

# *From Bench to Beach*

**AOMS**  **2025**

The 10th Asia-Oceania Mass Spectrometry Conference

Ishigaki Island, Okinawa, Japan - June 22-25, 2025



**Conference Program**





The 10th Asia-Oceania Mass Spectrometry Conference

# Conference Program

*From Bench to Beach*



Ishigaki Island, Okinawa, Japan - June 22-25, 2025



The Mass Spectrometry Society of Japan (MSSJ)

---

## *Welcome address from the Chair of the 10th AOMSC*

---

*The 10th Asia-Oceania Mass Spectrometry Conference (AOMSC) will be held at the ANA Intercontinental Ishigaki Resort, Ishigaki Island, Okinawa, Japan, from June 22 to 25, 2025, hosted by the Mass Spectrometry Society of Japan.*

*The AOMSC is the largest international conference on mass spectrometry and related topics in the Asia-Oceania region and has been held every other year since its first meeting in Tsukuba, Japan, in 2010, although the 9th conference was unfortunately postponed in 2021 due to the global Covid19 pandemic, in 2023, the 9th meeting was successfully held in Jeju, Korea. Over the past 15 years, the AOMSC has played a pivotal role in providing a unique platform for sharing research results and experiences through sessions on a wide variety of topics and a young scientists' forum. Continuing this tradition, the 2025 conference will be held in Ishigaki, Japan's southernmost subtropical island, providing a venue for sharing discoveries and breakthroughs in mass spectrometry. The venue is located on a beautiful beach, and the main theme of this year's conference is "From Bench to Beach". We hope that participants will be able to escape from the confines of their usual laboratories and engage in lively discussions in a unique culture blessed with nature.*

*Yasushi Ishihama (Chair of AOMSC 2025 committee, Kyoto University)*

---

*Local organizing committee*

---

**Conference Chair**

- *Yasushi Ishihama - Kyoto University*

**Local Organizing Committee**

- *Jun Adachi - National Institute of Biomedical Innovation, Health and Nutrition*
- *Takeshi Bamba - Kyushu University*
- *Tomoya Kinumi - National Institute of Advanced Industrial Science and Technology*
- *Masayuki Kubota - Waters Corporation*
- *Masamitsu Maekawa - Tohoku University*
- *Masahiro Miyashita - Kyoto University*
- *Takaya Satoh - JEOL Ltd.*
- *Kanako Sekimoto - Yokohama City University*
- *Naoyuki Sugiyama - National Cerebral and Cardiovascular Center*
- *Hirochika Sumino - The University of Tokyo*
- *Michisato Toyoda - The University of Osaka*
- *Atsushi Yamamoto - Tottori University of Environmental Studies*

---

*International Advisory Committee*

---

- *Stephen Blanksby (Australia)*
- *William Donald (Australia)*
- *Yet-Ran Chen (Taiwan)*
- *Man-Ho Choi (South Korea)*
- *Yasushi Ishihama (Japan)*
- *Yuanjiang Pan (China)*
- *Andy Chi-Kit Siu (Hong Kong)*
- *Wei Wu (Singapore)*

## History of AOMSC

<b>Year</b>	<b>Hosting Society</b>	<b>Chairperson(s)</b>	<b>City</b>
2010*	MSSJ, Mass Spectrometry Society of Japan (since 1953)	Prof. Mitsuo Takayama	Tsukuba
2011	KSMS, Korean Society for Mass Spectrometry (since 2004)	Dr. Jong Shin Yoo	Busan
2012	MSSJ	Prof. Yoshinao Wada	Kyoto
2013	TSMS, Taiwan Society for Mass Spectrometry (since 2003)	Prof. Yu-Ju Chen	Taipei
2014	CMSS, Chinese Mass Spectrometry Society (Since 1980)	Prof. Huawei Liu	Peking
2015	ANZSMS, Australia and New Zealand Society for Mass Spectrometry (since 1970)	Prof. Stephen Blanksby	Brisbane
2017	SSMS, Singapore Society for Mass Spectrometry (since 2005)	Prof. Maxey Chung	Singapore
2020	HKSMS, Hong Kong Society for Mass Spectrometry (since 1998)	Prof. Ivan Chu	Macau
2023	KSMS	Dr. Byungjoo Kim and Prof. Han Bin Oh	Jeju
2025	MSSJ	Prof. Yasushi Ishihama	Ishigaki

