

1st Day (Wednesday, May 14, 2003) Program

Auditorium

“Symposium Session”

Symposium 1 “Drug discovery & MS”

- (9:30~11:50) Chairpersons: Yutaka Hashimoto,
Takeshi Kinoshita
1-S-01 Natural products and mass spectrometry
(Fujisawa)
Nobuharu Shigematsu
1-S-02 Role of Mass Spectrometry for Drug Metabolism and Pharmacokinetics Research
(Discovery Metabolism Research,
Yamanouchi Pharmaceutical Co., Ltd.)
Hiroya Miura
1-S-03 Genome based drug discovery in Eisai
(Eisai)
Takeshi Nagasu
1-S-04 The role of LC/MS system in high throughput chemistry (HTC)
(Research Division, Glaxo
Smith Kline K. K.)
Ichiro Morimoto
1-S-05 Difference in drug discovery strategy between Japanese and U.S. pharmaceutical industries
(Banyu Tsukuba Research Institute)
Susumu Nishimura

Invited lecture 3

(17:00~17:45)

Chairperson: Junichi Goto

- 1-T-03 Mass spectrometry-based approaches for analysis of oxidative damage to DNA and proteins
(Center for Cancer Pharmacology and Genomics Institute Proteomics Facility,
University of Pennsylvania)
Ian A. Blair

Business meeting of MSSJ (12:00~12:50)

Invited lecture 1

(15:00~15:45) Chairperson: Zenzaburo Tozuka

- 1-T-01 New Strategies for Automated LC/MS and Data Processing of Small and Large Molecules in Life Sciences Research
(¹Novatia, LLC, ²Michrom BioResources)
°Mark E. Hail¹, Jeffrey L. Whitney¹,
David J. Detlefsen¹, Kerry D. Nugent²

Invited lecture 2

(16:00~16:45) Chairperson: Takemichi Nakamura

- 1-T-02 Mass Spectrometric Strategies for Screening Natural Toxins in Tropical Venomous Organisms
(Laboratory of Structural Biology and Zoochemistry-CEIS/Dept. Biology,
Institute of Biosciences,
São Paulo State University)
M. S. Palma, M. A. Mendes, M. R. Marques,
B. M. Souza, L. M. M. César,
L. D. Santos, K. S. Santos

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Conference room 1

Oral presentations "Molecular association, Cluster, Data base"

(9:30~10:30)

- 1-O1-01 Structure and Energy Correlation of Hydrogen-bonded Complexes of Phenylacetylides and Methanol

(Institute for Material Chemistry and Engineering, Kyushu Univ.)

°M. Mishima, Mustanir, Mio Matsuoka

- 1-O1-02 Formations and Structural Analysis of Coordination Products, Ni(II) and Zn(II) with *o*-Phenanthroline or 2,2'-Bipyridine by Spray Ionization

(Grad. School of Eng., Osaka Univ.)

°Masana Arimura,

Gen-etsu Matsubayashi

- 1-O1-03 Dissociation processes of MgCH_3I^+ cluster ion from excited electronic states

(Department of Chemistry, Graduate School of Science, Tohoku Univ.)

°Ari Furuya, Hironori Tsunoyama,

Fuminori Misaizu, Koichi Ohno

(10:30~11:10)

- 1-O1-04 Study of intracuster anionic polymerization reactions induced by electron transfer from an alkali metal atom

(Department of Chemistry, Graduate School of Science, Tohoku Univ.)

°Fuminori Misaizu, Keijiro Ohshimo,

Hironori Tsunoyama, Ari Furuya,

Koichi Ohno

- 1-O1-05 Isomeric structures of gas-phase

$\text{C}_2\text{H}_5^+(\text{OCS})_n$ cluster ions

(¹Clean Energy Res. Center, Yamanashi Univ., ²MEIKO Co., Ltd., ³Department of Chemistry, Nara Univ. of Education)

°Kazuo Fujita¹, Fumiyuki Nakagawa¹,

Masayumi Ishida¹, Keiichiro Akiyama¹,

Kouki Hiizumi², Kenzo Hiraoka¹,

Shinichi Yamabe³

(11:10~11:50)

- 1-O1-06 Clusters of alcoholic solutions studied by liquid ionization mass spectrometry—methanol and ethanol

(¹Yokohama National Univ.,

²Toyaku Univ., ³Hosei Univ.)

°Masahiko Tsuchiya¹, Yasuo Shida²,

Kenichi Kobayashi³, Osamu Taniguchi³,

Shoichi Okouchi³

- 1-O1-07 Mass Spectral Data Base Actively Utilizing the Internet Facilities (III) Present

Situation of High Speed Communications on Web Networks

(¹Japan ASTEC, ²INJ)

Hirotaka Rokusha¹, °Kogoro Maeda²

Luncheon seminar

(12:00~13:30)

Amersham Biosciences

Oral presentations "Proteome, Protein"

(15:00~15:40)

- 1-O1-08 Use and problems of 2D-PAGE based proteomics in drug discovery research

(¹Analysis Research, ²Genomics

Research, Institute for Drug

Discovery Research, Yamanouchi

Pharmaceutical Co., Ltd.)

°Masashi Hiramoto¹, Hiroyuki Yokota²

- 1-O1-09 Problems and future aspects on isotope-coded affinity tag (ICAT) method

(Analysis Research, Institute for Drug

Discovery Research, Yamanouchi

Pharmaceutical Co., Ltd.)

Masashi Hiramoto

(15:40~16:20)

- 1-O1-10 Proteomic analysis of brain proteins related to the ischemic neuronal apoptosis

(¹Tumor Gen. & Biol., Kumamoto Univ.

Sch. of Med., ²SRL, Inc., ³Molecular

Biol. Tokyo Metro. Inst. of Gerontol.,

⁴Biochem. Sch. of Agric. Kyushu

Tokai Univ., ⁵Proteomics Research

Lab., ⁶Neurol., Neurological Inst.,

Grad. Sch. of Med. Sci., Kyushu Univ.)

°Norie Araki¹,

Siriporn Patrakitkomjorn¹,

L. Feng¹, Tatsuya Ozawa¹,

Katsumi Kawano², Toshifusa Toda³,

Tomohiro Araki⁴, Akira Tsugita⁵,

Junichi Kira⁶, Hideyuki Saya¹

- 1-O1-11 Topological analysis of cytochrome P450 17a which reconstituted into liposomes

(¹Graduate School of Science, ²Faculty

of Integrated Arts and Sciences,

Hiroshima Univ.)

Hajime Mizuno¹, Hiroshi Kaneko²,

°Shunsuke Izumi¹, Takeshi Yamasaki²,

Toshifumi Hirata¹, Shiro Kominami²

(16:20~17:00)

- 1-O1-12 Analysis for phosphorylated proteins in the human CD4⁺ T-cell clone using high-resolution mass spectrometer

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¹Dept. Immunogenetics, Kumamoto Univ. Grad. Sch. Med. Sci.,
²Dept. Oncology, Kumamoto Univ. Sch. Med.)

^oAtsushi Irie¹, Kumiko Takeshita¹,
Hirotake Tsukamoto¹, Norie Araki²,
Yasuharu Nishimura¹

- 1-O1-13 Rapid development of purification process using RC-SELDI-MS
(CIPHERGEN Biosystems K. K.,
Yokohama Lab.)
^oMieko Shiwa, Rumi Wakatabe

Conference room 2

Tropo-mass spectrometry workshop

(9:30~12:00)

Luncheon seminar

(12:00~13:30) Waters & JASCO International

Tropo-mass spectrometry workshop

15:00~17:20

Foyer & Poster room

Poster presentations

13:30~15:00

- 1-P-01 Splitless low-flow LC/MS for proteins and peptides
(Graduate School of Integrated Science,
Yokohama City Univ.)
^oYoshiyuki Itoh, Yoshifumi Nishimura,
Satoko Akashi
(Institute of Life Sciences,
Ajinomoto Co., Inc.)
^oNaoyuki Yamada, Reiko Yuji,
Naoko Arashida, Ei-ichiro Suzuki,
Kazuo Hirayama
- 1-P-02 A robust nanoESI technique for protein analysis using tapered 30 μ m internal diameter stainless-steel needle as an ESI emitter
(Institute of Life Sciences,
Ajinomoto Co., Inc.)
^oNaoyuki Yamada, Reiko Yuji,
Naoko Arashida, Ei-ichiro Suzuki,
Kazuo Hirayama
- 1-P-03 Peptide sequence information by LC-Frit-FAB/MS
(Center for Analytical Chemistry and
Science, Inc., Yokohama Laboratory)
^oNaoko Takeda, Masatomi Ozawa
- 1-P-04 Peptide mass fingerprinting by combination of gas-phase Edman degradation and MALDI-MS
(¹Institute for Protein Research,
Osaka Univ., ²Asahi Technion Co., Ltd.)
Yoshinori Satomi¹, Satoshi Fujita²,
Yoshinori Tamura², Toshifumi Takao¹
- 1-P-05 Nobel sequence analysis of peptide in MALDI TOF-MS-PSD method by the modification with fluorescent reagent
(¹National Institute of Advanced
Industrial Science and Technology,
²Dept. of Chem., Schl. Sci.,
The Univ. of Tokyo)
^oMasatoshi Nakagawa¹, Tohru Yamagaki²,
Hiroshi Nakanishi¹
- 1-P-06 Rapid Analysis of Digested Proteins by Atmospheric Pressure-MALDI/Ion Trap Mass Spectrometry
(Yokogawa Analytical Systems, Inc.)
^oHirokazu Sawada, Naoto Shimizu,
Hiroki Kumagai
- 1-P-07 A protein processing method for direct proteomics
(Biomolecular Characterization
Division, RIKEN)
^oHiromi Miura, Koji Takio,
Hiroshi Nakayama
- 1-P-08 Proteome analysis of *Escherichia coli* by

