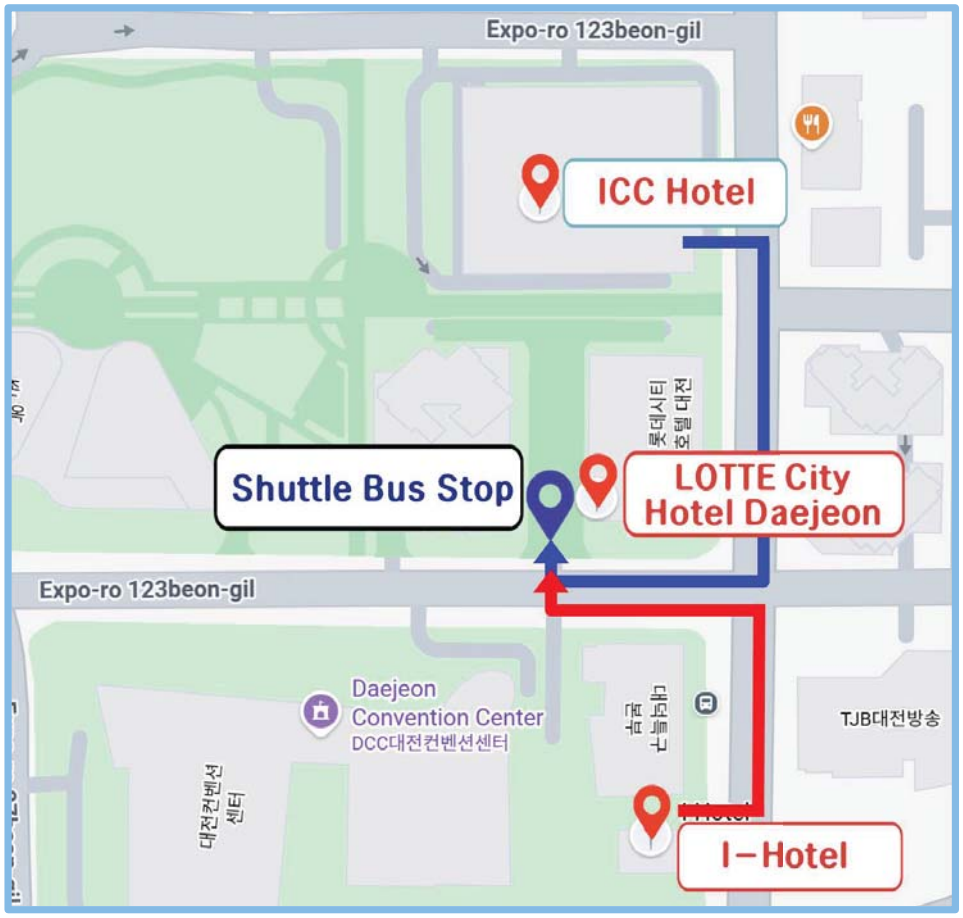
Departure (Bus stop-YOUNGTOP Hall)	11:40
Return (YOUNGTOP Hall-Bus stop)	12:30

Banquet ICC Hotel (May 12, 19:00~21:00)

Shuttle Bus Schedule

Departure (Bus stop-ICC Hotel)	18:10

Shuttle Service: CNU ↔ Hotel



Route	May 10 (Sun)	May 11-12 (Mon-Tue)	May 13 (Wed)
Hotel → CNU Bus Stop	12:00	07:30	07:30
	15:30	08:15	08:15
CNU Bus Stop → Hotel	20:10	18:10	-

Taxi Service: CNU ↔ Hotel

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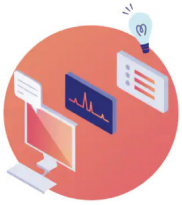

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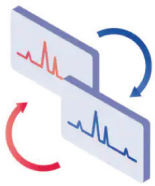

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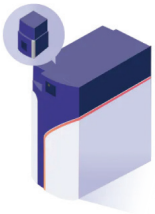

