



2008 Summer Annual Meeting of
the Korean Society for Mass Spectrometry

PROTEIN IDENTIFICATION

PR-01

Hybrid MALDI MSn system with wide dynamic range and low ppm mass accuracy for high-throughput identification of proteins

Kerstin Strupat¹, Maria C. Prieto Conaway², Rosa Viner², Viatcheslav Kovtoun², Huy Bui², Nick Izgarian², George Stafford², Stevan Horning¹ & Thomas Moehring¹

ThermoFisher Scientific, ¹Bremen, Germany; ²San Jose, CA, U.S.A

PR-02

Proteomics of a differentiated membrane system of cyanobacterium *Synechocystis* sp. PCC 6803

Hyun Ju Park¹, Sun Kyu Choi¹, Birgitta Norling², Gun Wook Park¹, Jong-Soon Choi³ & Young Hwan Kim¹

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PR-03

Acid hydrolysis of proteins at aspartic acid residues at different acidic conditions

Jinhee Kim, Aera Lee, Hyo-Jik Yang, Seongjae Shin, Hyesun Han & Jeongkwon Kim

Department of Chemistry, Chungnam National University, Daejeon 305-764, South Korea

PR-04

Quantitative phosphoproteome analysis applied to the human neural stem cell

Kun Cho¹, Eunmin Kim¹, Gun Wook Park¹, Jeong Hwa Lee¹, Yeong Hee Ahn¹, Kyung-Hoon Kwon¹, Jin Young Kim¹, Kyung Hee Byun², Bong Hee Lee² & Jong Shin Yoo¹

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PR-05

Quantitative proteome analysis between hypoxia and normoxia in 3T3-L1 adipocytes using iTRAQ coupled with 2D-LC/MS/MS

Sunkyu Choi^{1,3}, Kun Cho¹, Jaeyoon Kim², Kyungmoo Yea², Gunwook Park¹, Jeonghwa Lee¹, Sung Ho Ryu², Jeongkwon Kim³ & Younghwan Kim¹

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PR-06

Role of sphingolipids in ischemic tolerance revealed by LC-MS/MS technique
Terry Zhang, Rosa Viner and Vlad Zabrouskov

Mohammad Iqbal Hossain Bhuiyan^{1,2}, M. Nurul Islam^{1,2}, Seo-Yun Jung¹, Hye-Hyun Yoo¹ & Changbae Jin¹

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PR-07

Characterization of recombinant antibody using HPLC fractionation and direct infusion ESI-FTICR mass spectrometry

Jun Young Kwak, Youxun Jin, Yong-Moon Lee, Jeong Soo Yang¹, Dae Bong Moon¹, Jung Keun Suh¹, Surendar Tadi², Hun-Young So³, Hyong-Ha Kim³ & Yong-Hyeon Yim³

College of Pharmacy, Chungbuk National University; ¹*Korea German Institute of Technology;* ²*College of Medicine, Chungnam National University;* ³*Korea Research Institute of Standards and Science*

PR-08

Determination of olanzapine in plasma using liquid chromatography-tandem mass spectrometry

Hyun Jung Cha, Eun Ja Kwon, Ji Hye Gil & Myeong Jun Choi

Korea Clinical Research Center, Gyeonggi-do 431-836

PR-09

Determination of camostat mesylate in human plasma by liquid chromatography - tandem mass spectrometry

Sung Il Yoon, Yoon-Jae Lee & Myeong Jun Choi

Korea Clinical Research Center, Gyeonggi-do 431-836

PR-10

Identification of deglycosylated monoclonal antibody isoform by quadrupole time-of-flight mass spectrometry

Sun-Young Kim, Yeong-Ran Jeong, Ji-Hye Cheon & Chulho Jung

LG Life Sciences, Ltd., 104-1 Moonji-Dong, Yuseong-Gu, Daejeon, Korea

PR-11

Analysis of the functional role of Lys-11 in polyubiquitin chain formation mediated by Chfr

Jin Woo Jung¹, Sung Jun Bae³, Gum-Yong Kang¹, Kyun-Hwan Kim⁴, Jae Hong Seol³ & Kwang Pyo Kim^{1,2}

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PR-12

Proteome analysis of roots reveals salt-hypersensitive response of transgenic rice over-expressing a SnRK2 kinase

Kyung Mi Kim¹, In Sun Yoon², Jong Bok Seo, Seung Eun Song¹, Woong Jun Park¹ & Myung Hee Nam¹

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CLINICAL & BIOMEDICAL APPLICATION

CB-01

Quantitation of DNA damage response signaling proteins using iTRAQ labeling and LTQ Orbitrap XL

Ryan Bomgarden¹, Rosa Viner², Terry Zhang², Michael Major¹ & Vlad Zabrouskov²

ThermoFisher Scientific, ¹Rockford, IL and ²San Jose, CA, USA

CB-02

Annotation of complex proteomic data obtained using Linear Ion Trap LC-MS/MS with ETD: analysis of human cerebrospinal fluid digests

R. G. Bringer¹, Z. Hao¹, H. Tran¹, M. G. Harrington², & A. F. R. Hühmer¹

¹ThermoFisher Scientific, San Jose, CA; ²Huntington Medical Research Institutes, Pasadena, CA, USA

CB-03

Electron transfer dissociation and multi-stage activation analysis of human kinase sites of phosphorylation

Martin P. Hornshaw¹ & Nick Morrice²

¹ThermoFisher Scientific, Hemel Hempstead, UK; ²MRC Protein Phosphorylation Unit, Dundee, UK

CB-04

Evaluation of iTraQ quantitation with higher energy collision dissociation on a hybrid LTQ Orbitrap XL mass spectrometer

Markus Kellmann, Thomas Moehring, Bernard Delanghe, & Kerstin Strupat

ThermoFisher Scientific, Bremen, Germany

CB-05

Liquid chromatography optimization glycopeptides analysis by electron transfer dissociation

Terry Zhang, Rosa Viner & Vlad Zabrouskov

ThermoFisher Scientific, San Jose, CA, USA

CB-06

Metabolic significance of bisphenol A induced oxidative stress in rat urine measured by liquid chromatography-mass spectrometry

Sung-Hee Cho^{1,2}, Man Ho Choi¹, Won-Yong Lee² & Bong Chul Chung¹

¹Life Sciences Division, Korea Institute of Science and Technology, Seoul 136-791, Korea; ²Department of Chemistry, Yonsei University, Seoul 120-749, Korea

CB-07

GC-MS based multi-enzyme assay for identification of metabolic alteration in hormone-dependent diseases

Ju-Yeon Moon^{1,2}, Myeong Hee Moon², Bong Chul Chung¹ & Man Ho Choi¹

¹Life Sciences Division, Korea Institute of Science and Technology, Seoul 136-791; ²Department of Chemistry, Yonsei University, Seoul 120-749

CB-08

Determination of meloxicam in human plasma by LC-ESI-MS/MS and its application to a pharmacokinetic study

Hyun-Mi Lee¹, Yu-Mi Lee¹, Yang-Hee Kim¹, Ji-Hyun Kim¹, Gee-Youn Kwon², Soo-Kyung Kim², Hae-Ran Moon¹ & Sung-Hyun Hong¹