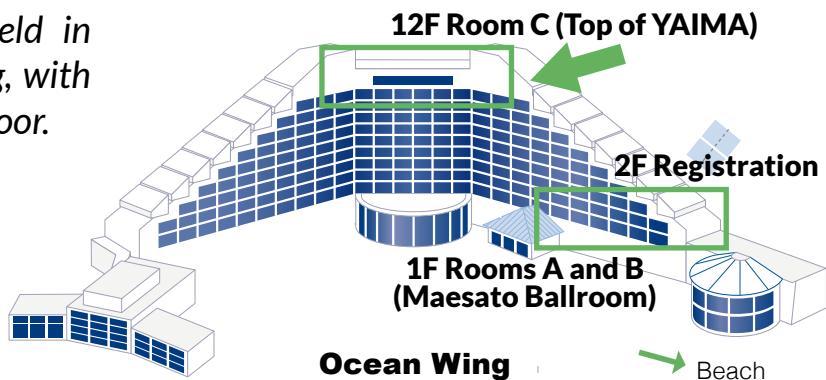
\*Co-founders of the AOMSC: (1)Prof. Yoshinao Wada (MSSJ), (2) Prof. Seung Koo Shin (KSMS), and (3) Prof. Jentae Shiea (TSMS).

## Conference venue and floor plans

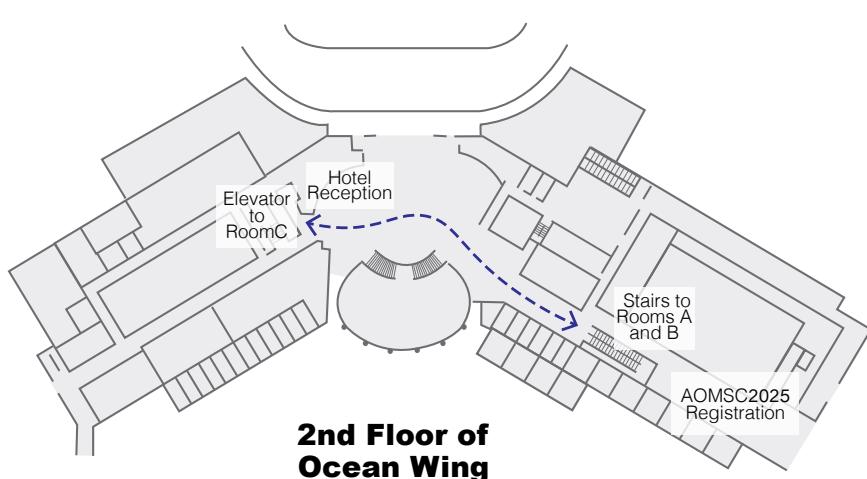
### ANA InterContinental Ishigaki Resort



AOMSC2025 will be held in the Ocean Wing building, with registration on the 2nd floor.



To go to Room C, use the stairs to the 2nd floor, pass in front of the hotel reception, and take the elevator to the 12th floor.