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- SDS-PAGE and 2-dimensional LC/MS/MS
(National Institute of Technology and Evaluation)
°Hanako Ishikawa, Miyako Mise, Keiko Nishijima, Kazumi Sasaki
- 1-P-09 Quantitative analysis of plasma proteome from atopic dermatitis model mice
(Clinical Proteome Center, Tokyo Medical Univ.)
°Takao Kawakami, Hisae Anyoji, Atsushi Ogiwara, Toshihide Nishimura
- 1-P-10 Proteomics analysis of protein-protein interaction caused by EGF using LC-MS/MS for a computational simulation of signal transduction
(RIKEN Genomic Science Center (GSC) Bioinformatics Group)
°Kazumi Matsumura, Aki Hasegawa, Xiaomei Yu, Mariko Hatakeyama, Fumikazu Konishi, Akihiko Konagaya
- 1-P-11 Quantitative Aspects in Direct Characterization of Digested Protein Complex: An Approach Based on High-Accuracy Mass Chromatographic Analysis with FT ICR MS
(¹RIKEN Biomolecular Characterization, ²RIKEN Harima Institute)
°Takemichi Nakamura¹, Naoshi Dohmae¹, Koji Takio²
- 1-P-12 Proteome Analysis of PSD Fraction Using Multi-Dimensional Separation
(¹KAN Research, ²Laboratory of Seeds Finding Technology, Eisai Co., Ltd.)
°Keiko Sato¹, Yoshiya Oda², Hiroyuki Katayama², Tsuyoshi Tabata², Masakazu Takeuchi¹, Maki Tawarada¹, Takeshi Nagasu²
- 1-P-13 Optimization of in-gel digestion system in combination with thin gel separation and negative staining in 96-well plate format (Laboratory of Seeds Finding Technology, Eisai Co., Ltd.)
°Hiroyuki Katayama, Yoshiya Oda, Takeshi Nagasu
- 1-P-14 Multiple Large Gel Two-dimensional Electrophoresis for Proteomics
(¹Division of Signal Transduction, Nara Institute of Science and Technology, ²Recognition and Formation, PRESTO, JST)
°Kazuhiro Katsuta¹, Tatsuya Mori¹, Tomoko Ueda¹, Naoyuki Inagaki²
- 1-P-15 Expressing proteome analysis of basic proteins using two dimensional gel electrophoresis
(¹Division of Signal Transduction, Nara Institute of Science and Technology, ²Recognition and Formation, PRESTO, JST)
°Tatsuya Mori¹, Kazuhiro Katsuta¹, Tomoko Ueda¹, Naoyuki Inagaki²
- 1-P-16 Examination of various gel stain method for in-gel digestion
(¹Division of Signal Transduction, NAIST, ²Recognition & Formation, PRESTO, JST)
°Michinori Toriyama¹, Eiko Nomura¹, Naoyuki Inagaki^{1,2}
- 1-P-17 A protocol to improve in-gel digestion by an acid-labile surfactant
(¹Division of Signal Transduction, NAIST, ²Recognition & Formation, PRESTO, JST)
°Eiko Nomura¹, Michinori Toriyama¹, Naoyuki Inagaki^{1,2}
- 1-P-18 Study on Proteomics for Human Plasma (1) In-solution Digestion
(¹Dept. Human Genetics, Mount Sinai School of Medicine, ²Clinical Proteome Center, Tokyo Medical Univ.)
°Kiyonaga Fujii^{1,2}, Toshihide Nishimura², Rong Wang¹
- 1-P-19 SYPRO Ruby stain frequently induces oxidization of methionine residue which reduces the efficiency of the protein identification with the MASCOT search
(¹Developments of Hair Regeneration Therapy and Functional Proteomics, Innovation Plaza Hiroshima, JST, ²TOWA KAGAKU Co., Ltd., ³Prophoenix Co., Ltd., ⁴Cooperative Link of Unique Science and Technology for Economy Revitalization (CLUSTER) Hiroshima Prefectural Institute of Industrial Science and Technology, ⁵Developmental Biology Laboratory, Department of Biological Science, Graduate School of Science, Hiroshima University)
°Yoshiko Takeda¹, Akira Yamagata^{1,2,3}, Yuka Myoken-Miyamoto¹, Mutsumi Inamatsu¹, Ken Oofusa^{1,2,3}, Katsutoshi Yoshizato^{1,4,5}

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- 1-P-20 The influence of water quality for proteome analysis by LC/MS
(Nihon Millipore K. K.)
Naoe Ishii
- 1-P-21 ESIMS of Polysaccharides: Inclusion of Permethylated Inulin with Alkali Metal Ions
(¹ISIR, Osaka Univ., ²Osaka Institute of Technology)
°Yoshio Takai¹, Gakuto Goshima², Jyuichi Tanaka², Masami Sawada¹
- 1-P-22 Host-guest chiral recognition system in nano-ESI mass spectrometry
(¹ISIR, Osaka Univ., ²Kansai Univ., ³Osaka Municipal Techn. Res. Inst., ⁴Graduate School of Engineering Sci., Osaka Univ.)
°Hitoshi Yamada¹, Muneyoshi Yoshikawa², Motohiro Shizuma³, Kazuo Fukuda⁴, Yoshio Takai¹, Ryuichi Arakawa², Masami Sawada¹
- 1-P-23 New host-metal-guest chiral recognition system to determine the enantiomeric excess of the guests using ESIMS/MS
(¹Osaka Municipal Techn. Res. Inst., ²Osaka Inst. Techn., ISIR, ³Osaka Univ.)
°Motohiro Shizuma¹, Masamichi Muranaka², Hitoshi Yamada³, Yoshio Takai³, Jyuichi Tanaka³, Masami Sawada²
- 1-P-24 Chiral recognition of new acyclic hosts containing mannofuranose moieties
(¹Osaka Municipal Techn. Res. Inst., ²ISIR, Osaka Univ.)
°Motohiro Shizuma¹, Hitoshi Yamada², Yoshio Takai², Tokuji Takeda¹, Masami Sawada²
- 1-P-25 On-line ESI-MS of the reaction products of 1,3-butadiene diepoxide in supercritical fluids
(Faculty of Engineering, Kansai Univ.)
°Seiji Uemura, Masanobu Kondo, Tsuyoshi Hukuo, Ryuichi Arakawa
- 1-P-26 Detection of Peroxides Using Triphenyl Phosphine Reagent by EI Mass Spectrometry
(Kanagawa Univ.)
°Yoshiyuki Mochida, Goro Arai, Shigeo Nakamura
- 1-P-27 Synthesis of Heterofullerene and Its Characterization with a Double Focusing Tandem Mass Spectrometry
(¹National Institute of Advanced Industrial Science and Technology, ²Japan Fine Ceramics Center)
°Takako Nakamura¹, Keiichiro Ishikawa¹, Akiko Goto², Masatou Ishihara¹, Tsuguyori Ohana¹, Yoshinori Koga¹
- 1-P-28 Mass spectrometry of dyes by Frit-FAB method
(CACs)
°Keishi Oba, Shuji Kagawa
- 1-P-29 Mass Spectrometry of Pigments and Polymers by Desorption Chemical Ionization Method
(CACs)
°Shuji Kagawa, Masatomi Ozawa
- 1-P-30 Analysis of Additives in Lithium Ion Battery Electrolyte by MALDI-TOF MS
(¹CACs, Inc., ²Mitsubishi Chemical Corporation)
°Takuya Hatozaki¹, Naohide Takesue¹, Kenji Shiduka², Kuniyoshi Shima², Makoto Ue²
- 1-P-31 Interlaboratory Comparison of Polymer Molecular Mass Distribution by MALDI-TOFMS
(¹National Institute of Advanced Industrial Science and Technology, ²TORAY Research Center Inc., ³SHIMADZU Corporation, ⁴Federal Institute for Materials Research and Testing (BAM))
Shinichi Kinugasa¹, Hisashi Togashi¹, Ritsuko Nagahata¹, Shigetomo Matsuyama¹, Hiroaki Sato¹, Kayori Shimada¹, Nobuyuki Sato², Shin-ichirou Kawabata³, Steffen M. Weidner⁴
- 1-P-32 Conformational effects on molecular mass distributions of synthetic polymers measured by MALDI-TOFMS
(¹National Institute of Advanced Industrial Science and Technology, ²SHIMADZU Corporation)
°Kayori Shimada¹, Marina A. Lusenkova¹, Keisuke Sato¹, Shigetomo Matsuyama¹, Ritsuko Nagahata¹, Shinichi Kinugasa¹, Shin-ichirou Kawabata²
- 1-P-33 UV-MALDI-TOF-MS Analysis of Poly(silsesquioxane)s Derived from the Hydrolytic Condensation of Organotrialkoxysilanes Containing Hydroxyl Groups

