

Program

1st Day (Wed., June 2, 2004)

Conference room 1

Symposium: Isotopes for Prosperous Future

(9:30~11:30)

Organizer: Tsuneo Matsui & Tsuyoshi Tanaka
Chairperson: Tsuneo Matsui

- 1-S1-01 Perspective of 21st Century COE Program
“Isotope Science from Basics to Applications”
° Ichirou Yamamoto¹, Satoru Tsushima¹,
Youichi Enokida¹, Kayo Sawada¹,
Takehiko Minamikawa¹

- 1-S1-02 Advanced isotope measurement with laser
spectroscopy and its application
(Grad.Sch.Eng., Nagoya Univ.)
° Tetsuo Iguchi, Kenichi Watanabe,
Hideo Tomita

- 1-S1-03 Isotope Effects on Physical Properties of
Functional Materials and Creation of Iso-
topically Controlled Materials
(¹Graduate School of Engineering,
Nagoya Univ., ²CIRSE, Nagoya Univ.,
³RCNMR, Nagoya Univ.)
° Tsuneo Matsui¹, Tadamasa Nagasaki²,
Yuji Arita³, Junji Yuhara¹
Chairperson: Tsuyoshi Tanaka

- 1-S1-04 Isotope clues COE project “Dynamics of
the Sun-Earth-Life Interactive System”
(Dep. Earth Environmental Sci.,
Nagoya Univ.) Eiji Matsumoto

- 1-S1-05 Development for Precise Isotopic Analysis
of Trace Elements by ICP-Mass Spectrometer
(Dept. Earth and Planet. Sci.,
Tokyo Tech.) ° Takafumi Hirata

- 1-S1-06 Formation and evolution of hydrous
planetesimals in the early solar system
(¹Dep. EPS, Kyushu Univ., ²Fac. Sci.,
Tokyo Univ.) ° Tomoki Nakamura¹,
Ryuji Okazaki¹, Keisuke Nagao²,
Nobuo Takaoka¹

Luncheon seminar

(12:10~13:10)

- 1-L1-01 Bottom-Up and Top-Down Proteomics and
Metabolomics for Mass Spectrometry
(Bruker Daltonics) Daisuke Higo

Conference room 2

Oral presentation

(Saccharides, Protein complexes, Bioorganic analysis)

(9:30~11:30) Chairperson: Takeshi Kasama

- 1-O2-01 Mass spectrometric fragmentations of
sugars in relation to their stereochemistry
(¹Univ. Electro-Comm., ²Thermoelectron,
³Kanagawa Univ.) ° Yoko Ohashi¹,
Yoshiyuki Itoh¹, Masayuki Kubota²,
Mitsuhiro Nakamura¹, Mamoru Ohashi³,
Haruki Niwa¹

- 1-O2-02 MS/MS analysis of oligosaccharides iso-
topically labeled at the non-reducing end
of a selected antenna
(¹Grad.Sch.Pharm.Sci., Nagoya City Univ.,
²MS Res. Lab., Shimadzu corp.)
° Koichi Kato¹, Yoshiaki Yamaguchi¹,
Noriko Takahashi¹, Mamiko Nishimura¹,
Shinichi Iwamoto², Sadanori Sekiya²,
Koichi Tanaka²

- 1-O2-03 On-Chip Derivatization of Sugars for High-
Sensitivity Detection using Microchip-
ESIMS. Part-I (¹MCPT, ²Univ. of Tokyo)
° Yutaka Takahashi¹, Ryo Sakai¹,
Yoshikazu Yoshida¹,
Takehiko Kitamori²
Chairperson: Koichi Kato

- 1-O2-04 Mass spectrometry of general transcrip-
tion factor TFIIE
(¹Grad. Sch. Integr. Sci. Yokohama
City Univ., ²Kihara Inst. Biol. Res.,
³Osaka Univ.) ° Yoshiyuki Itoh¹,
Aritaka Nagadoi¹, Masahiko Okuda²,
Yoshiaki Ohkuma³,
Yoshifumi Nishimura¹, Satoko Akashi¹

- 1-O2-05 Determination of 8 catechins in human
plasma using liquid chromatography com-
bined electrospray mass spectrometry
(Kao Co.Tochigi Laboratory)
° Yuji Matsui, Namii Shimizu,
Hidenori Endo, Michiya Kuzukawa,
Yoshinori Masukawa, Tadashi Hase

- 1-O2-06 High Sensitive Ion Exclusion Liquid Chro-
matography/Mass Spectrometric Analy-
sis of Low Molecule Organic Acids
(¹Fac. Edu. Kochi Univ., ²Shinwa
Chem. Ind.) ° Keiji Gamoh¹, Hiroki Saitoh¹,
Hiroo Wada², Katsumi Hishida²

1st Day (Wed., June 2, 2004)

Hall

Workshop: FT-ICR MS: Instrumentation, Application, and Allied Studies

- (9:30~11:30) Organizer: Yasuhide Naito
 Chairperson: Yasuhide Naito
- 1-W3-01 FT-ICR Study of Generation and Reaction of Metal-Carbon Binary Clusters
(Univ. of Tokyo)^o Shigeo Maruyama, Shuhei Inoue, Satoshi Yoshinaga
- 1-W3-02 "Stable" clusters produced in FTICR MS
(Nanotech. Res. Inst., AIST) Koichi Sugawara
- 1-W3-03 Many-particle Simulation of Ion Motion and Spectra in FT-ICR Mass Spectrometry
(Fac. Information Sci., Hiroshima City Univ.) Makoto Fujiwara
- 1-W3-04 Instrumentation of External Ion Sources and an Ion Transport Optics for FT-ICR MS
(iFEL, Osaka Univ.) Yasuhide Naito

General meeting of the Mass Spectrometry Society of Japan

(11:30~12:00)

Award lectures

- (13:30~14:30) Chairperson: Ryohei Yamaoka
- 1-A3-01 [MSSJ AWARD for Distinguished Contribution in MS] Primitive Xe in the early solar system
(Kyushu Univ.) Nobuo Takaoka
- 1-A3-02 [MSSJ RESEARCH AWARD] Application Research for Usefulness of NanoESI and Studies on Unimolecular Metastable Decomposition of Organic Ions using MIKE Spectrometry
(JEOL) Yutaka Takahashi

Special Lecture

- (15:00~16:00) Chairperson: Toshihide Nishimura
- 1-SL3-01 Advances in Mass Spectrometry for Comprehensive, Quantitative and High Throughput Proteomics
(Pacif. NW Natl. Lab.) Richard D. Smith

Display room

Poster presentation

(16:00~17:00)
Poster display 9:30~
Pull down 17:00

- 1-P-01 Improvement of the focal plane detector for the miniature double focusing Mass Spectrograph and performance evaluation
(¹Dep. Phys. Osaka Univ., ²JAXA,
³Dep. Earth and Planet. Hokkaido Univ)
°Masaru Nishiguchi¹, Kouhei Ueda¹,
Michisato Toyoda¹, Morio Ishihara¹,
Makiko Ohtake², Takamitsu Sugihara³,
Itsuo Katakuse¹
- 1-P-02 Development of a High Sensitivity Gas Chromatograph Mass Spectrograph II
(¹Dep. Phys. Osaka Univ, ²CREST)
°Takeo Inaba¹, Masaru Nisiguchi¹,
Hiroki Sakae², Michisato Toyoda¹,
Toshio Ichihara¹, Morio Ishihara¹,
Itsuo Katakuse¹
- 1-P-03 GC-TOFMS with newly designed ion transfer optics
(JEOL) °Takaya Satoh, Masaaki Ubukata,
Yoshihisa Ueda, Kazuo Tanaka,
Jun Tamura
- 1-P-04 Development and Applications of AP-MALDI-oaTOFMS.
(JEOL Ltd.) °Tetsuichiro Morita,
Kenji Nagatomo, Jun Tamura
- 1-P-05 Development of IRMPD Spectrum Measurement System Using FTMS-FEL-SUT
(¹CBRC, AIST, ²Cyber Laser)
°Kaoru Mogushi¹, Yasutoshi Takada²,
Kazuhiro Fukui¹, Katsutoshi Takahashi¹
- 1-P-06 Mid-IR wavelength tunable LASER for IR-MALDI
(¹Cyber laser Inc., ²CBRC, AIST)
°Yasutoshi Takada¹, Kazuhiko Fukui²,
Tetsumi Sumiyoshi¹,
Katsutoshi Takahashi²
- 1-P-07 Precise Mass Measurement of Unstable Nuclei Using a Multi-Reflection Time-of-Flight Mass Spectrometer
(¹RIKEN, ²Univ. Giessen)
°Yoshihisa Ishida¹, Michiharu Wada¹,
Yukari Matsuo¹, Hermann Wollnik²