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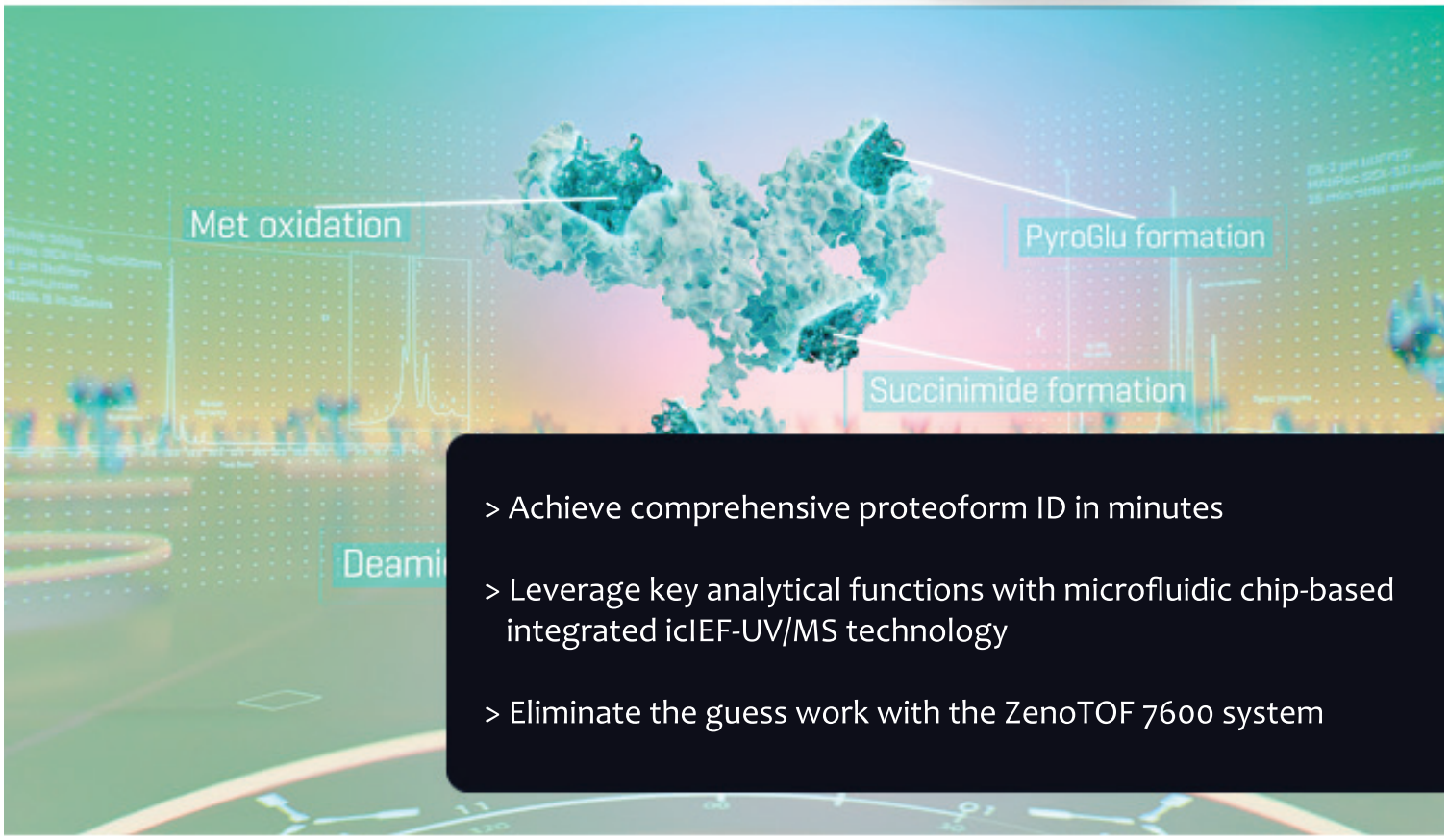

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바이오니아는 1992년, 국내 최초로 올리고뉴클레오타이드 합성 서비스와 내열성 DNA 중합효소 등 유전자 증폭 연구에 필수적인 시약들을 상용화하여 '바이오 벤처 1호'로서 빛나는 출발을 이루었습니다.