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- (¹Cihidecar-Conicet, ²Intema,
³College of Agriculture, Ehime Univ.)
^oRosa Erra-Balsells¹, Ignacio E. dell'Erba²,
Diana P. Fasce², Roberto J. J. Williams²,
Yuko Fukuyama³, Yasuto Sato³,
Hiroshi Nonami³
- 1-P-34 Mass Spectrometric Analysis of Synthetic
Polymers by Desorption/Ionization on Por-
ous Silicon
(Fac. of Engineering, Kansai Univ.)
^oYukiyasu Shimomae, Kazuma Ohara,
Ryuichi Arakawa
- 1-P-35 Novel matrix for MALDI-TOFMS and ap-
plication to synthetic polymer
(Sumitomo Chemical Co., Ltd.)
^oHiroshi Takigawa, Hideaki Nakajima,
Akihiko Okada, Toshio Sasaki
- 1-P-36 Direct analysis of polymeric hindered
amine light stabilizer in polypropylene
material by MALDI-MS and reactive ther-
mal desorption-GC
(¹Graduate School of Engineering,
Nagoya Univ., ²Research Center for
Advanced Energy Conversion,
Nagoya Univ., ³Aichi Institute of
Technology)
^oHajime Ohtani¹, Yoshihiko Taguchi¹,
Yasuyuki Ishida², Shin Tsuge³
- 1-P-37 Fundamentals for Characterization of
Synthetic Polymers by SEC/MALDI-MS
(¹Institute for Environmental
Management Technology, National
Institute of Advanced Industrial Science
and Technology (AIST), ²Graduate
School of Engineering, Nagoya Univ.)
^oHiroaki Sato¹, Hiroaki Tao¹,
Hajime Ohtani²
- 1-P-38 Elimination processes of guest molecules
from the inclusion complexes of butanols
+ deoxycholic acid
(Department of Chemistry, Kinki Univ.)
^oTakayoshi Kimura, Tomohide Tsujimoto,
Tadashi Kamiyama
- 1-P-39 Thermal decomposition process of fire-
retardant cables
(Nohmi Bosai Ltd., Research Laboratory)
^oKatsuhiro Suzuki, Maya Maekawa,
Takashi Nohmi
- 1-P-40 Oligosaccharides: Universal Calibrants for
both Positive and Negative Mode of Elec-
trospray Ionization Mass Spectrometry
(Environmental Health Science
Laboratory, Sumitomo Chemical Co., Ltd.)
^oKazuko Yamashita, Masahiko Okamoto,
Kiyoshi Nakai
- 1-P-41 Development of Cold-Spray Ion Source for
LC-TOFMS
(¹JEOL Ltd., ²Chemical Analysis
Center, Chiba Univ.)
^oKiyotaka Konuma¹, Tetsuichiro Morita¹,
Junichi Osuga¹, Kazuko Tanaka¹,
Yutaka Takahashi¹, Tatsuji Kobayashi¹,
Jun Tamura¹, Yoshihisa Ueda¹,
Kentaro Yamaguchi²
- 1-P-42 Development and application of new ion
sources for LC-TOFMS
(JEOL Application Research Center)
^oKazuko Tanaka, Junichi Osuga,
Kiyotaka Konuma, Yoshihisa Ueda,
Tetsuichiro Morita
- 1-P-43 Development and Applications of CE-MS
Interface for LC-TOFMS
(JEOL Ltd.)
^oYutaka Takahashi, Tetsuichiro Morita,
Kenji Nagatomo, Tatsuji Kobayashi,
Yasuhiro Nishimura, Jun Tamura
- 1-P-44 Measurement and evaluation of spatial
distribution of droplet size and flow veloc-
ity in the ESI spray by PDPA (Phase Dop-
pler Particle Analyzer)
(¹Technology Research Lab., ²Production
Design Technology Center, ³Analytical &
Measuring Instruments Division,
⁴Shimadzu Corporation; Department of
Mechanical and Systems Engineering,
Kansai Univ.)
^oSadao Takeuchi¹, Fujio Inoue²,
Mitsuaki Fukuda³, Takahiro Harada¹,
Shigeki Hayashi¹, Tsutomu Tajikawa⁴,
Atsushi Sakurai⁴, Kenkichi Ohba⁴
- 1-P-45 Development of a novel nanoflow inter-
face
(Central Research Laboratory,
Hitachi Ltd.)
Atsumu Hirabayashi
- 1-P-46 Development of IR-FEL/UV MALDI-
TOFMS
(Institute of Free Electron Laser, Graduate
School of Engineering, Osaka Univ.)
^oYasuhide Naito, Katsunori Ishii,
Sachiko Suzuki, Kunio Awazu
- 1-P-47 Development of a High Sensitivity Gas
Chromatograph Mass Spectrograph with
a CCD Array Detector

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- (¹Osaka Univ., ²CREST)
°Michisato Toyoda¹, Hiroki Sakae²,
Toshio Ichihara¹, Morio Ishihara¹,
Itsuo Katakuse¹
- 1-P-48 Improvement of a double focusing mass spectrograph for lunar and planetary exploration
(¹Faculty of Science, Osaka Univ.,
²National Space Development Agency of Japan)
°Kouhei Ueda¹, Masaru Nishiguchi¹,
Michisato Toyoda¹, Morio Ishihara¹,
Makiko Ohtake², Takamitsu Sugihara²,
Itsuo Katakuse¹
- 1-P-49 Development of TOF-MS for space dust measurement by using hypervelocity microparticles
(¹RCNST, Univ. Tokyo, IAA, ²Fac. Sci.,
Univ. Tokyo, ³Dokkyo Med. Univ.,
⁴Tokyo Univ. Fishery)
°Hiromi Shibata¹, Yoshimi Hamabe¹,
Sho Sasaki², Toru Kawamura³,
Kenichi Nogami³, Hideo Ohashi⁴,
Hypervelocity Microparticle Impact
Experimental Group
- 1-P-50 Development of a reflectron time-of-flight mass spectrometer to attain a higher mass resolution and a wider mass range
(National Institute of Advanced Industrial Science and Technology)
°Naoaki Saito, Eiichi Takahashi,
Eisuke Miura, Kazuyoshi Koyama,
Mitsumori Tanimoto
- 1-P-51 Performance evaluation of multi turn time of flight mass spectrometer 'MULTUM Linear plus'—measurement of organic compound—
(Osaka Univ.)
°Takuro Hagiwara, Daisuke Okumura,
Michisato Toyoda, Morio Ishihara,
Itsuo Katakuse
- 1-P-52 Measurements of high mass ions produced by MALDI using Multi-Turn TOF mass spectrometer 'MULTUM II'
(Department of Physics, Graduate School of Science, Osaka Univ.)
°Daisuke Okumura, Michisato Toyoda,
Morio Ishihara, Itsuo Katakuse
- 1-P-53 Simulation of ion injection into a RF ion trap
(Faculty of Science, Osaka Univ.)
Kenji Sasaki, °Morio Ishihara,

Michisato Toyoda, Kosuke Kumondai,
Itsuo Katakuse

2nd Day (Thursday, May 15, 2003)

Auditorium

Symposium 2 "The development & application of separation science"

(9:10~11:10) Chairpersons: Yutaka Takahashi,
Naoki Asakawa

2-S-01 Capillary Electrochromatography and
CEC/MS

(Department of Applied Chemistry,
Nagoya Institute of Technology)
Takao Tsuda

2-S-02 Miniaturized Separation Systems Based
on Fibrous Media

(School of Materials Science,
Toyohashi University of Technology)
°Kiyokatsu Jinno, Yoshihiro Saito

2-S-03 Nano-Biodevice for Proteome Analysis
(The Univ. Tokushima, CREST, JST,
Single-Molecule Bioanalysis Lab., AIST)

Yoshinobu Baba
(Keio University)
Tomoyoshi Soga

Invited lecture 6

(15:55~16:40)

2-T-03 Towards Comprehensive Proteomics of
Cells

Chairperson: Yoshiya Oda
(Department of Cell Biology,
The Scripps Research Institute)
°John R. Yates, Christine Wu,
Michael McCoss, Anita Saraf,
Hayes McDonald

Invited lecture 4

(11:10~11:55) Chairperson: Satoko Akashi

2-T-01 SUPREX: A New H/D Exchange- and
MALDI Mass Spectrometry-Based Method
for Measuring the Thermodynamic Stabili-
ty of Proteins in Solution

(Department of Chemistry,
Duke University)
Michael C. Fitzgerald, Kendall D. Powell,
Liyuan Ma, Michael Z. Wang, Susie Dai,
Yan Tong, Jagat Shetty

Invited lecture 5

(15:00~15:45) Chairperson: Yoshinao Wada

2-T-02 SELDI Protein Chip Array Protein Identifi-
cation and Characterization Strategies
for Studying Biomarkers of Clinical Inter-
est

(CIPHERGEN Biosystems, Inc.)
Scot R. Weinberger
Contribution of Human α -Defensin 1, 2,
and 3 to the Anti-HIV-1 Activity of CD8
Antiviral Factor

(CIPHERGEN Biosystems, Inc.)
Linqi Zhang, Wenjie Yu, Tian He, Jian Yu,
°Rebecca E. Caffrey, Enrique A. Dalmasso,
Siyu Fu, Thang Pham, Jianfeng Mei,
Jaclyn J. Ho, Wengyong Zhang,
Peter Lopez, David D. Ho

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Award lecture

(16:50~17:50) Chairperson: Ryouhei Yamaoka

2-J-01 Study on the atomic and molecular processes by means of mass spectrometry

(Clean Energy Research Center,
Yamanashi Univ.)

Kenzo Hiraoka

2-J-02 Study of Post-source Decay of Carbohydrates and Their Structure Analyses

(Department of Chemistry, School of
Science, The University of Tokyo)

Tohru Yamagaki

Conference room 1

Oral presentations "Biochemistry, Isotope"

(9:10~9:50)

2-O1-01 Biosynthesis of novel taurine-modification in tRNA and the onset of mitochondrial diseases

(¹Frontier Sciences, Univ. of Tokyo,

²Institute of Medical Technology,
Univ. of Tempere)

°Takeo Suzuki¹, Yohei Kirino¹,

Takehiro Yasukawa¹,

Sanna K. Lehtinen²,

Howard T. Jacobs²,

Kimitsuna Watanabe¹,

Tsutomu Suzuki¹

2-O1-02 Identification of structural elements necessary for amyloid fibril formation by mass spectrometry

(¹Graduate School of Sci. & Tech.,

Kobe Univ., ²Biosignal Research

Center, Kobe Univ., ³JST, CREST,

⁴JST, PRESTO)

°Kumiko Yonehara¹, Shuhei Tanaka¹,

Ken-ichi Yoshino^{2,3},

Kazuyoshi Yonezawa^{2,3},

Atsuo Tamura^{1,4}

(9:50~10:50)

2-O1-03 ESIMS of highly sulfated disaccharide (sucrose octasulfate): systematic evaluation of counter-ions

(¹Department of Biochemistry,

Teikyo Univ. School of Medicine,

²The Univ. of Iowa, ³Graduate School of
Pharmaceutical Sciences, Chiba Univ.)