¹Division of Drug Development Service and PhamacoMetabolomics Lab., Specialty Lab Solution Ltd., Suwon, Gyeonggi-Do 443-766, ²Dept. of Pharmacology, Keimyung University & Hospital, Daegu, 700-712

CB-09

Rapid and sensitive determination of imidapril in human plasma by LC-ESI-MS/MS and its application to a pharmacokinetic study

Sun-Young Lee¹, Jung-Hyang Lee¹, Yang-Hee Kim¹, Ji-Hyun Kim¹, Ju-Seop kang², Hae-Ran Moon¹ & Sung-Hyun Hong¹

¹Division of Drug Development Service and PhamacoMetabolomics Lab., Specialty Lab Solution Ltd, Suwon, Gyeonggi-Do 443-766, ²Dept. of Pharmacology and Clinical Pharmacology Lab, collage of Medicine and Institute of Biomedical Science, Hanyang University, Seoul, 133-791

CB-10

NMR and ESI mass spectrometric analyses of noncovalent interactions of β -cyclomalto-oligosaccharide with a C-21 steroid hormone, progesterone

Sanghoo Lee, Soonho Kwon, Hey-Jin Shin, Oh-Joong Kwon & Kyoung Ryul Lee

Dept. of Mass Spectrometric Analysis, Seoul Medical Science Institute and Seoul Clinical Laboratoires

CB-11

GC-MS based quantitative profiling of urinary free fatty acids and its clinical application in neo adjuvant and hepatic arterial infusion chemotherapy treated colon cancer

Jahan Israt^{1,2}, Jeongae Lee¹, Jin Cheon Kim³ & Bong Chul Chung^{1,2}

¹Bioanalysis and Biotransformation Research Center, Korea Institute of Science and Technology, Seoul 130-650, Korea; ²University of Science and Technology, Daejeon, Korea

CB-12

Direct identification of small molecules by MALDI imaging using fourier transform ion cyclotron resonance mass spectrometry (FT-ICR MS)

Jens Fuchser¹, Christian Berg², Mattias Witt¹, Michael Becker¹, J.S. Lee³ & Christopher Thompson²

¹Bruker Daltonik GmbH, Bremen, Germany, ²Bruker Daltonics Inc., Billerica, MA, USA, ³Bruker BioSciences Korea, Seoul, Korea

CB-13

Hierarchical clustering: A new approach using unsupervised classification of MALDI imaging data for cancer biomarker detection in tissue

Axel Walch⁴, Soren Deininger¹, Gongyi Shi², Michael Becker¹, Martin Schurenberg¹, Arne Futterer¹, Marc Gerhand¹, J.S. Lee³ & Detlev Suckau¹

¹Bruker Daltonik, Bremen, ²Bruker Daltonics, Billerica, ³Bruker BioSciences Korea, Seoul, ⁴Institute of Pathology, Helmholtz-Centre, Munich

CB-14

MALDI-TOF MS fingerprint identification of microorganisms on the species and subspecies level using different bioinformatic approaches

Thomas Maier¹, Oksana Gvozdyak², Vadim M Govorun³, Vladimir A Vereshchagin³, Elena Il'ina³, Stefan Klepel¹, Uwe Renner¹, Jongsik Lee⁴ & Markus Kostrzewa¹

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CB-15

Chemical derivatization of catecholamines for GC-MS analysis

Sun Young Park, Bo-Xin Kang & Jongki Hong

College of Pharmacy, Kyung Hee University, Seoul 130-701, Korea

CB-16

Structural characterization of N-linked oligosaccharides in recombinant human erythropoietin with various methods

Yeong-Ran Jeong, Ji-Hye Cheon, Sun-Young Kim & Chulho Jung

LG Life Sciences, Ltd., 104-1 Moonji-Dong, Yusung-Gu, Daejeon, Korea

CB-17

An analysis of cholesterol in human serum by isotope dilution liquid chromatography-mass spectrometry

Hyesun Shin², Hwashim Lee¹ & Gaeho Lee²

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CB-18

Proteomic approaches for biomarker discovery in myocarditis

Joo-Hee Chung, Hey-Sook Kim, Eunjung Bang, Hui-Jeong Choi, Hye-Young Moon¹, Kwan-Soo Hong¹ & Jong-Bok Seo

Metabolome Analysis Team, Seoul Branch, Korea Basic Science Institute, Seoul 137-701; ¹MRI team, Korea Basic Science Institute, Cheongwon 363-883

CB-19

Determination of progesterone in human serum by isotope dilution liquid chromatography-tandem mass spectrometry

Hwashim Lee¹, Hyesun Shin² & Gaeho Lee²

¹Division of Metrology for Quality Life, Korea Research Institute of Standards and Science; ²Department of Chemistry, Chungnam National University

CB-20

Global survey of cardiac hypertrophy by comparative proteomic profiling

Hye-Kyeong Kwon & Zee-Yong Park

Dept. of Life Science, Gwangju Institute of Science and Technology, Gwangju, South Korea

CB-21

**An integrated metabonomic approach for rat model of Myocarditis:
A study using LC/MS combined with NMR spectroscopy**

Eunjung Bang, Joo-Hee Chung, Hye-Sook Kim, Hye-Young Moon¹, Kwan-Soo Hong¹ & Jong-Bok Seo

Seoul Center, Korea Basic Science Institute, Seoul 136-713; ¹ MRI Team, Korea Basic Science Institute, Cheongwon 363-883

CB-22

Differentiated metabolomic signatures in urine of patients with cervical dysplasia

Hyun-Jin Jung^{1,2}, Man Ho Choi¹, Won-Yong Lee², Yong-Il Kwon³, Bong Chul Chung¹

¹ Life Sciences Division, Korea Institute of Science and Technology, Korea; ² Department of Chemistry, Yonsei University, Korea; ³ Department of Obstetrics & Gynecology, Hallym University, Korea

CB-23

**The application of LC-SRM measurement to the detection and quantitation of mutation
in Bcr-Abl from CML**

Jung Ok Park(1), Gum Young Kang(1), Soo-hyun Kim(2), Sun Kyu Choi(3), Dong-Wook Kim(2), Young Hwan Kim(3), and Kwang Pyo Kim(1),#

¹Department of Molecular Biotechnology, Institute of Biomedical Science and Technology, Konkuk University, Seoul 143-701, Korea; ²Division of Hematology, St. Mary's Hospital, The Catholic University of Korea, 62 Yeouido-dong, Yeongdeungpo-gu, Seoul, 150-7; ³Proteome Analysis Team, Korea Basic Science Institute, Daejeon 305-333, Korea



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FOOD, DRUG & ENVIRONMENTAL ANALYSIS

FE-01

**Determination of gabapentin in human plasma
by liquid chromatography-electrospray ionization tandem mass spectrometry**

Woo Chul Lee, Sun Koung Jung, Kyung Hee Cho, Yoo Chul Kim, Kyung Ryul Lee & Hee Joo Lee.