1st Day (Wed., June 2, 2004)

- 1-P-08 Fragment-Free Measurements of Molecules in Gas Phase by Time of Flight Analysis Combined with Ion Attachment Technique (Dept. of Phys. Toho Univ.)
°Yasuhiro Sakai, Tomoko Yuzuriha
- 1-P-09 Instrumental characteristics of Ion Attached Mass Spectrometry —from many organic compounds— (ANELVA Technix Co.)
°Masako Inoue, Harumi Maruyama, Yoshiro Shiokawa
- 1-P-10 Impurity Analysis of dialkylphthalates by IAMS (Ion Attachment Mass Spectrometry) (¹AIST, ²Anelva Technix Co.)
°Keiichiro Ishikawa¹, Katsuhiko Higudhi¹, Shinnu Bao¹, Satoko Otsuka¹, Akira Nomura¹, Tsuneaki Maeda¹, Harumi Maruyama², Masako Inoue², Yoshiro Shiokawa², Toshihiro Fujii²
- 1-P-11 The new attempt to date the fault activity using ⁸⁷Rb-⁸⁷Sr and ⁴⁰K-⁴⁰Ar isotope system for pseudotachylite (¹Dept. Earth Environmental Sci., Nagoya Univ., ²Dept. Earth Sci., Waseda Univ., ³Labo. Earthquake Chem., Univ. of Tokyo)Akifumi Umemoto¹, °Tsuyoshi Tanaka¹, Yoshihiro Asahara¹, Masayo Minami¹, Hideo Takagi², Keisuke Nagao³
- 1-P-12 Carbon and nitrogen isotope fractionations of bone collagens by chemical treatment (Grad. School of Environ. Studies, Nagoya Univ.) Masayo Minami
- 1-P-13 Radiogenic isotope in north Pacific sediment: Temporal variation in flux of the eolian dust from the Asian continent (Grad. School of Environ. Studies, Nagoya Univ.) Yoshihiro Asahara
- 1-P-14 The evolution of early solar system from the SIMS in-situ ²⁶Al-²⁶Mg isotopic analyses (¹AIST, ²Tokyo Univ.) °Noriko Kita¹, Erika Kurahashi², Shogo Tachibana², Shin Tomomura², Hiroko Nagahara², Yuichi Morishita¹
- 1-P-15 Development of the noble gas mass spectrometric system for I-Xe and Ar-Ar dating (¹Lab. Earthquake Chem., Univ. Tokyo, ²Dep. Earth & Planet. Sci., Kyushu Univ., ³Kantogakuen Univ., ⁴Earthquake Res. Inst., Univ. Tokyo) °Noriko Ebisawa¹, Hirochika Sumino¹, Ryuji Okazaki², Keisuke Nagao¹, Yutaka Takigami³, Ichiro Kaneoka⁴
- 1-P-16 Determination of atomic weight with ICP-MS (¹JAMSTEC, IFREE, ²Dept. Earth & Planet, Tokyo Tech.)
°Masaharu Tanimizu¹, Takafumi Hirata²
- 1-P-17 Certification of Isotopic Reference Materials at the EC Joint Research Laboratory, The Institute for Reference Materials and Measurements (EC-JRC-IRMM) Roger Wellum
- 1-P-18 Characterization of Acrylic Resin by MALDI-PSD and MS/MS analyses (¹Dep. Eng, Kansai Univ., ²JST, ³Inst. Maternal Child Health, ⁴Dep. Eng. Sci, Osaka Univ) °Ryuichi Arakawa¹, Youhei Okuyama¹, Shouji Okuno², Yoshinao Wada³, Kouichi Ute⁴
- 1-P-19 Structural Analysis of Acid and Amine Adducts of Epoxy Resin (¹Dep. Eng, Kansai Univ., ²JST, ³Osaka Univ.) °Hidemi Morikawa¹, Syouji Okuno², Masanori Ohtubo³, Motohiro Nakano³, Genetsu Matsubayasi³, Ryuuiti Arakawa¹
- 1-P-20 Influence of sample preparation method on UV-MALDI-TOF-MS experiments (¹Fac. Agr., Ehime Univ., ²DQO, FCEN, UBA) °Yasuto Sato¹, Maria Ponce², Olga Tarzi², Rosa Erra-Balsells², Hirosi Nonami¹
- 1-P-21 Characterization of Network Structure of UV-Cured Resins by MALDI-MS Combined with Supercritical Methanolysis (¹Nagoya Univ., ²Aichi Indust. Tech. Inst., ³Sumitomo Chemical) °Hajime Ohtani¹, Yousuke Kondo¹, Yasuyuki Ishida¹, Kuniyuki Kitagawa¹, Hideki Matsubara², Hiroshi Takigawa³

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- 1-P-22 Proteomics analysis of H₂O₂-resistant Chinese hamster V79 cells
 (1)Dep.nutrition and environment sci, Shizuoka Univ, (2)Dep.nutrition and environment sci Shizuoka Univ)
 °Masaya Sano¹, Manami Kato¹, Hirotaka Naito², Norio Ohashi², Kayoko Shimoi¹, Shigenori Kumazawa¹, Tutomu Nakayama¹
- 1-P-23 Redox proteomics: identification of oxidatively modified proteins induced by an endogenous electrophile
 (1)Grad. Sch. of Bioagric. Sci., Nagoya Univ., (2)Dep. of Food & Nut. Sci, Univ. of Shizuoka)°Takeshi Ishii¹, Toyo Sakurai¹, Shigenori Kumazawa², Tsutomu Nakayama², Toshihiko Osawa¹, Koji Uchida¹
- 1-P-24 Influence of antioxidants against oxidative stress on plant cells Proteomic approach for oxidative cellular response
 (Hiroshima Univ.) °Shunsuke Izumi, Misao Matsuoka, Toshifumi Hirata
- 1-P-25 An approach to quantitative proteome analysis by labeling tryptophan residues
 (1)Life Science Lab. Shimadzu Corp., (2)Koichi Tanaka Mass Spectrometry Research Laboratory)°Hiroki Kuyama¹, Makoto Watanabe¹, Chikako Toda¹, Eiichi Matsuo¹, Eiji Ando¹, Koichi Tanaka², Osamu Nishimura¹
- 1-P-26 Study on proteomics for human plasma (2) off-line2D-μLC/NSI-MS/MS system
 (1)Clinical Proteome Center, Tokyo Medical Univ., (2)AMR Inc., (3)Dept. Human Genetics, Mt. Sinai School of Med.) Kiyonaga Fujii¹, Tomoyo Nakano², °Takeshi Kawamura¹, Fumihiko Usui², Yasuhiko Bando², Rong Wang³, Toshihide Nishimura¹
- 1-P-27 Study on proteomics for human plasma (3) on-line2D-μLC/NSI-MS/MS system
 (1)Clinical Proteome Center, Tokyo Medical Univ., (2)AMR Inc.) Kiyonaga Fujii¹, Tomoyo Nakano², Fumihiko Usui², Yasuhiko Bando², °Toshihide Nishimura¹
- 1-P-28 High-speed protein profiling system for clinical proteomics
 (1)Clinical Proteome Center, Tokyo Medical Univ., (2)AMR Inc.) Kiyonaga Fujii¹, °Tomoyo Nakano², Fumihiko Usui², Yasuhiko Bando², Toshihide Nishimura¹
- 1-P-29 Investigation of microcystin binding proteins in mouse liver
 (Gradu. Environ. Human Sci., Meijo Univ.) °Susumu Imanishi, Kenichi Harada
- 1-P-30 Characterization of lactic acid bacteria by whole cell MALDI-MS
 (1)AIST, (2)IRC Ehime Pref.) °Masaki Torimura¹, Liwei Sun¹, Hiroaki Sato¹, Hiroaki Tao¹, Tomoyoshi Shintani²
- 1-P-31 Detection of Insulin/IGF1 receptor interacting proteins using a mammalian TAP Expression System
 (International medical center of Japan)
 °Xunmei Yuan, Yuko Fujiwara, Ryo Yamashita, Kazuki Yasuda, Yasushi Kaburagi
- 1-P-32 Proteomic analysis of insulin-induced phosphorylated proteins in HepG2 cells
 (Res. Inst. Inter. Med. Ctr. Jpn., Dept. Metabol) °Ryo Yamashita, Yuko Fujiwara, Kazuki Yasuda, Yasushi Kaburagi
- 1-P-33 Relationship between ionization flux and physico-chemical nature of amino acids
 (Integ.Sci, Yokohama City Univ.) °Takashi Nishikaze, Mitsuo Takayama
- 1-P-34 UV Laser Desorption/Ionization on Sub-micrometer Order Structures
 (1)JST, (2)Kansai Univ., (3)Osaka Medical Center and Research Institute for Maternal and Child Health)°Shoji Okuno¹, Ryuichi Arakawa², Yoshinao Wada³
- 1-P-35 Oxidation of ferrocene derivatives in Desorption/Ionization on Porous Silicon
 (1)JST, (2)Kansai Univ., (3)Osaka Medical Center and Research Institute for Maternal and Child Health)°Shoji Okuno¹, Kunihiko Oka², Yoshinao Wada³, Ryuichi Arakawa²
- 1-P-36 Analytical method for ubiquinones (Q9 and Q10) in rat tissues by LC/MS/MS with 1-alkylamine as an additive to the mobile phase
 (Takeda Chemical Industries)
 °Koichiro Teshima, Takahiro Kondo