---

*Sponsors of the AOMSC2025*

---

**Platinum sponsors**



---

**Gold sponsors**

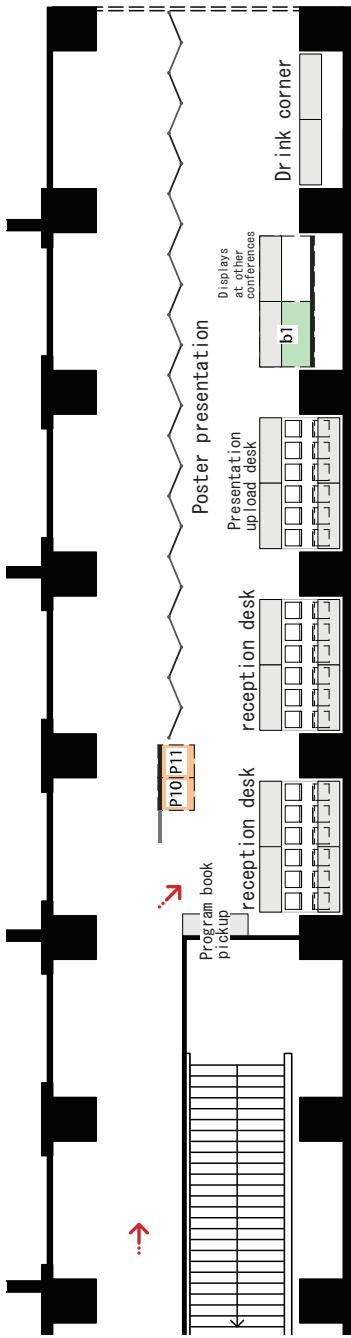
Waters™



The Power of Precision

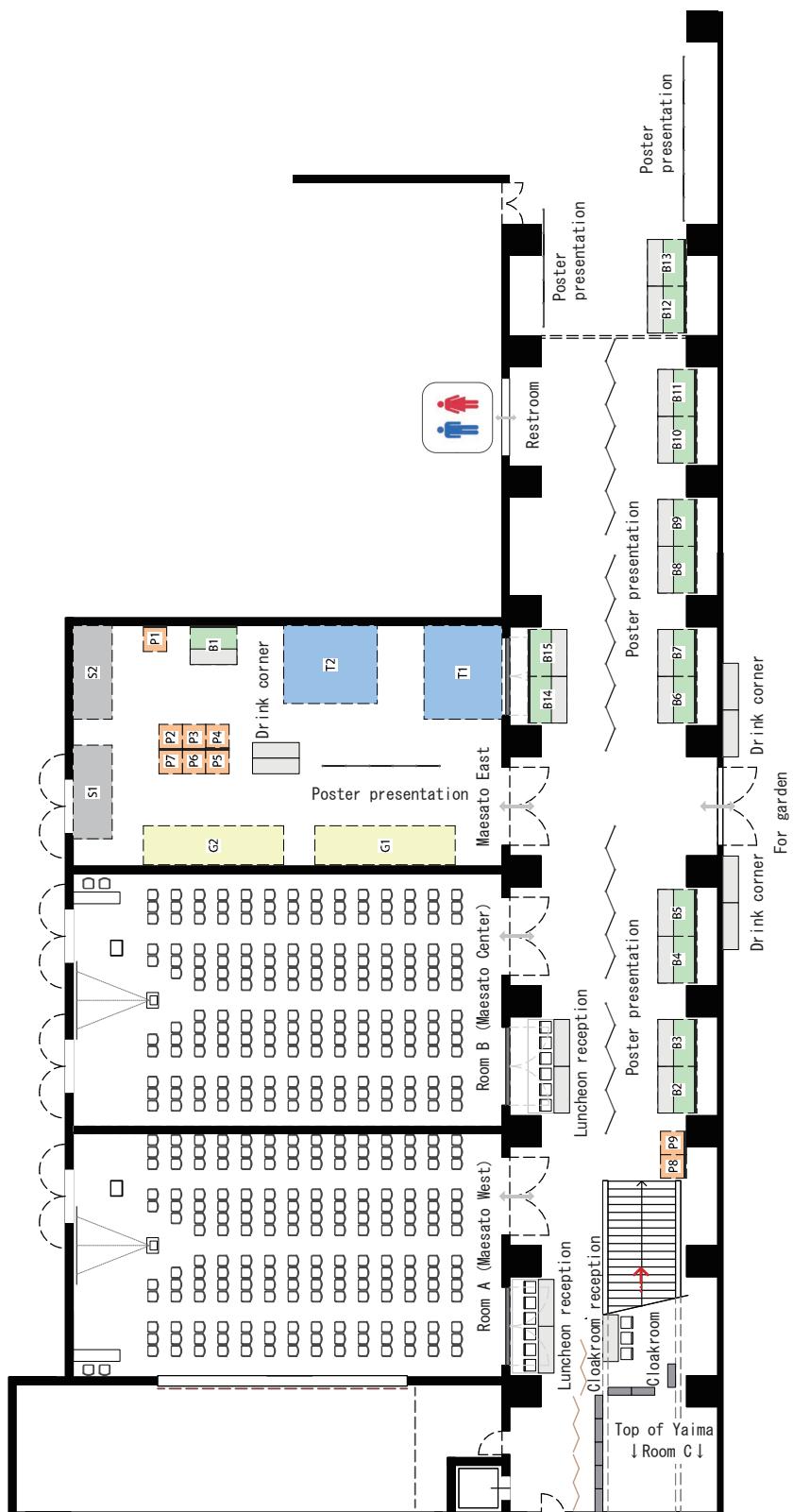
---

## Exhibition booth information



Top of Yaima  
↓ Room C ↓

**Ocean Wing 2F**



**Ocean Wing 1F (Maesato/Foyer)**

***Exhibition booth information***

NO	Sponsor	ID	Company Name	NO	Sponsor	ID	Company Name
1	Platinum	T1	Shimadzu Corporation	17	Exhibition	B11	AMR, Inc.
2	Platinum	T2	Thermo Fisher Scientific Pte Ltd	18	Exhibition	B12	IonOpticks
3	Gold medal	G1	Waters Corporation	19	Exhibition	B13	Protein Metrics
4	Gold medal	G2	SCIEX	20	Exhibition	B14	Yokogawa Electric Corporation
5	Silver medal	S1	Bruker Japan K.K.	21	Exhibition	B15	Kanomax Analytical Inc.
6	Silver medal	S2	Agilent Technologies, Inc.	22	Poster	P1	Genedata KK
7	Exhibition	B01	Genedata KK	23	Poster	P2	Innovation Science Co., Ltd.
8	Exhibition	B02	Bioinformatics Solutions Inc. / INFOCOM CORPORATION	24	Poster	P3	TAIYO NIPPON SANSO Corporation
9	Exhibition	B03	Nikkyo Technos Co.,Ltd.	25	Poster	P4	Before Ltd.
10	Exhibition	B04	CIL/Otsuka	26	Poster	P5	TERUTATSU SHOJII CORPORATION
11	Exhibition	B05	PEAK SCIENTIFIC	27	Poster	P6	MITSUI KNOWLEDGE INDUSTRY CO., LTD.
12	Exhibition	B06	GL Sciences inc.	28	Poster	P7	Ricoh Company, Ltd.
13	Exhibition	B07	JEOL Ltd.	29	Poster	P8	Bioinformatics Solutions Inc.
14	Exhibition	B08	M&S Instruments Inc.	30	Poster	P9	SpectralWorks Limited
15	Exhibition	B09	LECO Corporation	31	2F Exhibition	b1	SPM, Kyoto University, Graduate School of Pharmaceutical Sciences
16	Exhibition	B10	Evosep				

---

## *General information*

---

### **Reception Desk**

*Located on the ocean wing 2F.*

*Sunday, June 22 (Day1), 11:00-18:15*

*Monday, June 23 (Day2), 8:00-19:00*

*Tuesday, June 24 (Day3), 8:00-19:00*

*Wednesday, June 25 (Day4), 8:00-17:15*

### **Instructions for Oral Presenters**

*Plenary lecture: 45 or 60 min (incl. introduction and questions)*

*Oral session: 15 or 30 min (incl. introduction and questions)*

*Young researchers' session: 10 or 15 min (incl. introduction and questions)*

*Oral presentations will also be streamed via ZOOM. This is for when a venue cannot accommodate all of the audience. Please note that ZOOM will be used only for distribution of on-site lectures. Outside speakers and Q&A sessions are not available via on-line.*

*All presentations will be made using the equipped computers (Windows 11) at the oral presentation rooms with Microsoft PowerPoint/Adobe Acrobat Reader.*