°Keiko Tadano-Aritomi¹,

Nur Sibel Gunay², Toshihiko Toida³,

Robert J. Linhardt², Ineo Ishizuka¹

2-O1-04 Chemical Species of the Negative Adduct Ion [M+89]⁻

(¹Center for Instrumental Analysis,

The Univ. of Electro-Communications,

²Institut für Organische Chemie,

Universität zu Köln, ³Department

of Applied Physics and Chemistry,

The Univ. of Electro-Communications)

°Yoko Ohashi¹, Herbert Budzikiewicz²,

Masaki Nakazato¹, Takashi Hirano³,

Shojiro Maki³, Haruki Niwa³

2-O1-05 Application of FTICR/MS to metabolome focusing on phospholipids

(¹Nagoya City Univ., ²The Univ.

of Tokyo)

2nd Day (Thursday, May 15, 2003)

°Ryo Taguchi^{1,2}, Mayuko Ishida^{1,2},
Toshiaki Houjou^{1,2},
Toshiyuki Yamazaki^{1,2},
Masayoshi Imagawa¹

(10:50~11:30)

- 2-O1-06 Isotopic effect on Zinc through isotopic separation using macrocyclic polyether
(¹Graduate School of Science and Engineering, Tokyo Institute of Technology, ²Fuel Cycle and Environment Div., Research Reactor Institute, Kyoto Univ.)
°Yoichi Asada¹, Toshiyuki Fujii², Takafumi Hirata¹

- 2-O1-07 Precise Isotopic Analysis of Fe and Zn for Human Blood Samples
(¹Department of Earth and Planetary Sciences, Tokyo Institute of Technology, ²Department of Epidemiology and Environmental Health, Juntendo Univ. School of Medicine)
Takeshi Ohno¹, Atsuko Shinohara², Momoko Chiba², Takafumi Hirata¹

by laser spray ionization
(Clean Energy Res. Center,
Yamanashi Univ.)

°Toru Sakai, Kazuhiro Ueda,
Hiroko Furuya, Kenzo Hiraoka

- 2-O1-12 Investigation on the ionization of various gas molecules using metastable rare gas atoms

(Clean Energy Res. Center,
Yamanashi Univ.)

°Hiroko Furuya, Michiko Fujino,
Kenzo Hiraoka

Luncheon seminar

(12:00~13:30)

Waters

Oral presentations "Ionization, Others"

(15:00~16:00)

- 2-O1-08 The study on the system of the salting-out effect of silica from sodium chloride solution; the identification of chemical species in gel and the aqueous phase
(¹Tokyo Univ. Fisheries, ²RIKEN)
°Miho Tanaka¹, Kazuya Takahashi²

- 2-O1-09 A new glow discharge ionization for LC/MS

(The National Institute for
Environmental Studies)

°Shigeru Suzuki, Akio Yasuhara

- 2-O1-10 Mechanism on multi-charged ion formation in Kr M-shell ionization using a coincidence technique

(¹AIST, ²Hiroshima Univ.,
³Ehime Univ., ⁴Kyoto Univ.
Education, ⁵JASRI)

°Isao H. Suzuki¹, Kazumasa Okada²,
Shuichirou Tanimoto², Akiko Fujii³,
Shin-ichi Nagaoka³, Toshio Ibuki⁴,
Yuichi Haga⁴, Yusuke Tamenori⁵

(16:00~16:40)

- 2-O1-11 High-sensitive detection of amino acids

2nd Day (Thursday, May 15, 2003)

Conference room 2

Oral presentations "SID, Ion reaction"

(9:10~10:10)

- 2-O2-01 Comparison of 4 types of charge inversion reactions

(College of Integrated Arts & Sciences, Osaka Prefecture Univ.)

°Shigeo Hayakawa, Nobuaki Watanabe, Kouji Tomozawa

- 2-O2-02 Unimolecular metastable decomposition of benzenedicarboxylic acid diethyl esters upon electron ionization

(¹Gunma National College of Technology, ²JEOL Ltd., ³Amsterdam Free Univ.)

Susumu Tajima¹, Masashi Mamada¹, Satoshi Nakajima¹, Yutaka Takahashi², N. M. M. Nibbering³

- 2-O2-03 Theoretical Study on the Mechanism of Electron Capture Dissociation of Protonated Peptides

(Aichi Kyoiku Univ.)

°Hideyuki Konishi, Taro Ishibashi

(10:10~10:50)

- 2-O2-04 Gas Phase Unimolecular Dissociation of omega-Phenylalkanoyllactam Analogues

(¹Fac. of Sci., Osaka Women's Univ.,

²Fac. of Educ. & Regional Studies, Fukui Univ., ³Sakai OVEX Co., Ltd.)

°Hiroshi Yamaoka¹, Ikuko Kusagi¹, Kumiko Katsuma¹, Kimio Isa², Yasuhiko Maekawa³

- 2-O2-05 Gas-phase positive and negative ion/molecule reactions in OCS

(¹Clean Energy Res. Center, Yamanashi Univ., ²MEIKO Co., Ltd., ³Department of Chemistry, Nara Univ. of Education)

°Masayumi Ishida¹,

Fumiyuki Nakagawa¹, Kazuo Fujita¹,

Keiichiro Akiyama¹, Kouki Hiizumi²,

Kenzo Hiraoka¹, Shinichi Yamabe³

(10:50~11:50)

- 2-O2-06 TOF-SIMS of 400 eV Ne⁺ ion impact on Ar, Kr and Xe thin films

(Clean Energy Res. Center, Yamanashi Univ.)

°Ryo Amemiya, Ryo Uehara, Tetsuya Sato, Kenzo Hiraoka

- 2-O2-07 TOF-SIMS of 400 eV Ne⁺ ion impact on N₂ and O₂ films

(Clean Energy Res. Center,

Yamanashi Univ.)

°Ryo Amemiya, Ryo Uehara,

Tetsuya Sato, Kenzo Hiraoka

- 2-O2-08 TOF-SIMS of 400 eV H₂⁺ ion impact on N₂ thin film: formation of NH_n⁺ (n=0-4)

(Clean Energy Res. Center, Yamanashi Univ.)

°Ryo Uehara, Ryo Amemiya,

Tetsuya Sato, Kenzo Hiraoka

Luncheon seminar

(12:00~13:30)

Shimadzu

Oral presentations "Instruments, Others"

(15:00~16:00)

- 2-O2-09 Development of a double focusing mass spectrograph for lunar and planetary exploration

(¹Faculty of Science, Osaka Univ.,

²National Space Development Agency of Japan)

°Masaru Nishiguchi¹, Kouhei Ueda¹,

Michisato Toyoda¹, Morio Ishihara¹,

Makiko Ohtake², Takamitsu Sugihara²,

Itsuo Katakuse¹

- 2-O2-10 Orthogonal Acceleration Trap-TOF Mass Spectrometer (1)

—Synchronous Coupling of Trap and TOF

(¹Central Research Laboratory, Hitachi

Ltd., ²Hitachi Laboratory, Hitachi Ltd.)

°Akihiko Okumura¹,

Atsumu Hirabayashi¹, Takashi Baba¹,

Yuichiro Hashimoto¹, Izumi Waki¹,

Kiyomi Yoshinari²

- 2-O2-11 Orthogonal Trap-TOF (2)

—Asynchronous coupling of Trap and TOF

(¹Hitachi, Ltd., Central Research Laboratory., ²Hitachi, Ltd., Hitachi

Research Laboratory)

°Yuichiro Hashimoto¹, Izumi Waki¹,

Kiyomi Yoshinari², Tsukasa Shishika³,

Yasushi Terui³

(16:00~16:40)

- 2-O2-12 Hydrogen Atmosphere Effect on Vaporization of Li₂TiO₃ by Means of Atmosphere-Controlled High-Temperature Mass Spectrometry

(¹Graduate School of Engineering, Univ. of Tokyo, ²Fac. of Sci. &

Eng., Chuo Univ., ³RCNST,

2nd Day (Thursday, May 15, 2003)

- Univ. of Tokyo)
°Tsuyoshi Hoshino¹,
Takeshi Kobayashi²,
Masaru Yasumoto³, Takayuki Terai¹,
Yoichi Takahashi², Michio Yamawaki¹
2-O2-13 Measurement of Evolved Gas from Hydrolysis Products of Aluminum Alkoxides by Ion Attachment Mass Spectrometry (IAMS)
(¹ANELAVA Corp., ²AIST)
°Megumi Nakamura¹,
Takahisa Tsugoshi²,
Wakana Sekiguchi¹, Koji Watari²

Foyer & Poster room

Poster presentations

(13:30~15:00)

- 2-P-01 Mass Spectrometric Analysis of Extracellular Protein-DNA Complexation with Chemical Cross-linking
(School of Materials Science, JAIST)
°Akio Hayashi, Kazuo Tsujimoto
- 2-P-02 Sensitive detection of nucleic acid compounds with mass spectrometry
(¹CREST of Japan Science and Technology Corporation,
²Department of Applied Chemistry, Keio Univ., ³Kanagawa Academy for Science and Technology)
°Aki Honda^{1,2}, Noriyuki Tanji²,
Yoshio Suzuki^{2,3}, Naoko Iwasawa²,
Koji Suzuki^{1,2,3}
- 2-P-03 Mechanism of Action of Cell-Cycle Regulatory Factors Analyzed by Proteomic Approach
(Department of Biotechnology, United Graduate School of Agriculture, Tokyo Univ. of Agriculture and Technology)
Ryo Hasegawa, °Hideaki Ishikawa,
Yasuyuki Suda, Hiroyuki Tachikawa,
Sari Fujiyama, Mitsuaki Yanagida,
Toshiya Hayano, Nobuhiro Takahashi
- 2-P-04 TNF- α -induced apoptosis analyzed by proteomic approach
(Department of Biotechnology, United Graduate School of Agriculture, Tokyo Univ. of Agriculture and Technology)
°Iwao Henmi, Shunsuke Tawara,
Mitsuaki Yanagida, Nobuhiro Takahashi
- 2-P-05 Proteomic identification of S-thiolated protein
(Graduate School of Bioagricultural Sciences, Nagoya Univ.)
°Takeshi Ishii, Toshihiko Osawa,
Koji Uchida
- 2-P-06 Identification of ubiquitin-related proteome
(¹Department of Molecular and Cellular Biology, Medical Institute of Bioregulation, Kyushu Univ.,
²CREST, Japan Science and Technology Corporation (JST))
°Masaki Matsumoto^{1,2},
Kei-ichi Nakayama^{1,2}
- 2-P-07 Protein profiles of fast- and slow-twitch muscles of rats by polyacrylamide gel