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1-P-37 The establishment of High Throughput ADME Assay system with Liquid hander workstation system and HT-LCMS

(¹Cemistry Research Dep. II, Kamakura Research Labs., Chugai Pharmaceutical,

²Yokogawa Analytical Systems Inc.,

³Beckman Coulter K.K., Biomedical Research)^oKiyosi Yosinari¹,

Noboru Nakayama¹, Nobuo Shimma¹,

Hirokazu Sawada², Hiromasa Kashimori³

1-P-38 Exact Mass Measurement and Quantitative Analysis on LC-oa-TOFMS

(¹Nihon Waters, ²Waters) ^oMichiko Kanai¹,
Hideki Sasaki¹, Futoshi Sato¹,

Jose Castro-Perez², Mike Mccullagh²

1-P-39 Tracing the oxidative reaction of hydroxylamines using LC/MS (3)

(¹Faculty Pharm. Sciences, Mukogawa Women's Univ., ²Graduate School of

Sciences, Yokohama City Univ.,

³National Food Research Institute)

^oShizuyo Horiyama¹, Kiyoko Suwa¹,

Hiromi Kataoka¹, Junichi Kunitomo¹,

Mitsuo Takayama², Mayumi kameyama³

1-P-40 [MSSJ RESEARCH AWARD] Studies on chiral recognition of carbohydrate derivatives using mass spectrometry

(Osaka Municipal Techn. Res. Inst.)

Motohiro Shizuma

2nd Day (Wed., June 3, 2004)

Conference room 1

Symposium: Exploring New Substances Using Mass Spectroscopy

(9:00~11:00)

Organizer: Toshiki Sugai

Chairperson: Toshiki Sugai

- 2-S1-01 Isolation and structural characterization of magic-numbered gold clusters
 (Inst. Mol. Sci.)
 Yuichi Negishi,[°]Tatsuya Tsukuda

2-S1-02 Measurement and Application of Ions and Nanoparticles Generated by Electrospray
 (Chem. Eng. Dept., Hiroshima Univ.)
[°]Kikuo Okuyama, Wuled Lenggoro

2-S1-03 Creation of Opto-magneto Materials with Size-selective Soft-landing Deposition
 (Dep. Chem. Keio Univ.)
 Atsushi Nakajima

2-S1-04 Reaction of Metal Catalysts of SWNTs with Alcohol by FT-ICR
 (Univ. of Tokyo)[°]Shigeo Maruyama,
 Shuhei Inoue, Satoshi Yoshinaga

2-S1-05 Production Analyses on Pulsed Arc Discharge by Ion Mobility
 (¹RCMS, Nagoya University, ²Indiana State Univ., ³Nagoya Univ., CREST/JST)
[°]Toshiki Sugai¹, Jarrold Martin²,
 Hisanori Shinohara³

Luncheon seminar

(12:10~13:10)

Conference room 2

Oral presentation

(Environment, Microanalysis)

(9:00~11:00) Chairperson: Kozo Matsumoto

- 2-02-01 Uranium Isotopic Mass Ratio Measurement in Environmental Samples by Q-ICP-MS ⁽¹⁾Environ. Toxicol. Sci. Res. Grp.,
 Natl. Inst. Radiat. Sci., ²Res. C. Radiat.
 Safety, Natl. Inst. Radiat. Sci.)
[°]Keiko Tagami¹, Shigeo Uchida²,
 Satoshi Yoshida¹

2-02-02 The study on the distribution of silica species according to the depth in Tokyo bay
 (¹Tokyo Univ. of Marine Science and Technology, ²Riken)[°]Miho Tanaka¹,
 Kazuya Takahashi², Masao Nemoto¹,
 Hideki Nagashima¹

2-02-03 Application of reaction cell ICP-MS for the

- 2-O2-03 Application of reaction coil ICP-MS for the determination of trace elements in plant samples (¹Natl. Inst. Radiat. Sci., ²TNS)
Keiko Tagami¹, ^oIkuo Hirai²,
Shigeo Uchida¹
Chairperson: Yoshitomo Ikai

2-O2-04 Multiresidue analysis of pesticides listed in the drinking water regulation using LC/MS/MS

- (Nihon Waters)° Futoshi Sato,
Hideki Sasaki, Hiroyasu Yamamoto

2-O2-05 On-line Monitoring of Polychlorinated Biphenyls using laser ionization/dynamic trapping TOFMS Method
(MHI) ° Shinsaku Dobashi,
Yoshihiro Deguchi, Masaharu Kira,
Ryuichiro Tanaka, Yoshinori Izawa

2-O2-06 Development of a High Sensitive Photon Accumulated Laser Mass Spectrometer (RIMMPA-TOFMS) and PCDD/DF Detection
(IDX Corporation)
° Naotoshi Kirihara, Kenji Takahashi,
Norihumi Kitada, Haruaki Yoshida,
Mizuho Tanaka, Yasuo Suzuki

2nd Day (Wed., June 3, 2004)

Hall

Workshop: Present and Future of Tandem Mass Spectrometry

- (9:00~11:00) Organizer: Kimio Isa
Chairperson: Kimio Isa & Hiroshi Yamaoka
- 2-W3-01 Opening Remarks and Issues of MS/MS and Integrated Discussion
(Fac.of Edu., Univ. Fukui) Kimio Isa
- 2-W3-02 A Brief History of Tandem Mass Spectrometry
(Nihon Pharm. Univ.) Takeshi Kinoshita
- 2-W3-03 Isomer Characterization on the Competitive Channels in Electron Ionized Unimolecular Dissociation during Metastable Time Window Using Double Reversed Geometry (BEBE) Four Sector Tandem Mass Spectrometer
(Fac. Sci., Osaka Women's Univ.)
Hiroshi Yamaoka
- 2-W3-04 Difference between collisionally activated dissociation (CAD) and dissociation induced by electron transfer.
(Coll.Integr.Arts & Sci., Osaka Pref.Univ.)
Shigeo Hayakawa
- 2-W3-05 Mechanism of Electron Capture Dissociation (ECD) of Multiply Charged Peptide Cations
(Aichi Kyoiku University)
Hideyuki Konishi
- 2-W3-06 Fragmentation of even-electron ions in biomolecular characterization: views through time windows
(Biomol. Characterization, Riken)
Takemichi Nakamura
- 2-W3-07 Dissociation of large biological molecules in mass spectrometer.—Present and Future of Topdown Proteomics—
(Inst. of Life Sciences, Ajinomoto Co., Inc.) Naoyuki Yamada