*Please note that presentations cannot be made using your individual PC.*

#### **On-site upload:**

*Please bring your presentation file as .pptx files for PowerPoint or PDF files on a USB memory stick to the presentation upload desk at least one day prior to the presentation. Presentations should be previewed at that time. The upload desk will be located near the reception desk.*

#### **On-line upload:**

*Presenters can also upload their presentation files via online. Please upload from the URL provided to each presenter via email.*

*Please note that the network connection is likely to be unstable due to the limited capacity of Wi-Fi connection in venue.*

## **Instructions for Poster Presenters**

### **Poster Set-up**

The size of poster that can be mounted on the poster board is 86 cm wide and 120 cm high (for A0 size). It is recommended that the poster presenters bring their own mounting materials, Velcro Tape. These materials also will be provided at the poster session venue by the organizing committee. Posters must be in place throughout the scheduled day. The poster number will be attached at the top of the boards. Afternoon poster sessions may be held outside in the 1F Garden, weather and time permitting.

Sunday, June 22 (Day1): 13:00-18:15

(For welcome mixer participants, the poster removal time is preferably at 20:00.)

Monday, June 23 (Day2): 8:15-19:00

Tuesday, June 24 (Day3): 8:15-19:00

(For banquet participants, the poster removal time is preferably at 21:00.)

Wednesday, June 25 (Day4): 8:15-17:15

After the closing time, the organizing committee may dispose of the posters that remained on the board.

### **Poster Attendance**

Presenters should attend the designated core times listed below

Sunday, June 22 (Day1)

1P-PM, 16:15-17:15 (Odd), 17:15-18:15 (Even)

1P-LB (Late-breaking poster) 16:15-17:15 (Odd), 17:15-18:15 (Even)

TooLatePosterOutside 16:15-17:15

Monday, June 23 (Day2)

2P-AM, 9:30-10:30 (Odd), 10:30-11:30 (Even)

2P-PM, 17:00-18:00 (Odd), 18:00-19:00 (Even)

Tuesday, June 24 (Day3)

3P-AM, 9:15-10:15 (Odd), 10:15-11:15 (Even)

3P-PM, 17:00-18:00 (Odd), 18:00-19:00 (Even)

Wednesday, June 25 (Day4)

4P-AM, 9:15-10:15 (Odd), 10:15-11:15 (Even)

4P-PM, 15:15-16:15 (Odd), 16:15-17:15 (Even)

## **Important notice regarding photo/video recording at the venue**

The copyright of the presentation belongs to the presenter.