Department of Drug Development Supporting Service Division, BioCore Co., Ltd and Department of Pharmacokinetics, Seoul Medical Science Institute, Seoul Clinical Laboratories (SCL)

FE-02

**Validated LC-MS/MS method for simultaneous quantification of atorvastatin
and 2-hydroxyatorvastatin in human plasma**

Kyung Hyeon Lee¹, Yong Chul Shin¹, Jung Jin Park¹, Moon-Sun Jang¹, Kyung Ryul Lee^{1,2} & Hee Joo Lee^{1,2}

¹Drug Development Supporting Service Division, BioCore Co., Ltd.; ²Dept. of Pharmacokinetics, Seoul Medical Science Institute, Seoul Clinical Laboratories(SCL)

FE-03

Multiresidue analysis of pesticides in cooked vegetables and cereals by LC-MS/MS

Sung Joong Lee, Semin Park & Sung Chul Shin

Department of Chemistry and Research Institute of Life Science, Gyeongsang National University, Jinju, 660-701, South Korea

FE-04

**Determination of medroxyprogesterone acetate (MPA) residues
in pig (Liver, Kidney, Lung, Muscle) by LC/MS-MS**

Semin Park, Sung Joong Lee & Sung Chul Shin

Dept. of Chemistry and Research Institute of Life Science, Gyeongsang National University, Jinju 660-701, Korea

FE-05

Emerging POPs로써의 PAHs와 PFCs의 환경 다매체 분석 및 거동특성

Seung-Kyu Kim

Institute of Environmental Protection and Safety, NeoEnBiz Co., Bucheon, Gyeonggi, Korea

FE-06

The simultaneous determination of flavonoids in *Sophora subprostrata* by HPLC-DAD/MS

Ki Yong Lee, Junghyun Park, Young Woong Cho, Nam Ki Cho, Young Choong Kim & Sang Hyun Sung

College of Pharmacy and Research Institute of Pharmaceutical Science, Seoul National University, Seoul 151-742, Korea

FE-07

Unusual neutral loss of 11 Da in low-energy collision-induced dissociation mass spectrometry with positive electrospray ionization

Sang Kyu Lee, Seol-A Kim, Sung-Kwon Lee, Ying Lan Xu, Hye Hyun Yoo, Changbae Jin & Jaeick Lee

Doping Control Center, Korea Institute of Science & Technology

FE-08

Quantification evaluation of arsenic species in marine fish by ion chromatography/inductively coupled plasma-mass spectrometry

Joung Hae Lee, Hae-Jun Oh, Hyung-Sik Min & Sang-Ho Nam*

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FE-09

Simultaneous determination of octyl and nonyl phenol isomers in polyvinyl chloride packaging materials by gas chromatography-mass spectrometry

Jun-Hyun Sung, Hae-Jung Yoon, Dae-Hoon Jeon, Hyun-Cheol Choi, Mi-Ok Eum & Young-Ja Lee

Food Packaging Division, Korea Food and Drug Administration

FE-10

Determination of chloropropanols in foods by gas chromatography-mass spectrometry

Eunju Kim, Jangduck Choi, Sungkug Park, Junghyuck Su, Soojung Hu, Taehyung Yoon, Kwangho Lee & Dongmi Choi

New Hazard Chemicals Division, Korea Food and Drug Administration, Seoul 122-704, Korea

FE-11

Development of analytical method for total PBDEs in food by HRGC-HRMS

Jeoung Hwa Shin, Jungju Seo, Nam Hee Lee, Hyo Jeong Lim & Ji Jeong Ryu

Korea Basic Science Institute, Hazardous Substance Research Team

FE-12

Identification of Glucocorticoids in milk by liquid chromatography-tandem mass spectrometry

Yoon-ji Shin, Hyun-Woo Cho & Seung-Woon Myung

Department of Chemistry, Kyonggi University, Suwon-si, Gyeonggi-do, 443-760

FE-13

The risk assessment and monitoring of 1,4-Dioxane in drinking water

Ji Young Lee^{1,3}, Joung Hwa Kim², Hyun Gu Kim², Heesoo Pyo¹, Mi Ok Kim¹ & Jong Ho Choi³

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FE-14

Monitoring of neonicotinoid and ergosterol biosynthesis inhibitor pesticide residues in agricultural products

Hyoun-Joon Park, Jae-Hyun Kim, Chun-Sun Mun, Jung-Mi Lee, Moo-Song Lim, Jeung-Young Chai, Ji-Young Ahn, In-Shin Kwak & Ok-Hee Kim

Food and Drug Analysis Division, Center for Food and Drug Analysis, Gyeongin Regional KFDA

FE-15

Characterization of triterpenoids, flavonoids and phenolic acids in *Eclipta prostrata* by high-performance liquid chromatography/diode-array detector/electrospray ionization with multi-stage tandem mass spectroscopy

Ki Yong Lee, Junghyun Park, Na Ry Ha, Young Choong Kim & Sang Hyun Sung*

College of Pharmacy and Research Institute of Pharmaceutical Science, Seoul National University, Seoul 151-742, Korea

FE-16

LC-MS based metabolite profiling as a platform for high-throughput drug discovery

Jong Suk Lee^{1,2}, EunJin Lee¹, Jihoon Kim¹, Choong Hwan Lee³, Byoung-Mog Kwon¹, Tae Kwang Oh¹, Kwang Hee Son¹, Sangryeol Ryu² & Jung-Hoon Yoon¹

¹Korea Research Institute of Bioscience and Biotechnology (KRIBB), Daejeon, Korea, ²College of Agriculture and Life Sciences, Seoul National University, Seoul, Korea, ³Department of Bioscience and Biotechnology, Konkuk University, Seoul, Korea

FE-17

Microbial secondary metabolite profiling of *Zooshikella* sp. S1-1 by LC-MS/MS analysis

Jong Suk Lee^{1,2}, Sooyeon Park¹, Yong-Take Jung¹, Tae Kwang Oh¹, Sangryeol Ryu² & Jung-Hoon Yoon¹

¹Korea Research Institute of Bioscience and Biotechnology (KRIBB), Daejeon 305-333, Korea; ²College of Agriculture and Life Sciences, Seoul National University, Seoul 151-742, Korea

FE-18

A study on the analysis of metal compounds in seaweeds by using inductively coupled plasma mass spectrometry

Yeon-Jeong Ju, Yeun-Kyong Yang, Jin-Won Lee & Hye-Seoung Shin

Hankyong Analytic Center, 67 Seokjeong-dong, Anseong-si, Gyeonggi-do, 456-749, Korea

FE-19

Rapid and sensitive determination of baclofen in human plasma by liquid chromatography-electrospray ionization tandem mass spectrometry

Ho Min Hwang¹, Sun Koung Joung¹, Seung woo Kang¹, Hee Joo Lee^{1,2} & Kyung Ryul Lee^{1,2}

¹Department of Drug Development Supporting Service Division, BioCore Co., Ltd.; ²Department of Pharmacokinetics, Seoul Medical Science Institute, Seoul Clinical Laboratories (SCL)