Special Lecture

- (11:00~12:00) Chairperson: Hideyuki Konishi
- 2-SL3-01 Characterizing Proteins and Other Biomolecules by Mass Spectrometry
(Cornell Univ.) Fred W. MacLafferty

Special Symposium lectures

- (13:15~16:00) Chairperson: Ken-ichi Harada
- 2-SS3-01 The development of instruments and technologies for DNA analysis —Human genome project and the spreading bioscience field—
(Hitachi, Ltd.) Hideki Kanbara
- 2-SS3-02 Modern Characterization of nano-carbon materials
(Fac. Sci. Tech., Meijo Univ.)
Sumio Iijima
- 2-SS3-03 Nitride Semiconductors and Blue Light-Emitting Devices —Evolution and Prospect—
(Fac. Sci. Tech., Meijo Univ.)
Isamu Akasaki

2nd Day (Wed., June 3, 2004)

Display room

Poster presentation

(16:00~17:00)

Poster display 9:00~

Pull down 17:00

- 2-P-01 Dissociation Mechanisms of Excited CH_n(n = 3~5) Neutrals Using Charge Inversion Mass Spectrometry
(Coll. Integr. Arts Sci., Osaka Pref. Univ.)
Shigeo Hayakawa, °Nobutake Kabuki
- 2-P-02 Determination of the protonation site in ortho-chlorophenol using collision activated dissociation and charge inversion mass spectrometry
(¹Coll. Integr. Arts. Sci., Osaka Pref. Univ.,
²JEOL Ltd.) °Yoshiaki Kawamura¹,
Shigeo Hayakawa¹, Yutaka Takahashi²
- 2-P-03 Dissociation mechanisms of excited neutral methyl stearate and its hydrogen atom adduct
(Coll. Integr. Arts Sci., Osaka Pref. Univ.)
°Akihiro Kitaguchi, Shigeo Hayakawa
- 2-P-04 Study of LC/TOF-MS for the determination of trace compounds
(¹YAN, ²Dep.App. Chem. Gradu. Sch.
Engin. Osaka Pref. Univ.)
°Takino Masahiko¹, Nakahara Taketoshi²
- 2-P-05 Identification of Oxidation Numbers of Inorganic Species by MALDI/MS
(¹Dep. Applied Chem. Nagoya Univ.,
²HighEne. Conv. Cent., Nagoya Univ.)
°Kozo Matsumoto¹, Kuniyuki Kitagawa²,
Aritaka Matsunami²
- 2-P-06 Quantitative/Qualitative Analysis by Q/Linear Ion Trap hybrid mass spectrometer (1)
(Takara Bio Inc.) °Yoshifumi Kogure,
Yasutoshi Kawase, Jun Watanabe
- 2-P-07 Quantitative/Qualitative Analysis by Q/Linear Trap hybrid mass spectrometer (2)
(Takara Bio Inc.) °Yasutoshi Kawase,
Jun Watanabe, Yoshifumi Kogure
- 2-P-08 Evaluation of Molecular Weight Distribution of Synthetic Polymers for DIOS-MS
(¹AIST) °Teruyuki Seino¹, Hiroaki Sato¹,
Masaki Torimura¹, Kazue Simada¹,
Atsushi Yamamoto¹, Hiroaki Tao¹

- 2-P-09 Analysis of Persistent Organochlorine Pesticides in Human Blood by GC/TOF-MS
(Otsuka Pharmaceutical Co, Ltd.)
°Yoshinori Fujimine, Ayumi Mochizuki,
Tetsuya Hirai, Shunkichi Watanabe
- 2-P-10 Simplified analysis of dioxins by thermal desorption GC/MS
(AIST) °Hiroaki Sato, Hiroaki Tao
- 2-P-11 Study on binding of perfluorinated compounds to serum proteins using LC-MS/MS
(Dep. Eng, Kansai Univ.)
°Hiroshi Kitagawa, Yasuo Mizooko,
Ryuichi Arakawa
- 2-P-12 The direct measurement of the phthalate group by IAMS (Ion Attachment Mass Spectrometry)
(ANELVA Technix Co.)
°Masako Inoue, Harumi Maruyama,
Yosiro Shiokawa
- 2-P-13 Analysis of inorganic anions in water by ion chromatography with electrospray ionization mass spectrometry
(Sankio Chemical Co., Ltd.)
°Sachiki Shimizu
- 2-P-14 Factors on Affecting Formation of Molecular Weight Relation Ions from Peroxy Acid Esters under Atmospheric Pressure
(Faculty of engineering, Kanagawa Univ.)
°Yoshiyuki Mochida, Gorou Arai
- 2-P-15 Structural Analysis of Alkali Triple Ions and Their Sugar Complexes by Collisionally Activated Dissociation Mass Spectrometry
(¹Graduate School of Engineering,
Fukui University, ²Dep. Educ,
Fukui Univ.) °Nora Martinez¹,
Minoru Hatanaka¹, Ryuji Nakata²,
Kimio Isa²
- 2-P-16 Clusters of dilute alcohol aqueous solutions, Variation in the cluster compositions at the liquid surface
(¹Dep. Marine Bioresource, Tokyo Univ. of Marine Science., ²Dep. Pharam. of Toyaku Univ., ³Source of Resources Expl., Tokai Univ., ⁴Yokohama National Univ.)
°Yoshiyuki Shimura¹, Yasuo Shida²,
Masashi Maita¹, Nobuaki Okamoto¹,
Toshiro Saito³, Masahiko Tsuchiya⁴

2nd Day (Wed., June 3, 2004)