If you wish to film or record a presentation, please be sure to obtain the presenter's permission.

It is prohibited to share recorded content on the Internet, including social networking services.

Secondary use by co-organizers of corporate sessions (Luncheon seminar, Teatime seminar, Exhibition booth) is allowed with the permission of the presenter.

## **Social Events**

### **Welcome mixer**

Sunday, June 22, 18:15-20:00

Pre-registration is not required. All are welcome!

### **Banquet**

Tuesday, June 24, 19:00-21:00

Pre-registration only, tickets are already sold-out.

### **Awarding Ceremony and Closing**

Wednesday, June 25, 17:15-18:00

## **Cloak room**

The cloakroom is located on the 1st floor outside the Room A.

Opening hours:

Sunday, June 22 (Day1), 11:00-20:00

Monday, June 23 (Day2), 8:00-19:00

Tuesday, June 24 (Day3), 8:00-21:00

Wednesday, June 25 (Day4), 8:00-18:00

## **Conference Program and Abstracts**

<https://www.mssj.jp/conf/73/program.html>



**Time Table The 73rd Annual Conference on Mass Spectrometry (2025) / AOMSC2025**

Day 1, June 22 (Sunday)		Registration: Ocean Wing 2nd floor from 11 am.																		
8:00		8:00	9:00	9:00	10:00	10:00	11:00	11:00	12:00	12:00	13:00	13:00	14:00	14:00	15:00	15:00	16:00	16:00	17:00	
0	15	30	45	0	15	30	45	0	15	30	45	0	15	30	45	0	15	30	45	
<b>Room A</b> Maesato West Ocean Wing 1st Floor		9:00 - 11:30	Young Scientist Forum (closed)	11:30 - 12:00	YSF public session co-hosted by MSSJ-KSMS young researcher exchange program	13:00 - 13:40	MSSJ General Meeting (Japanese)	13:50 - 14:50	MSSJ Award Ceremony Award Lecture 1-AW (in Japanese)	15:00 - 15:10	Plenary I 1-PL-1510 Dr. Kengo Suzuki (Eiglena Co., Ltd.)	15:10 - 16:10								20:00
<b>Room B</b> Maesato Center Ocean Wing 1st Floor																				
<b>Room C</b> Top of Yaima Ocean Wing 12th Floor																				
<b>Poster &amp; Exhibition</b> Maesato East, Foyer Ocean Wing 1st & 2nd Floor																				
<b>Garden</b>																				
<b>Exhibitions by Sponsors</b> 13:00 - 20:00 <b>Core Time (Odd Number)</b> <b>Core Time (Even Number)</b> <b>18:15 - 20:00</b> <b>Welcome Mixer</b>																				

Time Table The 73rd Annual Conference on Mass Spectrometry (2025) / AOMSSC2025

**Time Table The 73rd Annual Conference on Mass Spectrometry (2025)／AOMSSC2025**

Day 3, June 24 (Tuesday)		Registration: Ocean Wing 2nd floor from 8 am.																	
		8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00					
	0	15 30 45 0	15 30 45 0	15 30 45 0	15 30 45 0	15 30 45 0	15 30 45 0	15 30 45 0	15 30 45 0	15 30 45 0	15 30 45 0	15 30 45 0	15 30 45 0	15 30 45 0	15 30 45 0	15 30 45 0	15 30 45 0	15 30 45 0	15 30 45 0
<b>Room A</b> <b>Maesato West Ocean Wing 1st Floor</b>	<b>8:15 - 9:15 Plenary III 3-PL-0815</b> Prof. Kini R. Manjunatha (National University of Singapore)					11:25 - 12:40 Oral 3A-Q1	12:45 - 13:45 Luncheon Seminar 3A-L-1245	13:55 - 15:10 Oral 3A-Q2	15:45 - 17:00 Oral 3A-Q3										<b>19:00 - 21:00 (Rainy) Banquet</b>
<b>Room B</b> <b>Maesato Center Ocean Wing 1st Floor</b>	Chair: M. Miyashita				Chair: S. Uchiyama N. Kawasaki	SCIEX		Chair: N. Kawasaki S. Uchiyama											
<b>Room C</b> <b>Top of Yaima Ocean Wing 12th Floor</b>					11:25 - 12:40 Oral 3B-Q1	12:45 - 13:45 Luncheon Seminar 3B-L-1245	13:55 - 15:10 Oral 3B-Q2	15:45 - 17:00 Oral 3B-Q3											
<b>Poster &amp; Exhibition</b> <b>Maesato East, Foyer Ocean Wing 1st &amp; 2nd Floor</b>																			
<b>Garden</b>																			