2nd Day (Thursday, May 15, 2003)

- electrophoresis
(Institute for Protein Research,
Osaka Univ.)
°Nobuaki Okumura, Masami Matsubae,
Kanako Kita, Akiko Okumura,
Toshifumi Takao, Katsuya Nagai
- 2-P-08 Proteomic analysis of the OLETF rat with
hereditary type 2 diabetes mellitus
(¹Fac. of Sci., Kitasato Univ.,
²School of Med., Kitasato Univ.)
°Yoshio Kodera¹, Masamichi Oh-Ishi¹,
Mamoru Satoh¹, Takeshi Ueno¹,
Kaori Dobashi¹, Sen-ichi Furudate²,
Tadakazu Maeda¹
- 2-P-09 Isolation and Proteomic Characterization
of Preribosomal Ribonucleoprotein Complexes
Associated with a Novel Nucleolar Protein that
is Ubiquitously Expressed in Human Tissues
(Applied Molecular Biology and
Biochemistry, Tokyo Univ. of
Agriculture and Technology)
°Miyuki Kawasaki, Tomoyo Sirakawa,
Toshiya Hayano, Nobuhiro Takahashi
- 2-P-10 Proteome analysis on endothelial cell
response for anti-oxidative stress
(¹ThermoQuest K. K., ²Human Stress
Signal Research Center, National Institute
of Advanced Industrial Science and
Technology, ³Research Center of
Advanced Science and Technology,
The Univ. of Tokyo)
°Junko Kimata¹, Tomoya Kinumi²,
Noriko Noguchi³, Etsuo Niki²
- 2-P-11 Mass spectrometric analysis of protein
modification by acrolein
(¹Department of Food and Nutritional
Sciences, Univ. of Shizuoka,
²Graduate School of Bioagricultural
Sciences, Nagoya Univ.)
°Tomoe Yamada¹, Shigenori Kumazawa¹,
Tsutomu Nakayama¹, Takeshi Ishii²,
Koji Uchida²
- 2-P-12 Proteomics characterization of novel
spore proteins of *Bacillus subtilis* by
liquid chromatography–tandem mass
spectrometry and estimate of two search
programs
(¹Ibaraki University, School of
Agriculture, ²Nara Institute of Science
and Technology, Graduate School of
Information Science, ³Setsunan
- University, Faculty of
Pharmaceutical Sciences)
°Yasuhiro Kasahara¹,
Masayoshi Kuwano², Ritsuko Kuwana³,
Hiromu Takamatsu³, Kazuhito Watabe³,
Naotake Ogasawara²
- 2-P-13 Mutant isolation and function analysis of
TUS1 in *Saccharomyces cerevisiae*
(¹AIST·RCG, ²Eisai·DRLII, ³Eisai·LSFT)
°Mariko Umemura¹, Ken-ichi Nakayama¹,
Katsura Hata², Naoaki Watanabe²,
Yoshifumi Jigami¹
- 2-P-14 FT-ICR mass analysis of oxidative
refolding intermediates of lysozyme
(¹National Food Research Institute,
²Biochemical Research Laboratory, Ezaki
Glico Co., Ltd.)
°Takashi Murata¹,
Mayumi Kameyama-Ohnishi¹,
Takeshi Takaha², Yoshinobu Terada²,
Kiyoshi Hayashi¹, Sachiko Machida¹,
Mitsuru Yoshida¹
- 2-P-15 Folding analysis of calcitonins using H/D
exchange and ESI-MS
(¹Chugai Pharm. Co., Ltd., ²Graduate
School of Integrated Science,
Yokohama City Univ.)
°Yoshiaki Nabuchi¹, Yoshinori Asoh¹,
Mitsuo Takayama²
- 2-P-16 Mass spectrometry on site-dependent H/D
exchange of dihydrofolate reductase
(Graduate School of Science,
Hiroshima Univ.)
°Tatsuya Yamamoto, Shunsuke Izumi,
Kunihiko Gekko
- 2-P-17 Metabolite Search and ID System to
Accelerate Drug Discovery and Development
(Tsukuba Research Laboratories,
Eisai Co., Ltd.)
°Yoshihisa Sano, Shinki Kawaguchi,
Tsutomu Yoshimura, Mami Gomibuchi
- 2-P-18 Screening of compounds for metabolic
stability using LC/MS
(Drug Safety and Disposition Research
Laboratories, Eisai Co., Ltd.)
°Shinki Kawaguchi, Satoshi Saeki,
Masae Fujisawa, Kazuhiro Kaneko,
Yoshihisa Sano, Tsutomu Yoshimura
- 2-P-19 Simultaneous analytical method for the
determination of TCH346 and its four
metabolites in human plasma by LC/MS
(Novartis Pharma K. K., Tsukuba

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- Research Institute Drug Metabolism & Pharmacokinetics Group)
^oHisanori Hara, Takashi Uchimura, Naotsugu Akashi, Tomoyoshi Naganuma, Tetsushi Aizawa, Yusuke Nagae, Naoki Masuda
- 2-P-20 Analysis of fucoxanthin metabolite in mouse plasma and liver
 (National Food Research Institute)
^oAkira Asai, Tatsuya Sugawara, Hiroshi Ono, Akihiko Nagao
- 2-P-21 Method development and validation for quantitative determination of desmosine and isodesmosine in urine by LC/MS/MS
 (¹Novartis Pharma K. K., Preclinical Development, ²Discovery Chemistry)
^oIkuo Sugiyama¹, Takatoshi Kosaka², Yusuke Nagae¹, Naoki Masuda¹
- 2-P-22 Ion-pair LC/MS/MS for direct analysis of drugs and metabolite in plasma
 (¹Anal. Res. Labs., Eisai Co., Ltd., ²Drug Development Technology, Eisai Co., Ltd.)
^oEiichi Yamamoto¹, Takashi Kajima¹, Naoki Asakawa²
- 2-P-23 Determination of the structural changes in a drug with Q/Linear Ion Trap hybrid mass spectrometer
 (Takara Bio Inc.)
^oJun Watanabe, Yoshifumi Kogure, Yasutoshi Kawase
- 2-P-24 Application of column switching H/D exchange for characterization of drug metabolites with liquid chromatography-tandem mass spectrometry
 (¹Analytical Research Laboratories, ²Eisai Co., Ltd.)
^oNaoki Asai¹, Yumi Yokoyama¹, Masayuki Tanaka¹, Naoki Asakawa²
- 2-P-25 On-line sample preparation system for NMR measurements coupled with mass spectrometric detection. Application for rapid characterization of metabolites
 (Analytical Research Laboratories, Eisai Co., Ltd.)
^oYumi Yokoyama, Naoki Asai, Masayuki Tanaka, Naoki Asakawa
- 2-P-26 Determination of a strong basic compound and its metabolites in plasma and urine by LC/MS/MS
 (¹Nippon Kayaku Co., Ltd., ²Shin Nippon Biomedical Laboratories, Ltd.)
- ^oRika Goda¹, Takashi Kawashiro¹, Kouwa Yamashita¹, Shun Nakamura², Yoko Shibouta², Reiko Hidaka²
- 2-P-27 LC/APCI/MS Analysis of Etheno 2'-Deoxyguanosine Adducts as a Dosimeter for Oxidative Stress
 (Center for Cancer Pharmacology, Univ. of Pennsylvania)
^oSeon Hwa Lee, Tomoyuki Oe, Tilo Grosser, Garret A. FitzGerald, Ian A. Blair
- 2-P-28 Characterization of a lipid hydroperoxide-derived post-translational modification to a histone protein using mass spectrometry
 (Center for Cancer Pharmacology, Univ. of Pennsylvania)
^oTomoyuki Oe, Seon Hwa Lee, Anastasia K. Yocum, Jasbir S. Arora, Ian A. Blair
- 2-P-29 Investigation of analytical conditions for residual solvents in drug by HSS/GC/MSD
 (Banyu Tsukuba Research Institute)
^oHisaki Kojima, Naoto Sakurai, Ikuko Nishimura, Tatsuji Nakamura, Takahiro Fukami
- 2-P-30 Sensitive analysis of steroids and sugars after charge derivatization using ESI/MS (3)
 (¹Pharmaceutical Division, Nippon Kayaku Co., Ltd., ²Graduate School of Integrated Science, Yokohama City Univ.)
^oYutaka Hashimoto¹, Mitsuo Takayama²
- 2-P-31 Quantitative analysis of peptides by using CE/micro ESI/TOF-MS
 (Graduate School of Pharmaceutical Sciences, Kyoto Univ.)
^oYukihiko Kuroda, Hideo Yukinaga, Akimasa Shibukawa, Terumichi Nakagawa
- 2-P-32 Elucidation of chemical structure by mass spectrum of disperse dye causing allergic dermatitis by contact and a characteristic of chemical structure
 (¹National Institute of Technology and Evaluation, ²Nagoya Univ. School of Medicine)
^oKazumi Sasaki¹, Mari Sakai¹, Mariko Sugiura²
- 2-P-33 Architecture of a mass spectrum database of disperse dye causing allergic contact

2nd Day (Thursday, May 15, 2003)