- 2-P-17 Determination of molecular weight of a sodium cholate micelle
 (Faculty of Eng., Gifu Univ.)
 °Takatomo Kajiura, Kouji Takeda,
 Daisuke Nohara
- 2-P-18 Inclusion of Permethylated Cyclic (1→2)- β -Glucan (n=17) with Cations.
 (¹ISIR, Osaka Univ., ²OIT) °Yoshio Takai¹,
 Yasuko Nishida², Jyuichi Tanaka²,
 Masami Sawada¹
- 2-P-19 Detection of cucurbit[6]uril host-guest complexes by electrospray ionization mass spectrometry
 (¹Fac.of Engineering,Kansai Univ.,
 ²Center for Smart Supramolecules,
 POSTECH, ³Entropy Control Project ICORP) °Masanobu Kondo¹,
 Issei Osaka¹, Ryuichi Arakawa¹,
 Selvapalam N.², Samal S.², Kim Kimoon²,
 Mikhail v. Rekharsky³, Yoshihisa Inoue³
- 2-P-20 Enantiomeric excess determination of amines and dipeptides by mass spectrometry using the EL-host method
 (¹ISIR,Osaka Univ., ²Kansai Univ., ³OIT,
 ⁴OMTRI, ⁵OWU)Masami Sawada¹,
 Akihiro Kamei², Hirotaka Ueno³,
 °Hitoshi Yamada¹, Yoshio Takai¹,
 Motohiro Shizuma⁴, Hiroshi Yamaoka⁵,
 Juichi Tanaka³, Ryuichi Arakawa²
- 2-P-21 Determination of branched β -cyclodextrin-prostaglandin inclusion complex by ESIMS
 (¹Japan Clinical Lab, Inc, ²School of Pharmaceutical Sciences Mukogawa Women's Univ.) °Naoe Yamane¹,
 Yuki Nishi², Toshiko Tanimoto²
- 2-P-22 Elimination processes of guest molecules from the inclusion complexes of deoxycholic acids (Dept. Chem. Kinki Univ.)
 °Takayoshi Kimura, Yuuki Adachi, Takehiro Nakanishi, Tadashi Kamiyama
- 2-P-23 Structural study of oriental lacquer films during the hardening process
 (¹JEOL DATUM, ²Meiji Univ.)
 °Noriyasu Niimura¹, Tetsuo Miyakoshi²
- 2-P-24 Thermal Decompositions and Evolved Gas Analysis of Alkylbenzyldimethylalkylammonium Chloride
 (Forensic Sci. Lab. Saitama P.H.Q.,
 ²Dep. Sci. Saitama Univ.) °Yasushi Ehara¹,
 Michio Kutsuzawa¹, Hitoshi Sekine¹,
 Yoshio Shibasaki²
- 2-P-25 UV-MALDI-TOF-MS analysis of glycosphingolipids from Plasmodium falciparum by using nor-harmane and GA as matrix
 (¹UBA, ²FCEN) °Rosa Erra-Balsells¹,
 Malena Landoni¹, Masae Nishioka²,
 Hiroshi Nonami², Alicia S. Couto¹
- 2-P-26 Computational Analysis of Fragmentation for Glyco-chains in MS
 (¹CBRC, ²FUJITSU LABORATORIES LTD.) °Kazuhiko Fukui¹,
 Katsutoshi Takahashi¹, Noriko Ikeda²,
 Hiroshi Yamakawa²,
 Kouji Maruhashi², Nobuo Watanabe²
- 2-P-27 Saccharide chain analysis of glycosphingolipids using LC/MS with monolithic normal phase capillary column
 (Inst. Anal. Res. Cntr)
 °Takeshi Kasama, Kenji Kawasaki
- 2-P-28 Comparison of mass spectra of phosphoglycosphingolipids with ESI and APCI.
 (¹Kansai Lipid Institute, ²Joint Research Center, Kinki Univ.) °Hideki Kishine¹,
 Masanori Morita², Akira Hayashi¹
- 2-P-29 Electron Capture Dissociation of Enzymatically Synthesized Glyco-peptides
 (CBRC, AIST) °Katsutoshi Takahashi,
 Kazuhiko Fukui
- 2-P-30 Systematic analysis of glycans and peptide backbone of glycopeptide by MALDI QITTOF MS
 (¹Res. Inst. Osaka MCH, ²JST)
 Yoshinao Wada¹, °Michiko Tajiri²
- 2-P-31 Analysis of oligosaccharides from N-linked glycopeptides by MALDI-QIT-TOF MS
 (¹Life Science Lab., Shimadzu Corp.,
 ²MS Lab., Shimadzu Corp., ³Shimadzu Biotech) °Masaki Yamada¹,
 Yuko Fukuyama², Chris W. Sutton³,
 Osamu Nishimura¹, Koichi Tanaka²
- 2-P-32 New Analytical Method for Glycoprotein Structure Analysis using MALDI-QIT-TOF MS: an Application to Ribonuclease B
 (¹MS Res. Lab., Shimadzu Corp., ²Research Institute, Osaka MCH, ³Life Sience Lab., Shimadzu Corp.) °Yuko Fukuyama¹,
 Koichi Tanaka¹, Yoshinao Wada²,
 Noriyuki Ojima³, Yuzo Yamazaki³,
 Masaki Yamada³

2nd Day (Wed., June 3, 2004)

- 2-P-33 Fast analysis of drugs in plasma by column-switching LC/MS
(¹Anal. Appl. Dept, Shimadzu Corp.,
²Anal. Res. Lab, Eisai Co., Ltd.)
°Shinichi Kawano¹,
Masatoshi Takahashi¹, Takashi Hine¹,
Eiichi Yamamoto², Naoki Asakawa²
- 2-P-34 The usefulness of methylhippuric acids analysis in case of thinner abuser by LC/MS
(Forensic Science Lab. Fukuoka Prefectural Police Headquarters)
°Masatoshi Morinaga
- 2-P-35 Matrix effects on the analysis of trichothecens using LC/ESI-MS/MS
(¹Nihon Waters K.K, ²Dep. Natural Sci. & Tech., Kanazawa Univ.)
°Hideki Sasaki¹, Jun Yonekubo¹,
Kazuiti Hayakawa²
- 2-P-36 Direct Analysis of Bacterial Lipids by MALDI-MS Using On-Probe Sample Pretreatment
(¹Nagoya Univ.)°Yasuyuki Ishida¹,
Kuniyuki Kitagawa¹, Akihito Nakayama¹,
Hajime Ohtani¹
- 2-P-37 Identification of Molecular Species of Phospholipids by Normal and Reverse phase capillary LC/ESIMS/MS
(¹Grad. Sch. of Med, Tokyo Univ.,
²Grad. Sch. of Pharm. Sci, Nagoya City Univ.) °Kotoko Yamatani¹,
Toshiaki Houjou², Takao Shimizu¹,
Ryo Taguchi¹
- 2-P-38 Metabolite analyses with UV-MALDI and ESI TOF-MS in tulip bulbs during vernalization treatments
(¹Fac. Agr. Ehime Univ., ²Univ. Buenos Aires)°Naoko Sugimoto¹, Hiroshi Wada¹,
Rosa Erra-Balsells², Hiroshi Nonami¹
- 2-P-39 Analysis of Extract from Bixa orellana, antioxidant of native Brazil, by LC/MS
(School of Materials Science, JAIST.)
°Akio Hayashi, Kazuo Tsujimoto

Nagoya Garden Palace

Banquet

(18:30~20:30)

3rd Day (Wed., June 4, 2004)

Conference room 1

Oral presentation

(9:00~11:00)

(DIOS, Instruments, Ionization methods)

Chairperson: Hiroaki Sato

- 3-O1-01 Reduction of Organic Dyes in Matrix-Assisted Laser Desorption/Ionization and Desorption/Ionization on Porous Silicon

(¹JST, ²Osaka Univ., ³Kansai Univ.,

⁴Osaka Medical Center and Research Institute for Maternal and Child Health)

◦Shoji Okuno¹, Motohiro Nakano², Genetsu Matsabayashi²,

Ryuichi Arakawa³, Yoshinao Wada⁴

- 3-O1-02 Quantitative analysis of polypropylene-glycol mixtures by desorption/ionization on porous silicon mass spectrometry

(¹JST, ²Kansai Univ., ³Osaka Medical Center and Research Institute for Maternal and Child Health)◦Shoji Okuno¹,

Ryuichi Arakawa², Yoshinao Wada³

- 3-O1-03 Mass Spectrometric Analysis of Low Molecular Weight Polyesters by laser Desorption Ionization on Porous Silicon (DIOS)

(¹Fac. of Engineering, Kansai Univ., ²Japan Science and Technology Agency)

◦Yukiyasu Shimomae¹,

Hidemi Morikawa¹, Kazuma Ohara¹, Shouji Okuno², Ryuuiti Arakawa¹

Chairperson: Morio Ishihara

- 3-O1-04 Development of super time-of-flight mass spectrometers (Super-TOF) I

(¹EEL AIST, ²UpTech AIST)

◦Naoaki Saito¹, Masataka Ohkubo², Masahiro Ukibe², Shingo Ichimura²

- 3-O1-05 Development of a high performance LC-QIT-TOF (Shimadzu corporation)

◦Shinichi Yamaguchi, Junichi Taniguchi, Eizoh Kawatoh, Hiroto Itoi, Kozo Miseki

- 3-O1-06 Comparative study of laser spray and electrospray using an orthogonal TOF mass spectrometer

(Clean Energy Research Center, Yamanashi Univ) Atsushi Takamizawa,

Fumiuki Nakagawa, Tohru Sakai,

Hiroaki Maeda, Hideki Yamada,

◦Kenzo Hiraoka

Luncheon seminar

(12:10~13:10)

- 3-L1-01 Comprehensive Analyses of Endogenous Metabolites by LC-TOFMS and LC-QTOFMS with the Software Developed for Biomarker Discovery

(¹Waters, ²Jasco) ◦Michiko Kanai¹, Sanae Furusho²

Symposium: The Next Generations, of the MS, by the MS, for the MS

(13:30~16:30)

Organizer: Takahisa Tsugoshi & Yukiko Hirabayashi

Chairperson: Yukiko Hirabayashi

- 3-S1-01 MS/MS Newborn Screening and Chemical Diagnosis of Metabolic Diseases.

