At Shimadzu, we’re focused on providing a total solution to all researchers with an expansive portfolio of instrumentation that provides unparalleled performance. Delivering precise, reliable results, our platforms will help advance your research and development in a multitude of application areas, from screening of hazardous substances for securing human health and earth environment, biomarker discovery, metabolite ID to small molecule analysis, pharmacokinetics, and tissue imaging.

Shimadzu at IMSC 2012

Look inside for details on our events and scientific presentations by Shimadzu or in collaboration with our research partners.
LCMS-8040

Ultra Fast with High Sensitivity

Ultra Fast MS
- Ultra Fast Scan Speed of 15,000 u/sec
- 555 MRMs per Second, the Most Ever Possible
- Polarity Switching Speed of 15msec

High Sensitivity
- Improved Ion Optics
- Improved Collision Cell Efficiency
- Femtogram Range Detection Limits

User-Friendly
- Easy Maintenance for Minimized Instrument Downtime
- Quantitation Browser for Multi-Analyte Quantitation
- Compatible with LCMS-8030 Systems

GCMS-TQ8030

Ultra Fast MRM and Ultra Fast Scan Speed

Ultra Fast Speed
- Fast Enough to Perform MRM/Scan
- Unmatched Scan Speed of 20,000 u/sec
- Ultra Fast 600 MRM Transitions/sec

Sensitivity and Selectivity
- Overdrive Lenses to Reduce Neutral Noise
- High-sensitivity Ion Optics and Low-noise Detector
- Twin-column TQ Configuration for Ultimate Flexibility

User-Friendly
- Front-access Source for Easy Maintenance
- Single Software Platform for Both TQ and GCMS
- Automatically Adjusts for Compound RT and MRM Time

LCMS-8080

Ultra High Sensitivity for the Most Challenging Applications

Ultra High Sensitivity
- Coaxial Flow Source Design
- Hot Source Induced Desolvation
- Axial Field Collision Cell Technology

Robust Source
- Multi-Orthogonal Source Design Reduces Need for Cleaning
- Venturi Exhaust System Minimizes Contamination
- Ultra High Sensitivity Even in Complex Matrices

User-Friendly
- Fully Integrated LC and MS Software Control
- Quantitation Browser for Multi-Analyte Quantitation
- Wide Polarity Range
Luncheon Seminar Agenda
Monday, Tuesday, Wednesday, Thursday   September 17-20, 12:20h-13:30h

<table>
<thead>
<tr>
<th>Date</th>
<th>Place</th>
<th>Title and Speaker</th>
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| Sept. 17 (Mon) | Main Hall | Let’s Fish Mass  
Koichi Tanaka *(Shimadzu Corporation)*  
Daniel J. Capon *(Blood Systems Research Institute, San Francisco, U.S.A)* |
| Sept. 18 (Tue) | Room D   | Challenges in (un)-supervised LC-MS/MS–based metabolomics.  
Gérard Hopfgartner *(Life Sciences Mass Spectrometry, School of Pharmaceutical Sciences, University of Geneva, University of Lausanne, Geneva, Switzerland)* |
| Sept. 19 (Wed) | Room D   | Ultra Fast and Sensitive: Shimadzu UHPLC-Triple Quadrupole Mass Spectrometers  
Richard van Breemen *(University of Illinois College of Pharmacy Director, UIC/NIH Botanical Center for Dietary Supplements Research, U.S.A)* |
| Sept. 20 (Thu) | Main Hall | Induction of Pluripotency of Defined Factors  
Shinya Yamanaka *(Director, Center for iPS Cell Research and Application, Kyoto University, Japan)* |