**Time Table The 73rd Annual Conference on Mass Spectrometry (2025) / AOMSC2025**

Day 4, June 25 (Wednesday)		Registration: Ocean Wing 2nd floor from 8 am.																		
8:00		8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	0	15	30	45	0	
0	15	30	45	0	15	30	45	0	15	30	45	0	15	30	45	0	15	30	45	0
<b>Room A</b> Maesato West Ocean Wing 1st Floor		8:30 - 9:15	Plenary IV 4-PL-0830 Prof. Tomoyoshi Soga (Keio University)			11:25 - 12:40 Oral 4A-O1 "Fundamentals & emerging applications of ionization and gases phaseon processes -part I"	12:45 - 13:45 Luncheon Seminar 4A-L-1245	13:55 - 15:10 Oral 4A-O2 "Instrument developments for the future of mass spectrometry"					17:15 - 18:30 Closing 4-CL-1700							
<b>Room B</b> Maesato Center Ocean Wing 1st Floor					Chair: T. Bamba	Chair: K. Sakimoto, L. C. Chen	Yokogawa Electric Corporation	Chair: Y. Otsuka Y.-S. Wang												
<b>Room C</b> Top of Yaima Ocean Wing 12th Floor						11:25 - 12:40 Oral 4B-O1 "Young researcher session 2"	12:45 - 13:45 Luncheon Seminar 4B-L-1245	13:55 - 15:10 Oral 4B-O2 "Mass spectrometry in agriculture and food science"												
<b>Poster &amp; Exhibition</b> Maesato East, Foyer Ocean Wing 1st & 2nd Floor						Chair: Y. Yamaguchi, P.-S. Chen	Agilent Technologies, Inc.	Chair: A. Oikawa	13:55 - 15:10 Oral 4C-O2 "Cutting-edge lipidomics technology and applied research"											
						Chair: W. Wu, J. Adachi	AMR	Chair: T. Bamba, K. Ekiroo												
									15:15 - 16:15 Poster 4P-PM	16:15 - 17:15 Poster 4P-PM										
									Core Time (Odd Number)	Core Time (Even Number)										
									15:15 - 17:15 Poster (4P-AM & 4P-PM)											

## Program

Day 1, June 22 (Sun.)

### Room A (Maesato West)

#### ⟨Award Lecture⟩

[1-AW] MSSJ Award Lectures

#This session will take place in Rooms A and B and will be available for live viewing via online streaming in Room C.

(13:50 ~ 14:50) Chair: Yasushi Ishihama (Kyoto University)

1-AW-1350 Mass Spectrometry Studies on Higher-Order Structure of Biomacromolecules (Yokohama City Univ.) <sup>a</sup>Satoko Akashi

1-AW-1410 Development and application of highly sensitive metabolomics analysis using LC/MS (Kyushu Univ.) <sup>b</sup>Yoshihiro Izumi

1-AW-1430 Development of Thin metal Film formation Method For Surface-Assisted Laser Desorption/Ionization Mass Spectrometry Imaging (Toyama Pref. Univ.) <sup>c</sup>Issey Osaka

#### ⟨Plenary Lecture⟩

[1-PL] Plenary Lecture I

#This session will take place in Rooms A and B and will be available for live viewing via online streaming in Room C.

(15:10 ~ 16:10) Chair: Michisato Toyoda (The University of Osaka)

1-PL-1510 Advancing the Study and Practical Use of Microalgae Euglena (<sup>1</sup>Euglena / RIKEN Baton Zone / Tohoku Univ. / UTM / UGM, <sup>2</sup>Euglena / RIKEN Baton Zone, <sup>3</sup>RIKEN Baton Zone / RIKEN CSRS / Yokohama City Univ. / Nagasaki Univ.) <sup>a</sup>Kengo Suzuki<sup>1</sup>, Koji Yamada<sup>2</sup>, Keiichi Mochida<sup>3</sup>

### Room B (Maesato Center)

#### ⟨Award Lecture⟩

[1-AW] MSSJ Award Lectures

#This session will take place in Rooms A and B and will be available for live viewing via online streaming in Room C.