(Faculty of Medical Sciences, Univ. of Fukui¹, Centers for Advanced Research Support²) ◦Yosuke Shigematsu¹,

Ikue Hata¹, Yukie Tanaka²

Chairperson: Tadashi Arii

- 3-S1-02 MS analysis for thin solid films

(Materials Chemistry and Engineering, College of Nihon Univ.)

Toshikazu Nishide

Chairperson: Takahisa Tsugoshi

- 3-S1-03 The present and possibility of fragment-free IAMS

(ANELVA Technix) ◦Yoshiro Shiokawa, M.Nakamura, H.Maruyama, Y.Taneda,

M.Inoue, T.Fujii

Chairperson: Takayoshi Kimura

- 3-S1-04 Structure characterization of oxidatively modified DJ-1, responsible for familial Parkinson's disease using LTQ linear ion trap MS

(¹HSSRC, AIST, ²ThermoElectron KK)

◦Tomoya Kinumi¹, Junko Kimata², Masayuki Kubota², Etsuo Niki¹

- 3-S1-05 Image Analysis of Industrial Materials using Scanning MALDI Technique

(Life Sci., Shimadzu Corp.)

◦Shin-ichirou Kawabata

3rd Day (Wed., June 4, 2004)

3-S1-06 Measurement of SiH₄ plasma by Ion Attachment Mass Spectrometry (IAMS)

(¹Anelva Technix Corp., ²Agricul., Tokyo

Univ. of Agricul. & Technol.,

³Graduate School of BASE, Tokyo Univ. of Agricul. & Technol.)^oMegumi Nakamura¹,

Yasuyuki Taneda¹, Yoshiki Hirano¹,

Yoshiro Shiokawa¹, Masao Takayanagi²,

Munetaka Nakata³

Conference room 2

Oral presentation

(9:00~11:00)

(Gas phase reaction, Reaction mechanism, Data base)

Chairperson: Mikio Tanaka

3-O2-01 Gas-phase positive and negative ion-molecule reactions in C₅F₈: perfluoro effect

(¹Clean Energy Res. Center Yamanashi

Univ., ²Yamanashi Fuji Industrial

Technology, ³MEIKO Co. Ltd,

⁴Department of Chemistry, Nara Univ.

of Education)^oToshiyasu Itikawa¹,

Masayumi Ishida¹, Kazuo Fujita¹,

Hiroshi Okada¹, Kiyotoshi Takaoka²,

Koki Hizumi³, Kenzo Hiraoka¹,

Siniti Yamabe⁴

3-O2-02 Gas-Phase Reactivity of La (I) Cation

(¹IMCE, ²Kyushu Univ.)

^oMasaaki Mishima^{1,2}, Soe Than²

3-O2-03 Study of intracluster polymerization reactions initiated by an alkali metal atom in gas-phase clusters

(Dep. Chem., Tohoku Univ.)

^oHironori Tsunoyama, Fuminori Misaizu,

Koichi Ohno

Chairperson: Shigeo Hayakawa

3-O2-04 Electron transfers for [RuX₂(bpy)₂] (X=Cl and CN) observed in LSIMS mass spectra

(¹Lab. Chem., Nippon Med. Sch.,

²Dep. Chem., Rikkyo Univ.)

^oMikio Tanaka¹, Eiichi Miki²

3-O2-05 Structure determination of FK228 and its metabolites using the new SRM data dependent exclusion MSⁿ measurement by LC/ESI/Ion Trap MS.

(Dep. DMPK, Fujisawa Pharm.)

^oZenzaburo Tozuka, Toshifumi Shiraga,

Hidetsugu Murai, Rika Ishimura,

Akira Kagayama

3-O2-06 Mass Spectral Data Base actively utilizing the Internet Facilities (IV) Construction and Setting up of a New MSDB Web Server

(¹Techno-Science, ²Internet Japan)

Hirotaka Rokusha¹, ^oKogoro Maeda²

3rd Day (Wed., June 4, 2004)

Oral presentation

(13:30~16:30)

(Gas phase reaction, Ion reaction, Reaction mechanism) Chairperson: Takae Takeuchi

3-O2-07 Metastable peak in MALDI-TOFMS and matrix effect

(Integ. Sci, Yokohama City Univ.)

°Mitsuo Takayama

3-O2-08 Definitive evidence of N-C α bond cleavage of hydrogen atom adduct peptides neutralized by near-resonant electron transfer collision with an alkali metal target

(Coll. Integr. Arts & Sci., Osaka Pref. Univ.)

°Shigeo Hayakawa, Mami Hashimoto

3-O2-09 Search for Silent Hydrogen Atoms on the Competitive Hidden Hydrogen Rearrangement (¹Fac. Sci., Osaka Women's Univ.,

²Fac. Educ. Regional Sci., Univ. of Fukui,

³Inst. of Hokuriku Environmental Res.,

⁴Vrije Universiteit) °Hiroshi Yamaoka¹,

Chiaki Murakami¹, Ikuko Kusagi¹,

Kumiko Katsuma¹, Kimio Isa²,

Yasuhiro Maekawa³,

Nico M. M. Nibbering⁴

Chairperson: Mitsuo Takayama

3-O2-10 Structures of 2N4O-18Crown-Metal Ion Complexes Formed by Spray Ionization

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

°Masana Arimura, Tadashi Katsura,

Gen-etsu Matsubayashi

3-O2-11 Chiral Carboxylic Acid Recognition by ESI Mass Spectrometry

(¹ISIR, Osaka Univ., ²OIT, ³OMTRI,

⁴OWU) °Masami Sawada¹,

Sachiyo Nomura¹, Yoshitaka Miyamoto²,

Yoshio Takai¹, Hitoshi Yamada¹,

Motohiro Shizuma³, Juichi Tanaka²,

Natsu Egawa⁴, Hiroshi Yamaoka⁴

3-O2-12 Differentiation of C₇H₇O⁺ Ions by CID Spectra versus Collision Energy Using Ion Trap Mass Spectrometer

(¹Gunma College Tech., ²Gunma

College Tec. Adv.) Susumu Tajima¹,

°Masashi Mamada², Satoshi Nakajima¹

Chairperson: Hiroshi Yamaoka

3-O2-13 CO Loss from Acetylphenyl Ion (CH₃COC₆H₄⁺ m/z 119) with Methyl Migration

(¹Gunma College Tech., ²Gunma College

Tech. Adv., ³Fac. Sci. Nara Women's

Univ.) Susumu Tajima¹,

°Kanako Minegishi², Satoshi Nakajima¹,

Takae Takeuchi³

3-O2-14 Specific Fragmentation of Negative Ion of Octylphenol

(Integ.Sci, Yokohama City Univ.)

°Yasuhiro Iida, Eriko Saegusa,

Nobuhiro Sato, Mitsuo Takayama

3-O2-15 Fragmentation Mechanism of Organogermanium and Organosilicon Compounds in APCI and EI Mass Spectrometry

(Dep. Chem., Nara Women's Univ.)