Users’ Day Agenda
Sunday, September 16   Registration at 09:00AM

<table>
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<tr>
<th>Time</th>
<th>Title and Speaker</th>
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| 10:00 | LCMS Product portfolio  
Ichiro Hirano, Product Manager, Mass Spectrometry Business Unit, Shimadzu Corporation |
| 10:30 | Biological Profiling: Complementary Qualitative and Quantitative Analysis using IT-TOF and QQQ Mass Spectrometry  
Kevin Schug, Department of Chemistry & Biochemistry, University of Texas at Arlington, U.S.A |
| 11:10 | MALDI Product portfolio  
Helen V. Montgomery, Kratos Analytical Ltd. |
| 11:25 | Top-down Proteomics using MALDI ISD and MSn  
Daniel Lafitte, University Aix-Marseille, France |
| 11:55 | GCMS Product portfolio  
Benjamin J. Figard, Shimadzu Scientific Instruments, U.S.A |
| 12:10 | GC x GC-qMS with chemical ionization for highly specific, sensitive, and quantitative steroids  
J. Thomas Brenna, Professor, Cornell University, U.S.A |
| 12:40 | Serum Metabolome Analysis for Early Detection of Colorectal Cancer  
Masaru Yoshida, Chief, Division of Metabolomics Research, Kobe University Graduate School of Medicine, Japan |
| 13:10 | Closing Remarks  
Kozo Miseki, Director, Life Science Business Department, Shimadzu Corporation |

The presentations will last until 13:15 and then we will host a lunch event featuring buffet style food and drinks from 13:30 in the Gold Room, Grand Prince Hotel Kyoto, close to the congress location. We also encourage you to enjoy Japanese traditional attractions with us!

Oral Presentations

Monday, September 17, 2012

Session 1: 09:40, Main Hall

S01-0940
High Mass Resolution MALDI TOF MS/MS with a Curved Field Reflectron (or the CFR Comes Of Age)
Andrew R Bowdler 1; Ian Brookhouse 1
1: Kratos Analytical Ltd, Manchester, UK

Session 1: 10:40, Main Hall

S01-1040
Identification of trace level process related impurities of small molecule Irbesartan, an angiotensin II receptor antagonist through MSMS analysis
Saravanan Subramaniam 1; Raman Palvannanathan 1; Ramiyra Uthayakumar 1; Govindarajan Chandramohan 1; Mohan Kasi 1; Arvind Thyagarajan 1; Manohar Venkat 1
1: Indian Institute of Chromatography & Mass Spectrometry

Session 9: 16:00, Room D

S09-1600
Diagnostic application of Imaging Mass Spectrometry
Mitsutoshi Setou 1; Kiyoshi Ogawa 2; Akiko Kubo 3; Ikuko Yao 4; Masaaki Matsuura 5
1: Hamamatsu University School of Medicine
2: Shimadzu Corporation
3: Keio University
4: Kansai Medical University
5: Japanese foundation for cancer research

Session 9: 16:20, Room D

S09-1620
High-throughput analysis for metabolic dynamics and in situ metabolite imaging by MALDI mass spectrometry
Daisuke Miura 1; Yoshinori Fujimura 2; Shin-ichi Yamaguchi 2; Noriyuki Ojima 2; Mitsuru Shindo 1; Hiroyuki Wariishi 1
1: Kyushu University
2: Shimadzu Corporation

Wednesday, September 19, 2012

Session 27: 16:40, Room A

S27-1640
Novel accurate bacterial identification by MALDI-TOFMS based on ribosomal protein coding in S10-spc-alpha Operon at Stain level
Hirotu Tamura 2; Yudai Hotta 2,3; Hiroaki Sato 4; Keisuke Shima 1; Akifumi Hosoda 2; Noriyuki Ojima 1
1: Shimadzu Corporation
2: School of Agriculture, Meijo University
3: Formulation Technology Institute, Kumiai Chemical Industry Co., 4: Research Institute for Environmental Management Technology, National Institute of Advanced Industrial Science and Technology

Session 30: 16:40, Room E

S30-1640
Ab initio peak identification for SRM/MRM data
Ken Aoshima 1; Koikegami Shigeru 3; Fukuda Mitsuru 3; Takahashi Kentaro 1; Matsuura Kentaro 1; Watanabe Hideki 1; Sato Yoshiaki 1; Uehara Taisuke 1; Kimura Takayuki 1; Nakamura Tatsuji 1; Parry Howell 2; Tanaka Satoshi 2; Utsunomiya Shin-ichi 2; Kajihara Shigeki 2; Tanaka Koichi 2; Oda Yoshiya 1
1: Eisai Co. Ltd., 2: Shimadzu Corporation