(13:50 ~ 14:50) Chair: Yasushi Ishihama (Kyoto University)

1-AW-1350 Mass Spectrometry Studies on Higher-Order Structure of Biomacromolecules (Yokohama City Univ.) <sup>a</sup>Satoko Akashi

1-AW-1410 Development and application of highly sensitive metabolomics analysis using LC/MS (Kyushu Univ.) <sup>b</sup>Yoshihiro Izumi

1-AW-1430 Development of Thin metal Film formation Method For Surface-Assisted Laser Desorption/Ionization Mass Spectrometry Imaging (Toyama Pref. Univ.) <sup>c</sup>Issey Osaka

#### ⟨Plenary Lecture⟩

[1-PL] Plenary Lecture I

#This session will take place in Rooms A and B and will be available for live viewing via online streaming in Room C.

(15:10 ~ 16:10) Chair: Michisato Toyoda (The University of Osaka)

1-PL-1510 Advancing the Study and Practical Use of Microalgae Euglena (<sup>1</sup>Euglena / RIKEN Baton Zone / Tohoku Univ. / UTM / UGM, <sup>2</sup>Euglena / RIKEN Baton Zone, <sup>3</sup>RIKEN Baton Zone / RIKEN CSRS / Yokohama City Univ. / Nagasaki Univ.) <sup>a</sup>Kengo Suzuki<sup>1</sup>, Koji Yamada<sup>2</sup>, Keiichi Mochida<sup>3</sup>

Day 1, June 22 (Sun.)

Room C (Top of Yaima)

⟨Award Lecture⟩

[1-AW] MSSJ Award Lectures

#This session will take place in Rooms A and B and will be available for live viewing via online streaming in Room C.

(13:50 ~ 14:50) Chair: Yasushi Ishihama (Kyoto University)

- 1-AW-1350 Mass Spectrometry Studies on Higher-Order Structure of Biomacromolecules (Yokohama City Univ.) <sup>o</sup>Satoko Akashi
- 1-AW-1410 Development and application of highly sensitive metabolomics analysis using LC/MS (Kyushu Univ.) <sup>o</sup>Yoshihiro Iizumi
- 1-AW-1430 Development of Thin metal Film formation Method For Surface-Assisted Laser Desorption/Ionization Mass Spectrometry Imaging (Toyama Pref. Univ.) <sup>o</sup>Issey Osaka

⟨Plenary Lecture⟩

[1-PL] Plenary Lecture I

#This session will take place in Rooms A and B and will be available for live viewing via online streaming in Room C.

(15:10 ~ 16:10) Chair: Michisato Toyoda (The University of Osaka)

- 1-PL-1510 Advancing the Study and Practical Use of Microalgae Euglena (<sup>1</sup>Euglena / RIKEN Baton Zone / Tohoku Univ. / UTM / UGM, <sup>2</sup>Euglena / RIKEN Baton Zone, <sup>3</sup>RIKEN Baton Zone / RIKEN CSRS / Yokohama City Univ. / Nagasaki Univ.) <sup>o</sup>Kengo Suzuki<sup>1</sup>, Koji Yamada<sup>2</sup>, Keiichi Mochida<sup>3</sup>

⟨Poster Presentations⟩

Room P (Maesato East, Foyer, Ocean Wing)

[1P-PM] Poster Session 1P-PM

Poster Display : 13:00 ~ 18:15

Core time (Odd numbers) : 16:15 ~ 17:15

Core time (Even numbers) : 17:15 ~ 18:15

#For welcome mixer participants, the poster removal time is preferably at 20:00.

- 1P-PM-01 Development of silicone oil detection method in pharmaceutical freeze dryer using EI-QMS with pulsed gas injection system (<sup>1</sup>ATONARP INC., <sup>2</sup>Osaka Univ.) <sup>o</sup>Kozue Asakura<sup>1</sup>, Hirofumi Nagao<sup>1,2</sup>

- 1P-PM-02 A Proteomic Study of Coffee Beans with Different Postharvest Processing Methods (<sup>1</sup>BCST NCYU, <sup>2</sup>ITFA NCYU) <sup>o</sup>Tai-Wei Wu<sup>1</sup>, Han-Ju Chien<sup>1,2</sup>

- 1P-PM-03 Rapid analysis of oligonucleotides and the impurities with acoustic ejection system coupled with high resolution mass spectrometry (AE-HRMS) (SCIEX) <sup>o</sup>Kaoru Karasawa