°Yuko Shirai, Takae Takeuchi

3rd Day (Wed., June 4, 2004)

Hall

Oral presentation

(9:00~10:00)

(Data base, Data analysis, Peptide structure)

Chairperson: Zenzaburo Tozuka

- 3-O3-01 Mass Spectrometric Identification of a Novel Tyrosine-Phosphorylated Protein using EST Consensus Sequence Database
(¹Biosignal Res. Ctr., Kobe Univ.,
²Res. Ctr. Environ. Genom., Kobe Univ.)
°Ken-ichi Yoshino¹, Kenichi Sato²,
Noriko Oshiro¹, Keiichi Sakakibara²,
Chiharu Tokunaga¹, Yasuo Fukami²,
Kazuyoshi Yonozawa¹

- 3-O3-02 Fully automated multi-dimensional protein profiling system for human plasma proteomics
(¹Clinical Proteome Center, Tokyo Medical Univ., ²AMR Inc.) °Kiyonaga Fujii¹,
Tomoyo Nakano², Fumihiko Usui²,
Yasuhiko Bando², Toshihide Nishimura¹

- 3-O3-03 Structure analysis of melittin analogue in lipid system
(Dep. Che., Univ. Tokyo)
Malika Hammoudi, Tomohiro Yamazaki,
°Tohru Yamagaki, Kazuo Tachibana

Special Lecture

(10:00~11:00)

Chairperson: Satoko Akashi

- 3-SL3-01 Application of Top Down Proteomics to Study Epigenetics and Gene Regulation
(Genomic Inst. of Singapore)
Newman S.-K. Sze

Symposium: Metabolome and MS

(13:30~16:30)

Organizer: Ryo Taguchi & Tomoyoshi Soga
Chairperson: Kazuo Hirayama, Ryo Taguchi
& Tomoyoshi Soga

- 3-S3-01 Metabolome Analysis and Systems Biology
(Inst. Adv. Biosci., Keio Univ., HMT Inc.)
Masaru Tomita
- 3-S3-02 Metabolome Analysis of Bacteria, Plant and Mammalian Cells by CE-MS
(Inst. Adv. Biosci. Keio Univ.)
Tomoyoshi Soga

- 3-S3-03 Metabolome Analysis Using an Interactive Metabolic Map

(Dep. Comput. Biol, Tokyo Univ.)

Masanori Arita

- 3-S3-04 High throughput and high sensitivity LC/MS oa-TOF and UPLC/TOF-MS for the identification of biomarkers of toxicity and disease using a metabolomics approach

(¹Waters corporation, ²Imperial College,
³Astra-Zeneca, Alderly Park, Macclesfield,
UK) °Robert Plumb¹, Jose Castro-Perez¹,
Jennifer Garager¹, Ian D. Wilson³

- 3-S3-05 Identification of phospholipids from MS data for lipidomics
(Dept. Metabo, Grad. Sch. Med, Univ. Tokyo) Ryo Taguchi

3rd Day (Wed., June 4, 2004)

Display room

Poster presentation

(11:00~12:00)

Poster display 9:00~

Pull down 16:30

- 3-P-01 Performance evaluation of multi-turn time-of-flight mass spectrometer 'MULTUM Linear plus' —stability of flight time for each cycle—
(Dep. Phy. Osaka Univ.)

°Daisuke Okumura, Michisato Toyoda,
Morio Ishihara, Itsuo Katakuse

- 3-P-02 Construction of a compact (20*20 cm) Multi-Turn Time-of-Flight Mass Spectrometer
(Dep. Phys. Osaka. Univ)

°Satoshi Uchida, Daisuke Okumura,
Michisato Toyoda, Morio Ishihara,
Toshio Ichihara, Itsuo Katakuse

- 3-P-03 A new calibration method for a multi turn TOF-MS.
(¹Faculty of Science, Osaka Univ, ²Jeol)

°Takuya Miyamura¹, Morio Isihara¹,
Hirosi Katou², Daisuke Okumura¹,
Ituo Katakuse¹

- 3-P-04 Multi-turn Time-of-Flight Mass Spectrometer 'MULTUM Linear Plus' with Improved Resolution
(Dep. Phys, Osaka Univ.) °Tatsuhiro Era,
Takuro Hagiwara, Daisuke Okumura,
Michisato Toyoda, Morio Ishihara,
Itsuo Katakuse

- 3-P-05 Development of the atmospheric pressure penning ionization mass spectrometry
(C.E.R. Yamanashi Univ.)
°Shizuka Kambara, Hiroko Furuya,
Susumu Fujimaki, Kenzo Hiraoka

- 3-P-06 Study of the Cylindrical Capacitor Interface
(¹Clean Energy Res. Center, Yamanashi University, ²Yamanashi pref. Fuji Industrial Technology)
°Hiroaki Maeda¹,
Hideki Yamada¹, Tooru Sakai¹,
Humiyuki Nakagawa¹,
Masana Nakamura², Kenzou Hiraoka¹

- 3-P-07 CID Spectra versus Collision Energy Using a Quadrupole Ion Trap Mass Spectrometer. Dissociation of Ionized Maleamide and Fumaramide
(¹Gunma College. Tech., ²JEOL)

°Susumu Tajima¹, Masaaki Ubukata²,
Masao Fujishige¹

- 3-P-08 Characteristics of mass spectra of alkyl nitrates by negative ion chemical ionization mass spectrometry

(Nat'l. Inst. Environ. Studies)

°Keiichi Sato, Takashi Imamura,
Hiroshi Tanimoto

- 3-P-09 Substituent Effect on Unimolecular Dissociation of N-(ω -phenyl)acyllactams

(¹Fac. Sci., Osaka Women's Univ.,

²Fac. Educ. Regional Sci., Univ. of Fukui,
³Inst. Hokuriku Environmental Res.)

°Eri Ueno¹, Hiroshi Yamaoka¹,
Kumiko Katsuma¹, Kimio Isa²,
Yasuhiko Maekawa³

- 3-P-10 Ion/Molecule Reactions of Silver Cluster Cations with Crown Ethers in a Cylindrical Ion Trap

(¹Dept. Phys., Osaka Univ., ²Osaka Pref. Univ., ³Dept. Chem., Nara Women's Univ.)

°Kousuke Kumondai¹, Michisato Toyoda¹,
Kenichi Iwamoto², Takae Takeuchi³,
Morio Ishihara¹, Itsuo Katakuse¹

- 3-P-11 Unimolecular Reactions of Diethyl Malonate upon Electron Ionization

(¹Gunma College Tech., ²Gunma College Tech. Adv.) Susumu Tajima¹,
°Masashi Mamada², Daisuke Ishiguro¹,
Satoshi Nakajima¹

- 3-P-12 CO Loss from Methoxyphenyl Ion (m/z 107) with Methyl Migration

(¹Gunma College Tech., ²Gunma College Tech. Adv., ³Fac. Sci. Nara Women's Univ.)

Susumu Tajima¹, °Satoshi Nakajima¹,
Shinya Oki¹, Masashi Mamada²,
Takae Takeuchi³

- 3-P-13 Ab Initio Study on the Oxidation Mechanism of N-Ethylhydroxylamine in Organic Solvents

(¹Dep. Chem., Nara Women's Univ.,

²Fac. Pharm. Sci., Mukogawa Women's Univ.) °Takae Takeuchi¹, Kyoko Nakanishi¹, Shizuyo Horiyama²

3rd Day (Wed., June 4, 2004)