Thursday, September 20, 2012

Session 32: 09:40, Room A

S32-0940
Ab initio MO Study on the Fragmentation Mechanisms of Protonated Phosphopeptides in “On-Resonance” and “Off-Resonance” Pulsed Gas Introduction Collision-Induced Dissociations
Takae Takeuchi 1,2; Ayaka Takahashi 1; Erika Sugawara 1; Tomoko Kimura 1; Yuka Kurosaki 1; Shigeki Kajihara 3; Hiroko Morinaga 4; Shinichi Iwamoto 3; Koichi Tanaka 3
1: Department of Chemistry, Faculty of Science, Nara Women's University
2: National Institute of Advanced Industrial Science and Technology (AIST), Ikeda, Osaka, Japan
3: Koichi Tanaka Laboratory of Advanced Science and Technology, Shimadzu Corporation
4: Technical Research Laboratory, Shimadzu Corporation

Session 34: 10:40, Room D

S34-1040
MSPTM-DB: a known PTM database for high-speed and accurate search available on the “ProteoAnalysis” web site
Akiyasu C Yoshizawa 1; Tsuyoshi Tabata 2; Takuyuki Kimura 2; Ken Aoshima 2; Yoshiya Oda 2; Shigeki Kajihara 1; Koichi Tanaka 1
1: Koichi Tanaka Laboratory of Advanced Science and Technology, Shimadzu Corporation
2: Eisai Product Creation Systems, Eisai Corporation, Ltd.
Poster Presentations

**Monday, September 17, 2012**

**PMo-004**
Qualitative analysis of impurities in enalapril using liquid chromatography-ion trap time of flight hybrid mass spectrometry

**PMo-005**
Qualitative Analysis of Gossypol, Free Gossypol, and Gossypol Derivatives in Cottonseeds By Electrospray Ionization Tandem Mass Spectrometry

**PMo-006**
evaluation of the higher sensitive LC/MS/MS incorporates novel desolvation technologies to achieve low femto-gram LOQ

**PMo-030**
Analysis of Panax ginseng extracts by comprehensive Two-Dimensional Ultra High Performance Liquid Chromatography coupled with IT-TOF

**PMo-031**
Influence of Sample Preparation Techniques on the Sensitive Detection of Peptides by MALDI-MS

**PMo-039**
Analysis of 8 kinds of estrogens in environmental water by ultra high performance liquid chromatograph hybrid triple quadrupole mass spectrometer

**PMo-063**
Comparison of MALDI Imaging modalities using a Peptide Gel matrix for stem cell implantation

**PMo-082**
Molecular detection of breast cancer-related phosphatidylinositol by high-resolution imaging mass spectrometry

**PMo-084**
MALDI Imaging of Metabolites Reconstructed by CE-MS Based Quantitative Analysis

**PMo-094**
Mass spectrometry-based sequencing of protein C-terminal peptide using alpha-carboxyl group specific derivatization and COOH capturing

**PMo-098**
Differentiation of isobaric residues in SPITC-derivatized tryptic peptides using MS/MS technique in a novel Curved Field Reflectron.

**PMo-114**
MALDI MSn analysis of protein oxidation in major diseases

**PMo-120**
Multidimensional LC-MALDI Workflow for High Sensitivity Detection of Low-Abundance Peptides from Complex Samples

**PMo-126**
Identification of a modified amino acid residue in the heme protein using LC/MS/MS

**PMo-169**
High Throughput Molecular Weight Confirmation of Pharmaceutical Compounds Using DART MS Analysis with Ultra-fast Polarity Switching

**PMo-170**
Componential Analysis of Pepper of Various Origins Using DART-MS Using Ultra-fast Polarity Switching

**PMo-189**
Acceleration of gluconeogenesis of the host liver bearing human colon cancer metastases revealed by microscopic imaging mass spectrometry

**PMo-200**
Direct detection of S-nitrosylated peptides with UV-MALDI MS using porphyrin and retinoic acid as a matrix additive

**Tuesday, September 18, 2012**

**PTu-003**
Detection of the Heterogeneous O-Glycosylation Profile of MT1-MMP Expressed in Cancer Cells by a Simple MALDI-MS Method

**PTu-006**
An MSn platform for detailed characterisation of both the peptide and the glycan moieties and the peptide/glycan linkage in glycoproteins.