FE-20

Non-targeted metabolomic approaches for evaluating acute exposure of volatile organic compounds using ultra performance liquid chromatography coupled with Q-TOF mass spectrometry

Kyung Mi Kim¹, Jeongae Lee¹, Man Ho Choi¹, Mina Ha² & Bong Chul Chung¹

¹Life Sciences Division, Korea Institute of Science and Technology, Seoul, 136-791; ²Department of Preventive Medicine, Dankook University, Seoul, 330-714

FE-21

Monitoring of alkylphenols, bisphenol-A and anodinia in water using gas chromatography-mass spectrometry

Su Hyeon Lee^{1,2}, Jeongae Lee¹, Hee-Soo Pyo¹, Won-Young Lee² & Bong Chul Chung¹

¹Life Sciences Division, Korea Institute of Science and Technology, Seoul 136-791; ²Department of Chemistry, Yonsei University, Seoul 120-749

FE-22

Biomonitoring for urinary metabolite of VOCs using gas chromatography-mass spectrometry

Min-hwa Kim^{1,3}, Jeongae Lee¹, Mina Ha², Younghee Hahn³ & Bong Chul Chung^{1*}

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²Department of Preventive Medicine, Dankook University, Cheonan, 330-715; ³Department of Chemistry, Sangmyung University, Seoul, 110-743

FE-23

Comprehensive multi-target screening of pesticides in food extracts using HPLC-ESI-TOF-MS

Ben Owens¹, J.S. Lee ², Petra Decker³ & Ilmari Krebs³

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FE-24

Classification and differentiation of crude oil by fourier transform ion cyclotron resonance mass spectrometry using atmospheric pressure ionization

Matthias Witt¹, Jens Fuchser¹, J.S. Lee³ & Victor Fursey²

¹Bruker Daltonik GmbH, Bremen, Germany, ²Bruker Daltonics Inc., Billerica, MA, USA, ³Bruker BioSciences Korea, Seoul, Korea

FE-25

Survey on the nitrofurant metabolites in livestock food, seafood and health functional food products using liquid chromatography with tandem mass spectrometry

Hwa-Mi Lee, Jun-Bae Lee, Ji-Eun Shin, Mi-Sun Park & Young-Mi Jang

Hazard Substance Analysis Div, Gyeongin Regional Korea Food & Drug Administration, Incheon, 402-835

FE-26

Simultaneous analysis of benzimidazoles in meat by liquid chromatography-tandem mass spectrometry

Young-Woon Kang, Jong-Seok Park, Young-Mi Jang, Jae-Ho Oh, Eun-Gui Kang, kyung-Jin Lee & Chan-Sun Kang

Harzard Substances Analysis Division, Gyeongin Regional Korea Food and Drug Administration

FE-27

Determination of flavonoids using ultra-performance liquid chromatography-photodiode array detection-electrospray quadrupole time-of-flight mass spectrometry

Yong-Kuk Kim, Jun-Young Shin & Yong-Ill Lee

Department of Chemistry, Changwon National University, Changwon, 641-773.

FE-28

Kinetic method for enantiomeric determination of thyroid hormone (d,l-thyroxine) using electrospray ionization tandem mass spectrometry

Yong-Hyun Kim, K.S.V. Krishna Rao & Yong-Ill Lee*

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FE-29

Determination of enantiomeric compositions of DOPA by tandem mass spectrometry using the kinetic method with fixed ligands

Hyeong-Rae Cha & Yong-Ill Lee*

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FE-30

Use of ultra-performance liquid chromatography coupled with quadruple time-of-flight mass spectrometry to investigate tetracycline antibiotics in human urine samples

Hua Jin & Yong-Ill Lee*

Department of Chemistry, Changwon National University, Changwon, 641-773.

FE-31

Isomeric discrimination and determination of thyroid hormone isomers, T3 and r-T3 by a single ratio kinetic method using ESI-MS/MS

Avvaru Praveen Kumar, Hua Jin & Yong-Ill Lee

Department of Chemistry, Changwon National University, Changwon 641-773.

FE-32

Determination of the fungicide oryastrobin residues in hulled rice using liquid chromatography-tandem mass spectrometry

Moon Ik Chang, Chan Hyeok Kwon, Moo Hyeog Im, Da I Jung, Su Chan Lee, Jin Young Yu, Jung Eun Son & Jong Ok Lee

Food Safety Evaluation Department, Korea Food & Drug Administration, Seoul 122-704, Korea

FE-33

Liquid chromatography-tandem mass spectrometry validated method for the quantification of new proton pump inhibitor, ilaprazole, in human plasma

Yune-Jung Yoon¹, Min-Jung Kim², Dong-Jun Lee¹, Mi-Kyoung Go², Min-Jeong Kang², Soo-Kyung Bae¹, Ji-Hong Shon^{1,2}, Kwang-Hyeon Liu² & Jae-Gook Shin^{1,2}

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FE-34

Structural determination of illegal sildenafil analogues in dietary supplements by fast atom bombardment mass spectrometry and collision-induced dissociation tandem mass spectrometry

Sungho Ahn, Jooyen Hong, & Jongki Hong*

College of pharmacy, Kyung Hee University, Seoul 130-701, Korea

FE-35

동위원소희석 액체크로마토그래피 질량분석법(Isotope Dilution Liquid Chromatography Mass spectrometry(ID/LC/MS))을 이용한 음료수에 들어있는 사카린 분석.

Yunjung Lee^{1,2}, Jeongkwon Kim¹, Seonghee Ahn² & Byungjoo Kim²

¹Department of chemistry, Chungnam university, Daejeon 305-764 and Science, Daejeon 305-340

²Korea Research Institute of Standards

FE-36

액체 크로마토그래피-질량분석법을 기초로 한 어류 및 육류 중 테트라사이클린류 항생물질의 분석

Hyemin Song, Eunkyung Son², Hyuk Jeong¹, Byungjoo Kim², Seonghee Ahn² & Hunyoung So²

¹Department of chemistry, Sookmyung women's university Chungpa-dong 2-ka, Yongsan-Ku, Seoul, Korea;

²Institute of Standard and Science(KRISS), Daejeon 305-340

FE-37

동위원소희석 액체크로마토그래피 질량분석법을 이용한 건강기능식품 속 글루코사민 분석

Gui-Nam Kim¹, Young-Seong Kim¹, Seonghee Ahn², Hun-Young So² & Byung-Joo Kim²

¹Department of chemistry Kyungnam university, MaSan 631-701; ²Korea Research institute of Standards and Science(KRISS), Dejeon 305-340

FE-38

동위원소희석 액체크로마토그래피 질량분석법(ID-LC/MS)을 이용한 건강기능식품 및 종합비타민제 중 비타민A 분석

Young-Ok Lim¹², Byungjoo Kim¹, Seonghee Ahn¹, Jeongkwon Kim², Hunyoung So¹ & Youngran Lim¹

¹Korea Research Institute of Standard and Science(KRISS), Deajeon 305-340 , and ²Department of chemistry , Chungnam National University, Daejeon 305-764