- 3-P-14 Time- and Temperature-Dependent CSI-MS Studies of the Trans-Etherification and Hydrolysis Reaction of Titanium (IV) Isopropoxide with BINOL and Water
¹Chem. Res. Lab., Nissan Chem. Ind., LTD.,
²Chem. Ana. Cen., Chiba Univ.
[°]Tomoyuki Ozawa¹, Kazuaki Shikii¹,
Masashi Ohno¹, Tatsuya Seki¹,
Shoichi Kondo¹, Hiroo Matsumoto¹,
Yoshihisa Sei², Shigeru Sakamoto²,
Kentaro Yamaguchi²
- 3-P-15 The studies of solution structure of steroid compounds by cold-spray ionization (CSI)-mass spectrometry and pulsed field gradient (PFG) NMR
¹Chem. Anal. Center, Chiba Univ.,
²NMR Appl. Lab., JEOL)[°]Kazuaki Shikii¹,
Shigeru Sakamoto¹, Hiroko Seki¹,
Hiroaki Utsumi², Kentaro Yamaguchi¹
- 3-P-16 Observation of Biomolecule-Bound water interaction by Cold-Spray Ionization Mass Spectrometry
¹CAC. Chiba Univ., ²Dep. Chem, Tokyo Metro. Univ.) Kentaro Yamaguchi¹,
Mitsuru Tashiro², [°]Yoshihsa Sei¹
- 3-P-17 Analysis of labile organic compounds by Cold-Spray Ionization mass spectrometry (JEOL) [°]Kiyotaka Konuma, Kazuko Tanaka, Junichi Osuga, Tetsuichiro Morita, Kenji Nagatomo, Jun Tamura
- 3-P-18 High Throughput Analysis by a Dual-Column LCMS System Using 1.8 μ m Octadecyl Silica Packed Columns
¹Yokogawa Analytical Systems, Inc.,
²Dep. Materials Sci., Toyohashi Univ. Tech.) [°]Hirokazu Sawada¹, Saiduzzaman Md², Hiroki Kumagai¹
- 3-P-19 High Throughput Nano-scale Spotting System for LC/MALDI-TOF-MS
¹LC, Shimadzu, ²Koichi Tanaka Mass Spectrometry Research Laboratory, Shimadzu, ³Shimadzu)[°]Yosuke Iwata¹, Sadanori Sekiya², Shuzo Maruyama¹, Yutaka Kuratani³, Yusuke Osaka¹
- 3-P-20 High-throughput screening system for evaluation of the interactions between small molecule drugs and proteins expressed from human full-length cDNA clones using size-exclusion chromatography coupled with mass spectrometry (REPRORI) Hideaki Sueoka, Tetsuo Torii,
[°]Kouichi Tsuchiya, Tadakazu Yamauchi, Takeshi Tsutsumi, Morikazu Kito, Yuko Isono, Yorimasa Suwa
- 3-P-21 Enhancement of matrix-assisted laser desorption/ionization mass spectra according to the derivatization of peptides with arginine via a C-terminal oxazolone
¹Life.Lab, Shimadzu. corp, ²Dep. Chem, Nara Womens Univ., ³Graduate School of Science, Osaka Univ, ⁴Mass, Res, Lab, ⁵Graduate School of Frontier Biosciences, Osaka Univ)
[°]Minoru Yamaguchi¹, Takashi Nakazawa², Kimiko Nishida², Mayu Ishida², Hiroki Kuyama¹, Takashi Obama¹, Eiji Ando¹, Takaaki Okamura³, Norikazu Ueyama³, Koichi Tanaka⁴, Shigemi Norioka⁵
- 3-P-22 Improvement of MS/MS fragment ion coverage of the peptide including acidic residues by amidation with amine constituent composed of ¹⁵N
¹MS Res. Lab., Shimadzu Corp., ²Research Institute, Osaka MCH.) [°]Sadanori Sekiya¹, Yoshinao Wada², Koichi Tanaka¹
- 3-P-23 Protein signal enhancement in MALDI-TOF MS
(Natl. Inst. Health Sci.) [°]Tetsu Kobayashi, Hiroshi Kawai, Takao Suzuki, Toru Kawanishi, Takao Hayakawa
- 3-P-24 The method for N-terminal amino acid sequencing of proteins by mass spectrometry
¹Life Science Lab., Shimadzu Corp., ²Koichi Tanaka Mass Spectrometry Research Laboratory, ³Graduate School of Science, Osaka Univ., ⁴Dep.Chem., Nara Women's Univ., ⁵Graduate School of Frontier Biosciences, Osaka Univ.)
[°]Takashi Obama¹, Minoru Yamaguchi¹, Hiroki Kuyama¹, Eiji Ando¹, Masami Ichikawa¹, Koichi Tanaka², Takaaki Okamura³, Norikazu Ueyama³, Takashi Nakazawa⁴, Shigemi Norioka⁵

3rd Day (Wed., June 4, 2004)

- 3-P-25 DeNovo sequence using MSⁿ of MALDI-QIT-TOF-MS
 (^1MS Res. Lab., Shimadzu Corp.,
 ^2Tech. Res. Lab., Shimadzu Corp., ^3SRL)
 °Shinichi Iwamoto¹, Shigeki Kajihara²,
 Mike May³, Jennifer Broughton³,
 Yao Jing wen³, Koichi Tanaka¹
- 3-P-26 An Alternative Method for Top Down Proteomics using MALDI-QIT-TOF MSⁿ
 (^1MS Res. Lab. Shimadzu Corp., ^2Kratos)
 °Koichi Tanaka¹, Rachel Martin²
- 3-P-27 Analysis of physiological amino acids by capillary electrophoresis —time-of-flight mass spectrometry
 (JEOL.Ltd) °Kenji Nagatomo,
 Toshinobu Hondo, Tetsuichiro Morita,
 Yasunori Nishimura, Jun Tamura
- 3-P-28 Use of a thin polyacrylamide gel for ingel digestion, and its manufacturing method
 (^1Res. Inst. Osaka MCH, ^2JST)
 °Yoshinao Wada¹, Michiko Tajiri²
- 3-P-29 A novel enzymatic microreactor for LC/MS analysis
 (Hitachi, Ltd.) °Masako Ishimaru,
 Astumu Hirabayashi
- 3-P-30 Accelerated Protein Digestion prior to Mass Spectrometry
 (^1Nihon-Millipore KK, ^2Millipore Corp.)
 °Kazuhsia Kameyama¹,
 Elena Chernokalskaya², Anja Dedeo²
- 3-P-31 Residue Selective Fragmentation of Electrospray-Generated Ubiquitin Ions in a Time Dependent Process
 (Biomol. Characterization, Riken)
 °Takemichi Nakamura, Naoshi Dohmae
- 3-P-32 Convenient method to distinguish between phosphate and sulfate by Hydrogen/Deuterium exchange mass spectrometry
 (Nagoya Univ.) °Akira Kanakubo,
 Minoru Isobe
- 3-P-33 Mass Spectrometry on H/D Exchange of Ligand-Complexes of E.coli Dihydrofolate Reductase
 (Grad. Sci, Hiroshima Univ.)
 °Tatsuya Yamamoto, Miyuki Inno,
 Shunsuke Izumi, Kunihiko Gekko
- 3-P-34 Analysis of endocrine disruptive action by nonylphenol and bisphenol A: breast cancer cells
 (Kobe Pharm. Univ.) °Atsuko Takeuchi,
 Kayoko Saiki
- 3-P-35 Molecular basis of enzyme inactivation by an endogenous electrophile 4-hydroxy-2-nonenal: identification of modification sites in thioredoxin
 (^1Grad. Sch. of Bioagric. Sci., Nagoya Univ.,
 ^2Dep. of Food & Nut. Sci., Univ. of Shizuoka, ^3Institute for Virus Res., Kyoto Univ.) °Toyo Sakurai¹,
 Takeshi Ishii¹, Shigenori Kumazawa²,
 Tsutomu Nakayama², Junji Yodo³,
 Koji Uchida¹
- 3-P-36 Detection of phosphorylated proteins from the extract of H-rasV12 transfected cells
 (RIKEN GSC) °Noriko Takeuchi,
 Masato Aoshima, Hiroshi Hirota
- 3-P-37 Identification of phosphorylation site using a MALDI QIT-TOF mass spectrometer
 (^1Life Science Lab.,Shimadzu Corp.,
 ^2Dep. Biochem. Biomole. Recognition, Yamaguchi Univ. School of Med.,
 ^3Mass Spec.Res.Lab.,Shimadzu Corp.)
 °Yuzo Yamazaki¹, Noriyuki Ojima¹,
 Yasuhiro Kuramitsu²,
 Masanoro Fujimoto²,
 Kazuyuki Nakamura²,
 Koichi Tanaka³
- 3-P-38 An efficient chemical method for dephosphorylation of phosphopeptides
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- 3-P-39 Development effective Post-translational modifications analysis method based on the LTQ features
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