**PTu-039**
MALDI MS analysis of N-glycan structures of a cell adhesion molecule, CADM1, in various cancer cells

**PTu-041**
A workflow for identification of isobaric isoforms of glycans using off-line MALDI-MSn system.

**PTu-042**
Negative-ion fragmentation of neutral N-glycans derivatized with 3-aminoquinoline and other non-acidic reagents

**PTu-078**
PGRN: a novel therapeutic target and biomarker for insulin resistance and obesity identified by differential proteome analysis

**PTu-082**
Discovery of novel urinary biomarker candidates for diagnosis of prostate cancer

**PTu-089**
Accurate Mass LC-MS/MS Profiling of Synthetic Cannabinoids
Poster Presentations

PTu-099
Ab initio MO Study on the Fragmentation Mechanisms of Protonated Phosphopeptides in “On-Resonance” and “Off-Resonance” Pulsed Gas Introduction Collision-Induced Dissociations

PTu-117
Adaptive Noise reduction in MALDI TOF Mass Spectrometers

PTu-118
Development of an ion transmission enhanced tandem ion guide system for triple quadrupole mass spectrometer

PTu-122
Source Cleaning in Maldi Mass Spectrometers by UV Laser Desorption

PTu-128
A Novel Precursor Isolation Method using Digital Ion Trap Mass Spectrometer

PTu-194
Differential Analysis in sulfenamide-based vulcanizing accelerators for rubber products by High mass Accuracy MS and Multivariate Statistical Technique

Wednesday, September 19, 2012

PWe-002
Metabolome profiling of human embryonic stem cells by gas chromatography-mass spectrometry

PWe-007
Ultra Fast Analysis of Amino Acids in Cultured Cell Extracts Using UHPLC/MS/MS

PWe-010
Plant metabolite analysis using comprehensive two dimensional gas chromatograph quadrupole mass spectrometer

PWe-021
Differential analysis of fermented beverage using fast polarity switching TOFMS acquisition with high mass accuracy and multivariate analysis

PWe-023
Development of accelerate quantification analysis for hydrophilic metabolites using ionparing chromatography with a high-speed triple quadrupole mass spectrometer

PWe-058
Data-dependent acquisition system for N-linked glycopeptides using MALDI-DIT-TOF

PWe-093
Mass spectrometry based assessment chimeric mouse liver metabolite profiles following oral dosing of troglitazone

PWe-095
Systems based LC-MS metabolite profiling of mice treated with ethanol enriched liquid diets

PWe-099
Development of comprehensive glycerophospholipid profiling methods using liquid chromatography / high-speed triple quadrupole mass spectrometry

PWe-100
Development of comprehensive glycerophospholipid profiling methods using liquid chromatography / high-speed triple quadrupole mass spectrometry

PWe-110
Design Of Specific methodology For The Identification Of Beta-Lactamase Producing Enterobacteriaceae Using MALDI Mass Spectrometry

PWe-113
MALDI Mass Spectrometry and MALDI-MS/MS Investigation into Chemically Induced Peptides of Beta-Lactamase Producing Enterobacteriaceae

PWe-128
Non-targeted identification of novel Buspirone metabolites using a Spectral Similarity score derived from common fragment ion and neutral loss species

PWe-133
Development of High Performance Liquid Chromatography Tandem Mass Spectrometry Method for Analysis of Bacopaside-I in Rat Urine and Feces Samples

PWe-147
A Semi-Automated Method for Sequencing Oligonucleotides using ISD and Pseudo-MS3 on a MALDI-Ion Trap-TOF Mass Spectrometer

PWe-148
Caco-2 Permeability Studies and Determination by LC/MS/MS of Memantine

PWe-150
Caco-2 Permeability Studies and Determination by LC/MS/MS of Thiocotic Acid

PWe-153
Caco-2 Permeability Studies and Determination by LC/MS/MS of Trimebutine

PWe-154
Caco-2 Permeability Studies AS A New Alternative Model to Bioequivalence and Biowaiver Tests

PWe-170
The study of ageing processes using in vitro glycation experiments applied to low density lipoproteins using MALDI Mass Spectrometry
PTh-022
To determine the activity of Essential Oil from Blumia eriantha from Indian origin by HSGC and GCMS

PTh-023
Screening of antioxidants present in unripe Manilkara zapota fruit of Indian origin by using LCMS/MS.