FE-39

동위원소 희석 액체크로마토그래피 질량분석법 (ID/LC/MS) 을 이용한 음료수 중 안식향산 및 파라옥시안식향산류의 분석

Insun Lee, Yongseong Kim¹, Seonghee Ahn² & Byungjoo Kim ²

¹Deparment of chemistry, Kyungnam university, Masan 631-701, and ²Korea Research Institute of Standards and Science, Deajeon 305-340

FE-40

Monitoring program on pesticide residues in Korea, 2005-07

Yoon Jung Kang, Won Jo Choe, Jung Ah Do, Hee Jung Lee, Ju Young Lee, In Kyung Kim, Yong-Mu Kim, Woo Seong Kim, Dai Byung Kim & Dae Hyun Cho

Food and Drug Analysis Division, Center for Food and Drug Analysis, Busan Regional KFDA

FE-41

Determination of pseudoephedrine, dextromethorphan and their metabolites in human urine by gas chromatography - mass spectrometry

Won Woong Lee, Sung-Ho Ahn, Sung-Woo Lee & Jongki Hong

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FE-42

Monitoring of clenbuterol in farm stock products by LC-MS/MS.

Yoon-Ae Lee*, Jee-Youn Shim, Hoon Choi, Ryun-Kyung Lee, Kyung-Yoal Yoo, Jin-Hee Nam, Eun-Jin Lee, Eun-Jung Chang & Soon-Han Kim

Daegu regional KFDA, Testing and Analysis Division, 1220-9, Egok-Dong, Dalse-gu, Daegu, Republic of Korea

FE-43

In vitro identification of intermediates from the biodegradation of fluorobenzene by *Pseudonocardia benzenivorans*

Eun-Ju Kim, Young-Mo Kim, Jong-Rok Jeon, Kumarasamy Murugesan & Yoon-Seok Chang

School of Environmental Science and Engineering, POSTECH, Pohang 790-784, Korea

FE-44

Fatty acid composition changes in vegetable oils induced by frying

Yoon Jin Lee¹, Chang Hoon Park^{1,2} and Han Bin Oh¹ & Sunghwan Kim³

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FE-45

Determination of clenbuterol and ractopamine in bovine muscle using LC-MS/MS

Se-Lyung Hong, Hyo-Jin Shim, Hyun-Ju Kim, Hye-Jin Park, Ji-Yoon Jeong, Soon-Ho Lee & Jong-Ok Lee

Pesticide & Veterinary Drug Residues Division, Korea Food & Drug Administration, Seoul, 122-704

FE-46

Simultaneous analysis of glucocorticoids in bovine livers by LC-MS/MS

Sang-Eun Shin & Seung-Woon Myung

Department of Chemistry, Kyonggi University, Suwon, 443-760, South Korea

FE-47

A monitoring of pharmaceuticals in livestock wastewater by LC-ESI-MS/MS

Cheon-Kyu Seo¹, Mi-Ae Jang¹, Youn-ku Nam², Tak-Hyun Kim² & Seung-Woon Myung¹

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FE-48

The study on horizontal and vertical distribution patterns of dioxin, furan and hexachlorobenzene in han-river sediment

Ki-Ho Kim¹, Min-ho Boo² & Sangchun Lee³

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FE-49

먹는 물 중의 염소 소독부산물 분석 모니터링에 관한 연구

Sunhye Hwang

Korea Institute of Science and Technology Bioanalysis and Biotransformation Research center

FE-50

Simultaneous determination of glucocorticoids residues in eggs by HPLC-ESI-MS/MS

Mi-Ae Jang & Seung-Woon Myung

Department of Chemistry, Kyonggi University, Suwon, 443-760, South Korea

FE-51

Statistical interpretation of crude oil high resolution spectra using principal components analysis

Manhoi Hur¹, Sunghwan Hwang¹, Injoon Yeo² & Sunghwan Kim²

Yeram Co., Ltd. ¹, Mass Spectrometry Research Team, Korea Basic Science Institute²

FE-52

Rapid and easy HPLC-MS/MS method for choline chloride determination.

Bora Kim, Yeon Hur, Young-il Kim & Young-pil Kim

Dept. of Analysis reaserch, Apple tree laboratories, Seoul

FE-53

Determination of talniflumate in human plasma by high-performance liquid chromatography-tandem mass spectrometry

Su-jin Oh, Hanna Youn, Yeon Hur, Hyun-ju Park & Young-pil Kim

Dept. of Analysis reaserch, Apple tree laboratories, Seoul

FE-54

Improvement and validation of liquid chromatographic method for the determination of Rebamipide in human plasma.

Sae-mi Pyun, Yeon Hur & Young-pil Kim

Dept. of Analysis reaserch, Apple tree laboratories, Seoul

FE-55

Mass spectrometric analysis of triclosan and triclocarban and identification of transformation products from the treatment processes

Young-Mo Kim, Kumarsamy Murugesan, Jong-Rok Jeon, Eun-Ju Kim & Yoon-Seok Chang

School of Environmental Science and Engineering, POSTECH, Pohang, 790-784

FE-56

Intermediates identification of transformed diaromatic compounds by aerobic bacterium

Jannis Wenk^{1,2}, Kumarasamy Murugesan¹, Young-Mo Kim¹, In-Hyun Nam¹ & Yoon-Seok Chang¹

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FE-57

Development of an isotope-dilution LC-MS/MS method for the determination of arsenobetaine in sea foods

Kyoung-Seok Lee¹, Hyeon-Ji Kim², Yong-Hyeon Yim¹, Youngran Lim¹, Jeongkwon Kim² & Euijin Hwang¹

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2008 Summer Annual Meeting of
the Korean Society for Mass Spectrometry

FUNDAMENTAL MASS SPECTROMETRY

FU-01

**The optimization of LC-MS/MS using response surface analysis:
peak area of product ion as a function of fragmentor and collision energy**

Hyo-kwan Bae & Jin-young Jung

Environmental Technology Center, Korea Institute of Science and Technology, Seoul 136-791, Korea

FU-02

Mass spectrometric profiling of saturated fatty acid esters of steroid analyzed by high-temperature gas chromatography

Hyun-Jin Jung^{1,2}, Won-Young Lee², Bong Chul Chung¹ & Man Ho Choi¹

¹ Life Sciences Division, Korea Institute of Science and Technology, Seoul 136-791

² Department of Chemistry, Yonsei University, Seoul 120-749

FU-03

Structural analysis of platycosides in Platycodi Radix by LC/ESI-MSⁿ

Yun-Cheol Na, Young Wan Ha¹, Yeong Shik Kim¹ & Kang-Jin Kim²

Hazardous Substance Research Team, Korea Basic Science Institute, Seoul 136-713; ¹ Natural Products Research Institute, Seoul University, Seoul 110-460; ² Department of Chemistry, Korea University, Seoul 136-713

FU-04

Optimization study of electrophoretic coating of oxides on an ion source filament

Gil-Seon Kang & Chang-Joon Park

Advanced Instrumentation Center, Korea Research Institute of Standards and Science, Yuseong-Gu, Daejeon, 305-340

FU-05

A study on the analysis of glycerine by gas chromatography mass spectrometry

Hyun-Mi Chun, Song-Yi Han & Tae-Wook Kim

Hankyong Analytic Center, 67 Seokjeong-dong, Anseong-si, Gyeonggi-do, 456-749, Korea

FU-06

Lipids composition of Halobacterial membrane grown under the light and dark conditions studied by LC-MS/MS.