- dermatitis
(National Institute of Technology and Evaluation)
°Mari Sakai, Kazumi Sasaki
- 2-P-34 Development of fish oil standard by isotope dilution mass spectrometry
(National Institute of Advanced Industrial Science and Technology)
°Keiichiro Ishikawa¹, Satoko Otsuka², Toshihide Ihara¹, Akira Nomura¹
- 2-P-35 Analysis of fragmentation in LC/MS. Part 1. DNPH derivatives of carbonyl compounds
(National Institute for Environmental Studies)
°Akio Yasuhara, Miyuki Makishima, Shigeru Suzuki
- 2-P-36 Analysis of perfluorinated compounds by LC/MS/MS
(¹Fac. of Eng., Kansai Univ.,
²Osaka City Inst. Pub. Health and Environmental Sciences)
°Hiroshi Kitagawa¹, Yasuo Mizooka¹, Ryuichi Arakawa¹, Hiroya Harino²
- 2-P-37 Development of extraction and GPC method for dioxins analysis (I)
(Chemical Analysis Research Center, National Institute for Agro-Environmental Sciences)
°Heesoo Eun, Eiki Watanabe, Koji Baba, Masumi Ishizaka, Masako Ueji
- 2-P-38 Cancel
- 2-P-39 Investigation on dioxins in Japanese lake. Part III
(Environmental Chemicals Analysis Laboratory, Chemical Analysis Research Center, National Institute for Agro-Environmental Sciences)
°Eiki Watanabe, Heesoo Eun, Koji Baba, Masumi Ishizaka, Yasuo Ishii
- 2-P-40 LC/MS/MS analysis of herbicides used in rice paddy fields
(¹Chemical Analysis Research Center, National Institute for Agro-Environmental Sciences,
²Graduate School of Agriculture, Tokyo Univ. of Agriculture and Technology)
°Masumi Ishizaka, Satoru Ishihara, Hirozumi Watanabe
- 2-P-41 Direct Analysis of Cadmium in Rice Grains by Laser Ablation-ICP-MS
(National Institute for Agro-Environmental Sciences)
°Koji Baba, Eiki Watanabe, Heesoo Eun, Masumi Ishizaka
- 2-P-42 Noble gas and Sr isotopic compositions of groundwater from Tono area, Gifu prefecture
(¹Univ. of Tokyo, ²MMC, ³MRC, ⁴JNC-Tono)
°Keisuke Nagao¹, Akira Ueda², Junko Kamei², Ayako Goto², Makoto Kawamura³, Teruki Iwatsuki⁴, Katsuhiro Hama⁵
- 2-P-43 Searching for Survivors by Mass Spectrometry and Gas Sensor
(Nohmi Bosai Ltd., Research Laboratory)
°Hiroshi Ueno, Takashi Nohmi
- 2-P-44 Differentiation of a pair of diastereomeric prolylproline esters by CID of alkali-metal adduct ions in ESI-MS and analysis by *ab initio* molecular orbital calculations
(¹Fukuoka Univ., ²Kyushu Univ., ³Towa Univ.)
°Hideaki Tsunematsu¹, Hirohito Ikeda¹, Hiroshi Hanazono¹, Masanori Inagaki², Ryuichi Isobe³, Ryuichi Higuchi²
- 2-P-45 Influence of *N*-acetyl group of oligosaccharides to their post-source decay MALDI mass spectrometry
(¹Department of Chemistry, School of Science, The University of Tokyo,
²National Institute of Advanced Industrial Science and Technology)
°Tohru Yamagaki¹, Hiroshi Nakanishi²
- 2-P-46 Generation, Structure and Reactions of Triply-Bonded Digermyne Ions Using FAB-MS/MS and *Ab Initio* Calculations
(¹Faculty of Science, Nara Women's Univ.,
²Instrument Analysis Research Center for Science, Tokyo Medical and Dental Univ.,
³ISIR, Osaka Univ., ⁴Department of Chemistry, Univ. of Tsukuba)
°Takae Takeuchi¹, Yuko Shirai¹, Takeshi Kasama², Hitoshi Yamada³, Masami Sawada³, Akira Sekiguchi⁴
- 2-P-47 Analysis of metal-cluster-complex using laser ionization TOF-MS
(National Institute of Advanced Industrial Science and Technology)
°Takeshi Mizota, Hidehiko Nonaka, Toshiyuki Fujimoto, Shingo Ichimura
- 2-P-48 Formations and Structures of Cobalto-

2nd Day (Thursday, May 15, 2003)

- cenium Cluster Ions with Bidentate Ligand by Spray Ionization MS
(Grad. School of Eng., Osaka Univ.)
°Kosou Matsuno, Masana Arimura,
Gen-estu Matsubayashi
- 2-P-49 FT-ICR mass spectrometric study on chemical reactions of metal clusters
(Nanotechnology Research Institute/
AIST, SYNAF)
°Ko-ichi Sugawara, Kenji Koga
- 2-P-50 Metastable decomposition of 1,1,1-trifluoroisopropyl methyl ether upon electron ionization
(¹Gunma National College of Technology,
²Amsterdam Free Univ.)
Susumu Tajima¹, Shoko Kojima¹,
Yuko Hiroi¹, Masashi Mamada¹,
°Satoshi Nakajima¹, N. M. M. Nibbering²
- 2-P-51 Metastable decompositions of m/z 135 ions generated from benzenedicarboxylic acid dimethyl esters upon electron impact
(¹Gunma National College of Technology
²JEOL Co., Ltd., ³Amsterdam Free Univ.)
Susumu Tajima¹, Akiko Kojima¹,
Takeshi Sugimura¹, Satoshi Nakajima¹,
Yutaka Takahashi², N. M. M. Nibbering³
- 2-P-52 Ionization and fragmentation of Bisphenol A
(Graduate School of Integrated Science,
Yokohama City Univ.)
°Yasuhiro Iida, Takashi Nishikaze,
Mitsuo Takayama
- 2-P-53 Observation of Ion-Molecule Reactions of Alkali Metal Cations with Crown Ether Using an RF Ion Trap
(¹Osaka Univ., ²Osaka Prefecture Univ.)
°Minako Fujigaki¹, Kousuke Kumondai¹,
Michisato Toyoda¹, Kenichi Iwamoto²,
Morio Ishihara¹, Itsuo Katakuse¹

AIST Dining Saloon Banquet

(18:00~20:00)

3rd Day (Friday, May 16, 2003)

Auditorium

Symposium 3 "Young researchers expected in the post-genome era"

(9:00~11:48) Chairpersons: Hiroshi Nakayama,

Takatoshi Kawai

3-S-01 Mass spectrometric identification of RNA-modifying enzyme genes by ribonucleome analysis

(¹Grad. Sch. Frontier Sci., Univ. of Tokyo, ²Grad. Sch. Eng., Univ. of Tokyo, ³Coll. Sci., Rikkyo Univ.,

⁴Grad. Sch. Sci., Tokyo Metropolitan Univ., ⁵Natl. Inst. Gen., ⁶Fukuoka Dental Coll., ⁷Nara Inst. Sci. Tech.)

^oYoshiho Ikeuchi¹, Akiko Noma¹, Akiko Soma³, Naoki Shigi¹,

Jun-ichi Kato⁴, Akiko Nishimura⁵, Takeyoshi Miki⁶, Kazuo Kobayashi⁷,

Naotaka Ogasawara⁷, Yasuhiko Sekine³, Kimitsuna Watanabe^{1,2},

Tsutomu Suzuki^{1,2}

3-S-02 Gel-enhanced LCMS Approaches for Large-scale Proteomics

(Center for Experimental BioInformatics, University of Southern Denmark)

^oYasushi Ishihama, Matthias Mann

3-S-03 Phosphorylation (Post-Translational Modification) Analysis and Structural Analysis by MS

(Univ. Tokushima & RIKEN)

Emiko Yamauchi

3-S-04 Atomic Reconstruction of Metabolism (ARM) Project: Computer Modeling of Metabolic Networks

(AIST, University of Tokyo)

Masanori Arita

3-S-05 Extracting Biomolecular Interaction from Large Biomedical Literature

(HITACHI, Central Research Laboratory)

Yoshihiro Ohta

3-S-06 Cell Simulation: A Fundamental Technology for Systems Biology

(Institute for Advanced Biosciences,

Keio University)

Yasuhiro Naito

Proteomics

(Applied Biosystems)

Marvin Vestal

Special lecture

(15:55~16:40)

Chairperson: Itsuo Katakuse

3-T-02 The Origin and Future of Soft Laser Desorption

(Shimadzu)

Koichi Tanaka

Luncheon seminar

(12:00~13:30)

Applied Biosystems Japan

Invited lecture 7

(15:00~15:45) Chairperson: Toshihide Nishimura

3-T-01 Mass Spectrometry Instrumentation for

3rd Day (Friday, May 16, 2003)

Conference room 1

Oral presentations "Chiral analysis, Drug, Environmental, Food"

(9:10~9:50)

3-O1-01 Matrix effects on the *IRIS* values in FABMS/EL guest method

(¹Osaka Municipal Techn. Res. Inst.,
²ISIR, Osaka Univ.,
³Fac. of Sci., Osaka Univ.)