PTh-024
Rapid development of functional extensions for mass spectrometry using freeware software Mass++

PTh-025
UHPLC-MS/MS, an Alternative Solution to Conventional Biosensor Approach for Quorum Sensing Signalling Molecules Detection in Complex Environmental Samples

PTh-031
Identification of antioxidants in Fructus aurantii and its quality evaluation using a new on-line combination of analytical techniques

PTh-033
JobRequest - an easy-to-use software platform for proteomics analysis - and ProteoAnalysis, its application for protein identification.

PTh-036
Application of high speed LC-MSMS technology towards unambiguous characterization of degraded products of Lenalidomide, an anticancer molecule

PTh-048
Simultaneous analysis of anionic, amphoteric and non-ionic surfactant using ultra-high speed LC-MS/MS

PTh-050
Multi-component quantitative analysis of pharmaceuticals and personal care products in the environment by LC-MS/MS with fast polarity switching

PTh-060
Analysis method of polybrominateddiphenylether using GC-MS and GC-MS/MS coupled with automated identification and quantification system with a database

PTh-086
Development and validation of high resolution liquid chromatography-time of flight method of Bacopaside-I and metabolites for pharmacokinetic study

PTh-105
Acylcarnitine analysis by ESI-MS/MS with smaller amount of sample and rapid analytical time

PTh-132
Rapid screening and confirmation of emerging contaminants in UK river waters by UHPLC-IT-TOF

PTh-159
Simultaneous determination of cationic and anionic compounds using a high-speed polarity switching ESI and an online-SPE LC-MS/MS

PTh-165
Simultaneous analysis of cationic, anionic and neutral surfactants from different matrices using LCMS/MS

PTh-175
Exploring the application of a universal method for pesticide screening in foods using a high data acquisition speed MS/MS

PTh-176
Multi-class pesticides residues analysis in challenging vegetable matrices by using fast MRM with 15 msec polarity switching

PTh-177
High Throughput Quantitative Analysis of Multi-mycotoxin in Beer-based Drinks using UHPLC-MS/MS

PTh-186
Assessing the impact of a novel ion source design in food safety applications using MS/MS detection

PTh-192
Development of a generic approach to drugs of abuse screening using fast polarity switching MRM triggered product ion scanning on the fly

PTh-193
HPLC method scouting system using ultra high performance liquid chromatography coupled to single quadrupole mass spectrometer

PTh-196
Identification of triazolam, etizolam and their metabolites by liquidchromatography tandem mass spectrometry
Shimadzu Event Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Sept. 16 (Sun)</th>
<th>Sept. 17 (Mon)</th>
<th>Sept. 18 (Tue)</th>
<th>Sept. 19 (Wed)</th>
<th>Sept. 20 (Thu)</th>
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<tr>
<td>10:00</td>
<td>Users' day</td>
<td>Luncheon Seminar</td>
<td>Luncheon Seminar</td>
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<tr>
<td>11:00</td>
<td>Room A</td>
<td>Main Hall</td>
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Booth Exhibition

Be sure to visit us at Booth No. F, Event Hall

NEW LCMS-8080
NEW LCMS-8040
NEW GCMS-TQ8030
AXIMA Resonance

LCMS-8030
LCMS-2020
LCMS-IT-TOF
GCMS-QP2010 Ultra
GCMS-QP2010 SE

Location

Event Hall
Shimadzu's Booth Exhibition
/Posters

Main Hall
Luncheon Seminar
Sept. 17(Mon)
Sept. 20(Thu)

Room D
Luncheon Seminar
Sept. 18(Tue)
Sept. 19(Wed)

Room A
Users' Day
Sept. 16(Sun)

Main Entrance

Shimadzu Corporation   http://www.shimadzu.com/an/