Min Hee Lee¹, Han Bin Oh¹, Keon Ah Lee² & Kwang-Hwan Jung²

¹Dept. of Chemistry, Sogang University, Shinsu-Dong 1, Mapo-Gu, Seoul, Korea 121-742; ²Dept. of Life Science and Interdisciplinary Program of Integrated Biotechnology, Sogang University, Shinsu-Dong 1, Mapo-Gu, Seoul, Korea 121-742

FU-07

Electrospray ionization tandem mass spectrometric analysis of a serine protease inhibitor, camostat mesylate using low-energy collision-induced dissociation

Soonho Kwon, Sanghoo Lee, Oh-Joong Kwon & Kyoung Ryul Lee

Department of Mass Spectrometric Analysis, Seoul Medical Science Institute and Seoul Clinical Laboratories, Seoul 152-766, Korea

FU-08

Fully unsupervised automatic assignment and annotation of sum formulae for product ion peaks, neutral losses in MS and proton spectra

I. Krebs¹, J.S. Lee² & S. Yates³

¹Bruker Daltonik GmbH, Bremen, Germany; ²Bruker BioSciences Korea, Seoul, Korea; ³Bruker Daltonics Inc., Fremont, USA

FU-09

Statistical evaluation of the benefit of combined use of accurate mass and isotopic pattern

Marcus Macht¹, Petra Decker¹, Aiko Barsch¹, Ilmari Krebs¹, JS Lee² & Catherine Stacey³

¹Bruker Daltonik, Bremen, Germany; ²Bruker BioSciences Korea, Seoul, Korea; ³Bruker Daltonics, Billerica, MA

FU-10

Application of radiation shielded LA-ICP-MS for the analysis of isotopes in a spent nuclear fuel

Yeong-Keong Ha, Sun-Ho Han, Hyun-Gyum Kim & Kyuseok Song

Korea Atomic Energy Research Institute, 1045 Daedeokdaero, Yuseong-gu, Daejeon, 305-353

FU-11

Improved sensitivity for PAH analysis with GC / APLI-MS

I. Sanders¹, T. Arther-Engeland¹, T. Zey¹, A. Holle¹C. Baesmann¹, R. Schieweck³, O. J. Schmitz³, K. J. Brockmann³, J.S. Lee² & T. Benter³

¹Bruker Daltonik GmbH, Bremen, Germany; ²Bruker BioSciences Korea, Seoul, Korea; ³University of Wuppertal, Wuppertal, Germany

FU-12

Emission characteristic of unintentional persistent organic pollutant from waste incinerator

ByungJo Lee, WooJung Kim, Min-Ho Boo, Youn Seok Kang, Thomas Lee & KiHo Kim^{*}

LabFrontier co.,Ltd, Younlin Bldg. #899-6, Hoggie-dong, Dongan-gu, Anyang, Gyeonggi-do, KOREA
Center for Instrumental Analysis in Kyungnam university^{*}

FU-13

Structural determination of glucocerebrosides isolated from marine sponge by fast atom bombardment and collision-induced dissociation tandem mass spectrometry

Young Min Ahn¹, Tae Seong Park², Jee H. Jung² & Jongki Hong¹

¹College of Pharmacy, Kyung Hee University, Seoul 130-701, Korea; ²College of Pharmacy, Pusan National University, Pusan 609-735, Korea

FU-14

Structural determination of triterpenic acids in prunellae spica by fast atom bombardment tandem mass spectrometry

Young Min Ahn¹, Kang Ro Lee² & Jongki Hong^{1*}

¹College of Pharmacy, Kyung Hee University, Seoul 130-701, Korea; ²College of Pharmacy, Sungkyunkwan University, Suwon 440-746, Korea

FU-15

TIMS/IDMS를 이용한 극미량 핵물질 정량에서 바탕값 영향

전영신, 하영경, 한선호, 송규석

한국원자력연구원 원자력화학연구부, 대전광역시 유성구 덕진동 150번지

FU-16

266 nm UV photodissociation of phosphorylated peptides using a Fourier transform ion cyclotron resonance mass spectrometer (FTICR MS)

Soojin Park¹, Wha-Keun Ahn², Bum Ku Rhee² & Han Bin Oh¹

¹*Department of Chemistry and Interdisciplinary Program of Integrated Biotechnology, Sogang University, Seoul 121-742, Korea*

²*Department of Physics, Sogang University, Seoul 121-742, Korea*

FU-17

Development of continuous flow sample introduction method in glow discharge plasma

Jin-Ah Kim, Hyunkook Park & Sang Chun Lee

Department of Chemistry, Kyungnam University, 449 Wolyoung-dong, Masan, Republic of Korea

FU-18

Infrared multiphoton dissociation of DNA-metal complexes ($M = K^+$ and Sr^{2+})

Eun Sun Hong,¹ Hey-joo Yoon,¹ Byungjoo Kim,² Hun-Young So,² & Seung Koo Shin^{1*}

¹*Bio-Nanotechnology Center, Department of Chemistry, Pohang University of Science and Technology, San 31, Hyoja dong, Namgu, Pohang, 790-784*

²*Korea Research institute of Standards and Science, Deajeon, 305-340*

FU-19

Relative stabilities of calix[4]arene-linked bisporphyrin–fullerene complexes in the gas phase

Sunghan Jung¹, John D. Paauwe², Peter D. W. Boyd² & Seung Koo Shin^{*1}

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FU-20

휘발성 유기화합물의 질량분석을 위한 소프트 플라즈마 이온화장치의 개발

Hiw-won Lee, Hyun-kook Park & Sang-Chun Lee

Department of Chemistry, Kyungnam University, 449 Wolyoung-dong, Masan, Korea

**Relative stabilities and fragmentations of metal thiolates in the gas phase
(metal = Cd, Zn)**

Won Ja Min, Yongwook Kim, Jongcheol Seo, Sung Jun Lim & Seung Koo Shin*

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San 31, Hyojadong, Pohang, Kyungbuk, Korea 790-784*



2008 Summer Annual Meeting of
the Korean Society for Mass Spectrometry

SAMPLE PREPARATION & METHOD DEVELOPMENT

SM-01

**Determination of lacidipine in human plasma
by liquid chromatography-electrospray ionization tandem mass spectrometry**

Hyun Jin Bae, Kyung Hee Jo, Jong Dae Kim, Moon Sun Jang, Seung Woo Kang, Kyung Ryul Lee & Hee Joo Lee

Department of Drug Development Service Division, BioCore Co. Ltd.; Dept. of Pharmacokinetics, Seoul Medical Science Institute, Seoul Clinical Laboratories (SCL)