°Motohiro Shizuma¹, Hitoshi Yamada²,
Hiroshi Adachi³, Yoshio Takai²,
Tokuji Takeda¹, Masami Sawada²

3-O1-02 Mass Spectrometric Chiral Recognition of Heterocyclic Compounds Based on Racemization

(Kansai Univ.)
°Masayoshi Omoto, Tadashi Shiraiwa,
Ryuichi Arakawa

(9:50~10:30)

3-O1-03 Optimization of automated pretreatment conditions for analysis of drugs in plasma by liquid chromatography-mass spectrometry

(¹Shimadzu Corporation,
²Eisai Co., Ltd.)
°Shin-ichi Kawano¹,
Hiroyuki Murakita¹,
Eiichi Yamamoto²,
Naoki Asakawa²

3-O1-04 Strategy for structure elucidation of drug metabolites derived from protonated molecules and (MS)_n fragmentation by ESI Ion Trap MS

(Fujisawa Pharmaceutical Co., Ltd.)
°Zenzaburo Tozuka, Hayato Kaneko,
Toshifumi Shiraga, Akio Kawamura,
Akira Kagayama

(10:30~11:10)

3-O1-05 Analysis of 3,3'-dichlorobenzidine by LC/MS/MS

(Fac. of Engineering, Kansai Univ.)
°Yasuo Mizooku, Hiroyuki Hashimoto,
Ryuichi Arakawa

3-O1-06 Detection of Chlordane by LC/MS

(¹Osaka City Institute for Public
Health & Environmental Sciences,
²Kansai Univ.)
°Hiroshi Moriwaki¹,
Hiroyuki Hashimoto²,
Ryuichi Arakawa²

(11:10~11:50)

3-O1-07 Application of on-line electrospray ioni-

zation mass spectrometry with a micro-flow electrolytic cell: Dimerization of caffeic acid

(¹Fac. of Eng., Kansai Univ.,
²Fac. of Science, Kobe Univ.,
³Kimoto Electric Co.)

°Masashi Yamaguchi¹, Hiroki Hotta²,
Toshiyuki Osakai², Takeshi Kimoto³,
Ryuichi Arakawa¹

3-O1-08 Interpretation of Imojoutyu (Japanese sweet potato spirit) flavor using mass spectrum analysis

(¹Dept. of Eng., Towa Univ.,
²Dept. of Horticulture, Chiba Univ.)
°Takehiko Tsuruta¹, (late) Takeo Ohta²

Luncheon seminar

(12:00~13:30)

GL Sciences

3rd Day (Friday, May 16, 2003)

Foyer & Poster room

Poster presentations

13:30~15:00

- 3-P-01 Use of mass spectral data base of SDBS by the internet system
(National Institute of Advanced Industrial Science and Technology)
°Nobuhide Wasada, Shinichi Kinugasa, Takeshi Saito, Yuuko Takizawa, Mari Kusakabe, Keiichiro Ishikawa
- 3-P-02 Information Mining in Biomedical Literature
(Hitachi, Ltd., Central Research Laboratory)
°Yoshihiro Ohta
- 3-P-03 Cell Simulation: A Fundamental Technology for Systems Biology
(Institute for Advanced Biosciences, Keio Univ.)
Yasuhiro Naito
- 3-P-04 Bioinformatics of Focused Proteome—1: Performance Comparison of Protein Identification Tools for LC-MS/MS Data
(¹Mitsui Knowledge Industry Co., Ltd., ²Eisai Co., Ltd.)
°Yasuto Yokoi¹, Yuji Miura¹, Ken Aoshima¹, Tsuyoshi Tabata², Takatoshi Kawai², Takeshi Nagasu², Hiroyuki Katayama², Yoshiya Oda²
- 3-P-05 Bioinformatics of Focused Proteome—2: Filtering Tools for Protein Identification Results
(¹Eisai Co., Ltd., ²Mitsui Knowledge Industry Co., Ltd.)
°Tsuyoshi Tabata¹, Takatoshi Kawai¹, Takeshi Nagasu¹, Hiroyuki Katayama¹, Yoshiya Oda¹, Yasuto Yokoi², Yuji Miura², Ken Aoshima²
- 3-P-06 Proteomic analysis of human proteins using consensus EST database
(¹Graduate School of Frontier Sciences, Univ. of Tokyo, ²Maze Inc., ³Sakaguchi Giken Inc., ⁴National Institute of Radiological Sciences)
°Yuriko Sakaguchi¹, Yasuji Kasama², Kazuhiro Kondo², Junko Ozaki², Masaaki Sakaguchi³, Toshiyuki Saito⁴, Tsutomu Suzuki¹
- 3-P-07 Electrophoretic profiles of phosphorylated protein in rat hepatic stellate cells
(¹Japan Science and Technology Corporation, ²MDS Proteomics, ³TOWA KAGAKU Co., Ltd., ⁴Prophoenix Co., Ltd., ⁵Third Department of Internal Medicine, Osaka City University Medical School, ⁶Cooperative Link of Unique Science and Technology for Economy Revitalization (CLUSTER) Hiroshima Prefectural Institute of Industrial Science and Technology, ⁷Developmental Biology Laboratory, Department of Biological Science, Graduate School of Science, Hiroshima University)
°Yuka Myoken-Miyamoto¹, Dan Bach Kristensen², Yoshiko Takeda¹, Akira Yamagata^{1,3,4}, Norifumi Kawada⁵, Chise Tateno⁶, Ken Oofusa^{1,3,4}, Katsutoshi Yoshizato^{1,6,7}
- 3-P-08 Screening for the phosphorylated peptides with Q/Linear Ion Trap hybrid mass spectrometer
(Takara Bio Inc.)
°Yoshifumi Kogure, Jun Watanabe, Yasutoshi Kawase
- 3-P-09 A novel phosphate capture molecule “Phos-tag™” for mass analysis of phosphoproteins
(¹Nard Institute, Ltd., ²MANAC Incorporated., ³Hiroshima Univ.)
°Norio Minami¹, Akihiko Kawasaki¹, Hironori Takeda², Tohru Koike³
- 3-P-10 Quantitative proteomics of phosphopeptides by modification with stable isotope derivatives
(¹Faculty of Pharmaceutical Sciences, Nagoya City Univ., ²Faculty of Medicine, The Univ. of Tokyo)
°Chie Murata^{1,2}, Kohfuku Kohda¹, Masayoshi Imagawa¹, Ryo Taguchi^{1,2}
- 3-P-11 Myosin Phosphorylation by Death-Associated Protein Kinase
(¹Nagasaki Univ., Schl. Env., ²Mitsubishi Pharma Co., ³Osaka Univ., Protein Inst.)
°Takayuki Miyanishi¹, Eisuke Sawada¹, Takeshi Hioki², Takehisa Ishii², Nobuaki Okumura³, Toshifumi Takao³
- 3-P-12 Structural Characterization of Glycosphingolipids and Glycopeptides by MALDI-QITTOF Mass Spectrometry
(¹RIKEN Frontier, ²Shimadzu Corporation, ³Tsukuba Univ., ⁴RIKEN)
°Emi Ito¹, Koichi Tanaka², Akio Tominaga², Kozo Miseki²

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- Junko Iida², Naoko Goto³, Yukishige Ito⁴, Minoru Suzuki¹, Akemi Suzuki¹
- 3-P-13 Mass Spectrometry of S-Nitrosoprotein. II. Requirement of fine settings of ESI conditions
(Osaka Medical Center and Research Institute for Maternal and Child Health)
°Rina Kaneko, Yoshinao Wada
- 3-P-14 Implication of S-nitrosylation in the process of mixed disulfide formation
(Osaka Medical Center and Research Institute for Maternal and Child Health)
°Yoshinao Wada, Rina Kaneko
- 3-P-15 Analysis of endocrine disruptive action by nonylphenol and bisphenol A
(Kobe Pharmaceutical Univ.)
°Atsuko Takeuchi, Kayoko Saiki
- 3-P-16 Screening of peptide sequences bound bioactive compound using phage display technology
(Tokyo University of Science)
°Satoko Aoki, Keisuke Ohta, Katsunori Suzuki, Takayuki Yamazaki, Fumio Sugawara, Kengo Sakaguchi
- 3-P-17 A Methodology for Rapid and Efficient Characterization of Novel Ghrelin-derived Peptides by Mass Spectrometry: MALDI-TOF-MS, MALDI-TOF-TOF-MS and Ladder Sequencing
(¹Daiichi Suntory Pharma Co., Ltd., ²National Cardiovascular Center Research Institute, ³Suntory Institute for Bioorganic Research)
°Keiko Iwasa¹, Osamu Tsunoka¹, Ryoji Muramatsu¹, Yujiro Hayashi¹, Yoshiharu Minamitake¹, Kenji Kangawa², Hideo Naoki³, Terumi Nakajima³
- 3-P-18 Multifunctional Sample Pretreatment Using Stop and Go Extraction Tips (Stage-Tips) for Proteomics
(Center for Experimental Bioinformatics, Univ. of Southern Denmark)
°Yasushi Ishihama, Juri Rappsilber, Matthias Mann
- 3-P-19 Drug target identification by chemical-targeted proteome
(Laboratory of Seeds Finding Technology, Eisai Co., Ltd.)
°Toshitaka Sato, Yoshiya Oda, Takashi Owa, Hiroyuki Katayama, Akira Yokoi, Jyunro Kuromitsu, Takeshi Nagasu
- 3-P-20 Chemical targeted proteome: Identification and characterization of phosphodiesterase V from platelets lysate
(Lab. of Seeds Finding Technology)
°Kishan Agarwala, Yoshiya Oda, Yasutaka Takase, Hiroyuki Kato, Toshitaka Sato, Takeshi Nagasu
- 3-P-21 UV-MALDI-TOF-MS analysis of the oligosaccharides from the cysteine proteinase cruzipain
(¹College of Agriculture, Ehime University, Japan, ²Instituto de Investigaciones Biotecnológicas, Universidad Nacional de Gral. San Martín, Argentina, ³Cihidecar-Conicet, Departamento de Química Orgánica, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Argentina)
°Yuko Fukuyama¹, Mariana Barboza², Vilma Duschak², Hiroshi Nonami¹, Rosa Erra-Balsells³, Juan J. Cazzulo², Alicia S. Couto³
- 3-P-22 Linkage analysis of oligosaccharides by using negative-mode MALDI-MS
(Department of Chemistry, School of Science, The University of Tokyo)
°Tohru Yamagaki
- 3-P-23 Distinguishing between isomeric oligosaccharides by mass spectrometry
(¹Department of Chemistry, School of Science, The University of Tokyo, ²National Institute of Advanced Industrial Science and Technology)
°Tohru Yamagaki¹, Hiroshi Nakanishi²
- 3-P-24 LC/MS applied to ganglioside
(IARC, Tokyo Medical and Dental University)
°Takeshi Kasama, Kenji Kawasaki
- 3-P-25 Photochemistry, ESI-MS, Absorption and Luminescence Spectroscopy as Complementary Tools in UV-MALDI-MS Analysis of Carbohydrates
(¹College of Agriculture, Ehime Univ., Japan, ²Cihidecar-Conicet, Departamento de Química Orgánica, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Argentina)
°Yoko Yasuda¹, Olga I. Tarzi², Hiroshi Nonami², Rosa Erra-Balsells²
- 3-P-26 UV-MALDI-TOF-MS Analysis of N-Substituted Monosaccharides by Using Different Matrices