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- Spin Column, Magnetic Bead

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- Real-time PCR
- Protein Synthesis and Purification
- DNA/RNA Preparation
- Electrophoresis
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- Vortexing & Spin-down

Custom Services
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- Gene Synthesis
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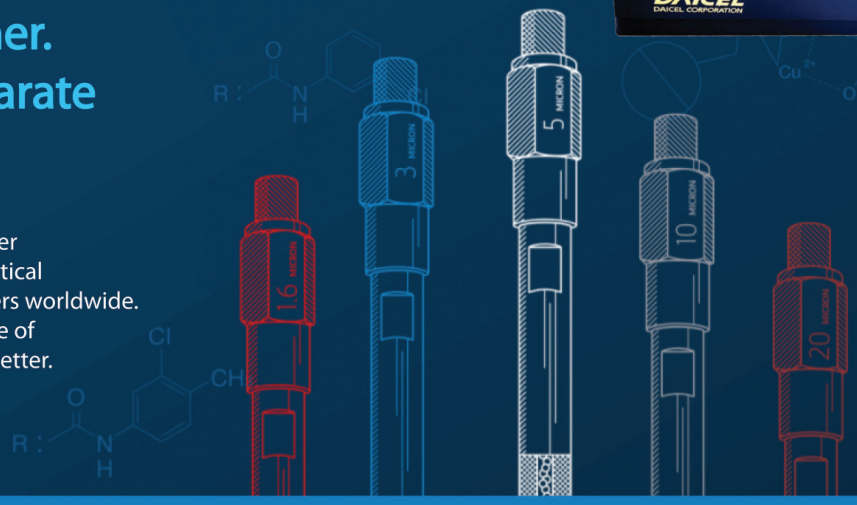

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- Method Development for Chiral Separation
- Chiral Screening

Impurity Standards

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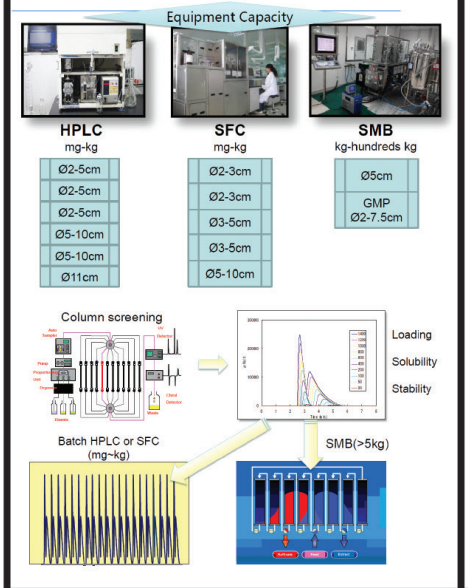
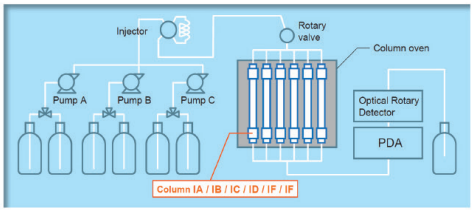
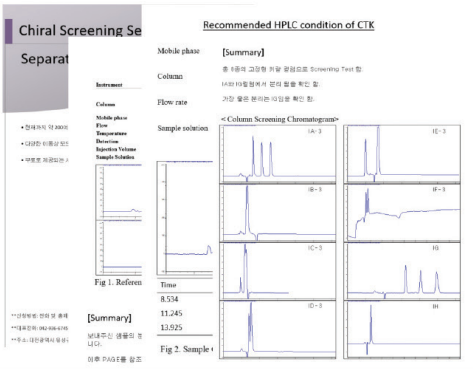
- 13C labeled Standards







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