SM-02

New nano-electrospray tip with platinum wire to improve spraying stability

Joseph Kwon¹, YunJo Chung² & Sunghwan Kim¹

¹Korea Basic Science Institute, 52 Yeoeun-Dong, Yuseong-Gu, Daejeon 305-333, Republic of Korea; ²Center for university-wide research facilities, Chonbuk National University, Chonju 561-756, Republic of Korea

SM-03

**Cation-assisted laser desorption/ionization for surface mass spectrometry
of alkanethiol SAMs on gold and gold nanoparticles**

Tae Kyung Ha,^{1,2} Han Bin Oh,² & Sang Yun Han¹

¹Nanobio Fusion Research Center, Korea Research Institute of Standards and Science (KRISS), Daejeon 305-340, Republic of Korea; ²Department of Chemistry, Sogang University, Seoul 121-742, Republic of Korea

SM-04

**Molecular mass sorting of C. Glutamicum proteome
using hollow fiber flow field-flow fractionation for proteomics**

Ki Hun Kim & Myeong Hee Moon

Department of Chemistry, Yonsei University, Seoul, 120-749, Korea

SM-05

**A soft preparative method for membrane proteome analysis
with flow field-flow fractionation and nanoflow LC-ESI-MS-MS**

Duk Jin Kang^{1,2}, Jong Shin Yu² & Myeong Hee Moon¹

¹Yonsei University; ²Korea Basic Science Institute

SM-06

Validated quantitative profiling of 21 endogenous urinary corticosteroids by LC-MS/MS and its clinical application in prostate diseases

Hye-Jin Cho^{1,2}, Su Hyeon Lee^{1,2}, Won-Young Lee², Bong Chul Chung¹ & Man Ho Choi¹

¹*Life Sciences Division, Korea Institute of Science and Technology, Seoul 136-791; ²Department of Chemistry, Yonsei University, Seoul 120-749*

SM-07

Quantitative metabolic profiling of endogenous steroids in human plasma by gas chromatography-mass spectrometry and its clinical application

Young Wan Ha¹, Ju-Yeon Moon^{1,2}, Myung Hee Moon², Man Ho Choi¹ & Bong Chul Chung¹

¹*Life Sciences Division, Korea Institute of Science and Technology, Seoul 136-791, Korea; ²Department of Chemistry, Yonsei University, Seoul 120-749, Korea*

SM-08

Applications of room temperature ionic liquid (RTIL) matrices for MALDI mass imaging of peptides adsorbed on organically modified surfaces

Won-Jik Shin^{1,2}, Nam-Joon Kim², Tae-Kyung Ha¹, Chang-Rok Choi¹, Tae-Geol Lee¹ & Sang-Yun Han¹

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SM-09

Development of a new system for the identification and classification of amphetamine-derivatives abuser by liquid chromatography/tandem mass spectrometry

Sang Kyu Lee, Yoo-Jin Kil, Hyeon-Ho Jeong, Rock-Ki Kim, Su Hee Yun, Changbae Jin & Hye Hyun Yoo

Doping Control Center, Korea Institute of Science & Technology

SM-10

Multiresidue analysis of 180 doping agents in human urine by monolithic LC-MS/MS

So-Hee Kim^{1,2}, Hae-Sun Park¹, Ho Jun Kim¹, Kang Mi Lee¹, Jaeick Lee¹, Changbae Jin¹, Kwang Yeon Hwang² & Min Jung Kang¹

¹*Doping Control Center, Korea Institute of Science & Technology; ²College of Life Science & Biotechnology, Korea University¹*

SM-11

Validation and application of a high-performance liquid chromatography-tandem mass spectrometry assay for fexofenadine in human plasma

Hae Jong Jang¹ & Seoung Woo Kang²

¹*CJ pharmaceutical Research Institute, CJ Corp., Korea;* ²*Department of Drug Development Service, BioCore Co., Ltd*

SM-12

Simultaneous determination of Nicotine, NNK and their major metabolites in smoker's urine by LC-MS/MS

Ki Young Kim^{1,2}, JongKi Hong², Bong Chul Chung¹ & Byung Hwa Jung¹

¹*Bioanalysis & Biotransformation Research Center, Korea Institute of Science and Technology;* ²*Department of Pharmacy, Kyung Hee University*

SM-13

Quantification of paclitaxel and its main metabolites in human plasma by liquid chromatography-tandem mass spectrometry

Se-UI Oh, Hwa-Sook Kim, Seon-Jeong Kim, Jun-Hwa Shim, Hyang-Hee Yang, So-Jeong Yi, Kwang-Hee Shin, Tae-Eun Kim, Seo-Hyun Yoon, Kyung-Sang Yu & In-Jin Jang

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SM-14

Analysis of polyethylene glycols, carbohydrate and amino acid using zinc oxide (ZnO) nanoparticles in surface-assisted laser desorption/ionization mass spectrometry

Aera Lee, Hyo-Jik Yang, Yangsun Kim & Jeongkwon Kim

Department of Chemistry, Chungnam National University, Daejeon, 305-764, South Korea *ASTA Inc., Gyeonggi Biocenter, Suwon, South Korea*

SM-15

Elucidation of protein structure using guanidination of lysine residues in mass spectrometry

Hyesun Han, Aera Lee, Seongjae Shin, Hyo-Jik Yang, Jinhee Kim & Jeongkwon Kim

Department of Chemistry, Chungnam National University, Daejeon 305-764, South Korea

SM-16

Comparison of three different digestion methods - overnight, ultrasound, and microwave - using MALDI-MS

Seongjae Shin, Hyo-Jik Yang, Hyesun Han, Aera Lee, Jinhee Kim & Jeongkwon Kim

Department of Chemistry, Chungnam National University, Daejeon 305-764, South Korea

SM-17

The modification of pretreatment for fine analysis of Korean Lacquer Tree by HPLC and LC-MS/MS

Yu-Kyung Jung, Yumi Cho, Su-Min Park & Ki-Jung Paeng

Department of Chemistry, Yonsei University, Wonju, 220-710, Korea

SM-18

Analysis of liquid crystal mixture using a liquid chromatography/mass spectrometer with atmospheric pressure chemical ionization

Kyung Lae Rho, Kook Ji Kim, In-Hyun Nam, Sung-Chan Jo & Weonsik Oh

LCD Business, Display R & D Center, Samsung Electronics Co. LTD. San 24, Nongseo-Dong, Giheung-Gu, Yongin-Shi, Gyeonggi-Do, 449-711

SM-19

Analysis of polyimide using off-line in-capillary methylation with tetramethylammonium hydroxide and microwave oven

In-Hyun Nam, Kyung Lae Rho, Kook Ji Kim, Sung-Chan Jo & Weonsik Oh

LCD Business Display R & D Center, Samsung Electronics Co. LTD. San 24, Nongseo-Dong, Giheung-Gu, Yongin-Shi, Gyeonggi-Do, 449-711, Republic of Korea

SM-20

Identification of oxidation products of biodiesel from vegetable oils under accelerated oxidation condition by FT-orbitrap mass spectrometer

Jungju Seo¹, Mi-Jin Lee¹ & Jae-Kon Kim²

¹Hazardous Substance Research Team, Korea Basic Science Institute, Seoul, 136-70; ²R & D Team, Korea Institute of Petroleum Quality, Ochang, 363-883