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- (¹ College of Agriculture, Ehime Univ., Japan, ² Cihidecar-Conicet, Departamento de Quimica Organica, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Argentina)
 Yasuto Sato¹, Maria C. Matulewicz², Carlos A. Stortz², Alberto S. Cerezo², Hiroshi Nonami¹, Rosa Erra-Balsells²
- 3-P-27 Cell map metabolomics on molecular species of phospholipids
 (¹ Graduate School of Pharmaceutical Sciences, Nagoya City Univ., ² Graduate School of Medicine, The Univ. of Tokyo, ³ Graduate School of Medicine, Nagoya Univ.)
 °Toshiaki Houjou^{1,2}, Toyoshi Fujimoto³, Ryo Taguchi²
- 3-P-28 Quantitative analysis of Prostaglandin J₂ family made by culture cell with LC-ESI-QMS
 (¹ Osaka Bioscience Institute, ² Ehime Univ. School of Medicine)
 °Toshihiko Maruyama¹, Kosuke Aritake¹, Yoshihiro Urade¹, Maiko Emi², Kazutaka Maeyama²
- 3-P-29 Analysis of Prostaglandins by LC/MS
 (Department of Biochemistry and Molecular Biology, Faculty of Medicine, Graduate School of Medicine, Univ. of Tokyo)
 °Toshie Takahashi, Yoshihiro Kita, Naonori Uozumi, Takao Shimizu
- 3-P-30 Comparison of mass spectrum of sphingophosphonolipids with various ionizations
 (¹ Kansai Lipid Institute, ² Joint Research Center, Kinki Univ.)
 °Hideki Kishine¹, Masanori Morita², Akira Hayashi¹
- 3-P-31 Normal phase capillary monolithic column for lipid analysis
 (IARC, Tokyo Medical and Dental Univ.)
 °Kenji Kawasaki, Takeshi Kasama
- 3-P-32 Identification of Bile Acids as Endogenous Ligands of Novel oGPCR, BG37
 (Banyu Tsukuba Research Institute)
 °Hiromasa Okada, Eiji Sugiyama, Kenichi Tanaka, Naoharu Maruyama, Yasuhisa Miyamaoto, Hirokazu Ohsawa, Tatsuji Nakamura
- 3-P-33 Rapid profiling and characterization of phospholipids using new liner ion trap MS technology
 (¹ Applied Biosystems Japan Ltd., ² Nagoya City Univ., ³ The Univ. of Tokyo)
 °Kaoru Karasawa¹, Mayuko Ishida^{2,3}, Toshiaki Houjou^{2,3}, Ryo Taguchi³
- 3-P-34 Formation and destruction of the guanine quartet in solution observed by CSI-MS
 (¹ Chemical Analysis Center, Chiba Univ., ² Department of Synthetic Chemistry and Biochemistry, and Faculty of Engineering) Shigeru Sakamoto¹, Kazuhiko Nakatani², Isao Saito², °Kentaro Yamaguchi¹
- 3-P-35 Comparative UV-MALDI-TOF-MS Analysis of New Synthetic Nucleosides Using Different Matrices
 (¹ College of Agriculture, Ehime University, Japan, ² Cihidecar-Conicet, Departamento de Quimica Organica, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Argentina, ³ Centro de Estudios e Investigaciones, Universidad Nacional de Quilmes, Argentina)
 °Iku Ninomiya¹, Maria A. Ponce², Luis E. Iglesias³, Adolfo M. Iribarren⁴, Hiroshi Nonami¹ and Rosa Erra-Balsells²
- 3-P-36 Extraction and LC-MS analysis of flavonoids in onions
 (¹ National Food Research Institute, ² Hokkaido Agricultural Center)
 °Kimiko Yabe¹, Sachiko Hoshino¹, Hiroyuki Nakagawa¹, Takako Najiwaru¹, Shioka Hamamatsu¹, Yuji Noguchi²
- 3-P-37 Identification of chemotypes among *Perilla* species by GC/MS
 (¹ National Food Research Institute, ² National Institute of Agrobiological Sciences)
 °Hidetaka Kobayashi¹, Miyuki Nitta², Mayumi Kameyama-Ohnishi¹, Tsukasa Nagamine², Mitsuru Yoshida¹
- 3-P-39 Analysis of low boiling volatile compounds in sweet potato by SPME-GC-MS
 (¹ Faculty of Engineering, Kansai Univ., ² Nippon Food Development Co.)
 °Muneyoshi Yoshikawa¹, Yumiko Miyamoto¹, Yasuo Mizooku¹, Toshiyuki Ozaki², Ryuichi Arakawa¹
- 3-P-39 The usages sodium adduct ions with LC/ESI-MS for the quantitative analysis of type A- and B-trichothecens
 (¹ Nihon Waters K. K., ² Graduate School of

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- Natural Science and Engineering,
Kanazawa Univ.)
°Hideki Sasaki¹, Jun Yonekubo¹,
Kazuichi Hayakawa²
- 3-P-40 Investigation of analytical methods for
acrylamide in foods by LC-MS/MS
(JASCO Interantional Co., Ltd.)
°Ryo Ogasawara, Fusako Kaneda,
Hideto Kakimi
- 3-P-41 Diagnostics of plasma for low-k material
deposition by monomer-vapor polymeri-
zation technique (1)
(¹MIRAI project-ASET, ²AIST, ³MIRAI
project-ASRC, AIST, ⁴RCNS,
Hiroshima Univ.)
°Keizo Kinoshita¹, Akinori Nakano¹,
Jun Kawahara¹, Naoaki Saito²,
Takamaro Kikkawa^{3,4}
- 3-P-42 3D Spectra of Uniform Synthetic Poly-
mers by High-Resolution Ion-Mobility
TOF-MS. Effects of Stereoregularity and
Adduct Ions
(¹Fac. of Engineering, Kansai Univ.,
²Graduate School of Engineering Science,
Osaka Univ., ³Dept. of Chem.,
Indiana Univ.)
°Ryuichi Arakawa¹, Masanobu Kondou¹,
Kouichi Ute², A. Hilderbrand³,
D. E. Clemmer³
- 3-P-43 HCl Loss from the Molecular Ions of Chloro-
phenols Using Charge Inversion Mass
Spectrometry. Comparison with MIKE
Spectrometry
(¹JEOL Ltd., ²Osaka Prefecture Univ.)
°Yutaka Takahashi¹, Nobutake Kabuki²,
Yoshiaki Kawamura², Akihiro Kitaguchi²,
Shigeo Hayakawa²
- 3-P-44 Dissociative reaction of polychlorinated
phenol anions
(Tokyo Metropolitan Industrial
Technology Research Institute)
Seiko Nakagawa
- 3-P-45 Dissociation of neutral metal carbonyls by
using charge inversion mass spectrometry
(College of Integrated Arts & Sciences,
Osaka Prefecture Univ.)
Keisuke Tominaga, Shinnya Konishi,
°Shigeo Hayakawa
- 3-P-46 Identification of the Characteristic Frag-
mentation Processes of Alkali Halide Tri-
ple Ion Adduct Monosaccharide Ions by
CAD
(¹Graduate School of Engineering, Univ.
of Fukui, ²Faculty of Education and
Regional Studies, Univ. of Fukui)
°Nora Martinez¹, Kimio Isa²,
Ryuuji Nakata², Minoru Hatanaka¹
- 3-P-47 Structural Analysis of Protonated Dipep-
tide Ions by High Performance CID Spec-
tra (2)
(¹Facultly of Education and Regional
Studies, Univ. of Fukui,
²Nicca Chemical Co., Ltd.)
°Kimio Isa¹, Makiko Gotou¹,
Hideyuki Takezawa¹,
Noriaki Kobayashi²
- 3-P-48 Pulsed-gas-introduction infrared multi-
photon dissociation in a quadrupole ion
trap
(Hitachi, Ltd., Central Research
Laboratory)
°Hideki Hasegawa, Yuichiro Hashimoto,
Izumi Waki
- 3-P-49 Gallium Ion Attachment Mass Spectrome-
try (Ga⁺-IAMS) of Organic Molecules
(¹Oyama National College of Technology,
²Anelva Corporation)
°Hiroshi Kishi¹, Toshihiro Fujii²
- 3-P-50 Comparison between excitation wave-
forms in an FT-ICR mass spectrometer by
many-particle simulation
(Dept. of Computer Eng.,
Hiroshima City Univ.)
Makoto Fujiwara
- 3-P-51 Vapor pressure measurement of LiNbO₃
with High Temperature Mass Spectrome-
ter
(¹Research Center for Nuclear Science and
Technology, The Univ. of Tokyo,
²Graduate School of Engineering,
The Univ. of Tokyo)
°Masaru Yasumoto¹, Tsuyoshi Hoshino²,
Michio Yamawaki², Takayuki Terai²
- 3-P-52 Degradation Pathways of Acetylcholine
Cluster Ions
(Graduate School of Integrated Science,
Yokohama City Univ.)
°Naoto Soya, Mitsuo Takayama
- 3-P-53 Measurement of molecular weight of a
cholic acid micelle
(Faculty of Engineering, Gifu Univ.)
°Takatomo Kajjura, Daisuke Nohara