SM-21

Large-scale phosphoproteome analysis under low pH buffer condition by liquid chromatography-tandem mass spectrometry (LC-MS/MS)

Hyunwoo Choi, Sin-Hyeog Im, Dong-Yu Kim & Zee-Yong Park

Department of Life Science, Gwangju Institute of Science and Technology, Gwangju, 500-712

SM-22

Determination of bicalutamide in human plasma by liquid chromatography-tandem mass spectrometry

Jun-Hwa Shim, Hwa-Sook Kim, Se-UI Oh, Seon-Jeong Kim, Hyang-Hee Yang, So-Jeong Yi, Kwang-hee Shin, Yong-Ju Chung, Seo-Hyun Yoon, Kyung-Sang Yu & In-Jin Jang

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SM-23

Magnetic beads as a useful tool for the separation of glycoprotein and the immunoprecipitation

Narae Lee¹, Heysun Meang¹, Jeongkwon Kim², Sehwan Moon³ & Yangsun Kim¹

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SM-24

펠프 및 종이 중 Pentachlorophenol 분석 방법 고찰

장명수, 강윤석, 권오영, 이덕희

(주)랩프런티어, 경기도 안양시 동안구 호계2동 영린빌딩 3층

SM-25

Comparison and optimization of various enrichment techniques for LC-MS analysis of lysophospholipids

Youxun Jin¹, Jun Young Kwak¹, Hwan-Soo Yoo¹, Yong-Moon Lee¹, Hun-Young So² & Yong-Hyeon Yim²

¹College of Pharmacy, Chungbuk National University; ²Korea Research Institute of Standards and Science

SM-26

Development of MALDI plates for practical analysis

Mikyung Son¹, Heysun Meang¹ & Yangsun Kim^{1,2}

¹*Applied Surface Technology Asia Inc., Korea;* ²*Hudson Surface Technology Inc., Newark, NJ, USA*

SM-27

Detailed experimental parameters for on-line normal-phase LC-FTICR MS for lipid analysis : accurate mass measurement approach

Yewon Lee & Han Bin Oh

Department of Chemistry and Interdisciplinary program of Integrated Biotechnology, Sogang University, Seoul, Korea

SM-28

Shot-gun membrane proteomics by acid hydrolysis combined with trypsin and chymotrypsin

Joseph Kwon¹, Jeehyun Oh¹, Sunghoon Lee², Seung Il Kim¹ & Jong-Soon Choi¹

¹*Proteome Research Team, Korea Basic Science Institute, Daejeon 305-333, Korea;* ²*Korean Bioinformatics Center, KRIBB, Daejeon 305-806, Korea*

SM-29

Quantitative determination of desmosterol and lanosterol from atorvastatin treated rat urine by gas chromatography–mass spectrometry

Bhowmik Salil Kumar^{1,2}, Bong Chul Chung¹, Young-Joo Lee³, Hong Jae Yi³ & Byung Hwa Jung^{1,2}

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SM-30

Quantitation of triacylglycerol lipase activity by mass spectrometry

Hye Jin Ham, Jongcheol Seo, Seung Koo Shin & Hye-Joo Yoon

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SM-31

Characterization of inks (ballpoint pen, printer ink) by FT-IR, TLC and GC/MS for the document analysis

Hyun-Mee Park, Jin-Sook Park, Ki-Su Lee, Yeon Hee Lee & Kang-Bong Lee

Advanced Analysis Center, KIST, Seoul 136-791, Korea

SM-32

A binary matrix for improved detection of phosphopeptides in matrix-assisted laser desorption/ionization mass spectrometry

Li-Hua Zhou & Kwang-Pyo Kim

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SM-33

Hydrophilic interaction liquid chromatographic analysis of donepezil in human plasma with tandem mass spectrometry: Application to a pharmacokinetic study of donepezil in volunteers

Eun Jeong Park¹, Hye Won Lee¹, Hye Young Ji¹, Hoe Yoon Kim², Kang Choon Lee² & Hye Suk Lee¹

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SM-34

Mass image analysis of thyroid cancer tissue by imaging mass spectrometry

Joo-Young Bang¹, Wan-Seop Kim² & Kwang Pyo Kim¹

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SM-35

Liquid chromatography-tandem mass spectrometry for the determination of jaceosidin in rat plasma

Won Young Song, Nam Jin Kim, Hye Young Ji, Sung Yeon Kim & Hye Suk Lee

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SM-36

Determination of essential oils extracted from schizonepeta tenuifolia briq. by gas chromatography and mass spectrometry

Mi Hee Cheon¹, Kang Ro Lee² & Jongki Hong¹

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SM-37

GC/MS를 이용한 환경시료 중 극성 미량유해물질 유도체화 분석법

Hyojin Chae^{1,2}, Jeong-Hwa Kim¹, Hee Soo Pyo¹, Jongki Hong², Seungki Kim¹ & Woon Yong Kwon¹

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SM-38

The property-tuned mass balanced isotope tags (MBITs) for simultaneous protein identification and quantitation using tandem mass spectrometry

Jongcheol Seo, Min-Soo Suh, Hye-Joo Yoon & Seung Koo Shin

Bio-Nanotechnology Center, Department of Chemistry, Pohang University of Science and Technology, Pohang 790-784, Korea

SM-39

Application of normalization methods to complex high resolution mass spectra for statistical interpretation

Injoon Yeo^{1,2}, Eun Suk Park¹, Jong Shin Yoo¹, Young Hwan Kim¹, Jae Won Lee³ & Sunghwan Kim¹

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SM-40

A new detection tool with ultra-high sensitivity by amplification of biological signals using gold particles and LDI-TOF MS

Jung-Rok Lee¹, Ju-Hee Lee², Kwang Pyo Kim¹, Hyungsoon Park³ & Woon-Seok Yeo²

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SM-41

UPLC-MS/MS를 이용한 모발 중 니코틴과 대사산물인 코티닌의 분석

Jung Ryu, Sung-Min Choi, Hae-Suk Lee, Kyoung Teak Kwon & Myoung Hee Lee

Central Laboratory Hanbat National University, Daejeon, Korea

SM-42

Analysis of intracellular metabolites of TCA cycle by LC-MS/MS

Joo-Hee Chung, Seung-Eun Song, Eun-Min Cho, Eun-Hee Lee & Chi-Yong Eom

Seoul Center, Korea Basic Science Institute, Seoul 136-713, Korea

SM-43

Analysis of the C-terminal amino acid sequence, glycosylation site and disulfide bond pattern of recombinant glucocerebrosidase by MALDI-MS and Edman sequencing

Jin Hee Kim¹, Seung Ho Kim³, Hyun Hee Park³, Soo Hyun Kim², Chi Yong Eum¹ & Myung Hee Nam¹

¹Korea Basic Science Institute, Metabolome Analysis Team, Seoul 136-713, Korea; ²Korea Basic Science Institute, Life Science Research Group, Daejeon 305-333, Korea; ³ISUABX, Seoul 120-749, Korea