- 1P-PM-04 Mass++ ver.4 Gold, an official release of open-source MS data viewer (<sup>1</sup>Mass++ Users Group, <sup>2</sup>Trans-IT, <sup>3</sup>RIKEN, <sup>4</sup>Human Metabolome Technologies, <sup>5</sup>The Noguchi Inst., <sup>6</sup>Niigata Univ., <sup>7</sup>Mass Soft, <sup>8</sup>Showa Univ., <sup>9</sup>Kitasato Univ.) <sup>o</sup>Satoshi Tanaka<sup>1,2</sup>, Masaki Murase<sup>1</sup>, Masaki Kato<sup>1,3</sup>, Hiroyuki Yamamoto<sup>1,4</sup>, Masaaki Matsubara<sup>1,5</sup>, Yushi Takahashi<sup>1,6</sup>, Tsuyoshi Tabata<sup>1,7</sup>, Maiko Kusano<sup>1,8</sup>, Shin Kawano<sup>1,9</sup>, Shujiro Okuda<sup>6</sup>, Akiyasu Yoshizawa<sup>1,6</sup>

- 1P-PM-05 Development of Metal Thin Films Using Mist CVD as Ionization-Facilitating Materials for SALDI/MS Analysis of Lipids and Synthetic Polymers (<sup>1</sup>Toyama Prefectural University, <sup>2</sup>NIT, Ishikawa College) <sup>o</sup>Riko Taka-ta<sup>1</sup>, Yuji Nakabayashi<sup>2</sup>, Yuki Kato<sup>1</sup>, Issey Osaka<sup>1</sup>

- 1P-PM-06 Metabolome Analysis of Juvenile Corals using a Comprehensive Two-Dimensional Gas Chromatography High-Resolution Time-of-Flight Mass Spectrometry for Calcification-Related Compounds (<sup>1</sup>JEOL, <sup>2</sup>Kitasato Univ., <sup>3</sup>AIST, <sup>4</sup>Okayama Univ., <sup>5</sup>Univ. Ryukyus) <sup>o</sup>Azusa Kubota<sup>1</sup>, Ayumi Kubo<sup>1</sup>, Masaaki Ubukata<sup>1</sup>, Nanami Mizusawa<sup>2</sup>, Mariko Iijima<sup>3</sup>, Yoshikazu Ohno<sup>4</sup>, Jun Yasumoto<sup>5</sup>, Ko Yasumoto<sup>2</sup>

Day 1, June 22 (Sun.)

- 1P-PM-07 Thin-section- and Matrix-free Mass Spectrometry Imaging: Platinum-coated Porous Plate Formed of Glass-beads (Transfer Plate) Realizes Various Sample Preparation (<sup>1</sup>Hamamatsu Photonics, <sup>2</sup>GPI) <sup>☆</sup>Takamasa Ikeda<sup>1,2</sup>
- 1P-PM-08 <sup>☆</sup>BIOSP-Based Multi-Scale Proteomics Decodes the Adipose-Brain Axis in Obesity (BMS CITYU) <sup>☆</sup>Rui Qian, Fenglian Yang, Liang Zhang
- 1P-PM-09 Comprehensive metabolomic profiling method for disease by non-target LC/IM/MS/MS (<sup>1</sup>Toyama PU, <sup>2</sup>Kanazawa Univ, <sup>3</sup>Toyama PU) <sup>☆</sup>Ei Horiuchi<sup>1</sup>, Shigehiro Karashima<sup>2</sup>, Issey Osaka<sup>3</sup>
- 1P-PM-10 <sup>☆</sup>Structural analysis of recombinant adeno-associated virus capsids using hydrogen/deuterium exchange mass spectrometry (Osaka Univ.) <sup>☆</sup>Tomohiko Ikeda, Yuki Yamaguchi, Mitsuko Fukuahara, Yasuo Tsunaka, Aoba Matsushita, Tetsuo Torisu, Susumu Uchiyama
- 1P-PM-11 A Proteomic Study of the Impact of Roasting Stages on Natural Coffee Beans (<sup>1</sup>NCYU, <sup>2</sup>ITFA) <sup>☆</sup>Dun-Xuan Wang<sup>1</sup>, Han-Ju Chien<sup>1,2</sup>
- 1P-PM-12 The [M-H]<sup>+</sup> Formation of 4-Substituted-1-(methoxymethyl)benzene Derivatives under Positive Fast Atom Bombardment Ionization (<sup>1</sup>Mukogawa Women's Univ., <sup>2</sup>Osaka Research Institute of Industrial Science and Technology) <sup>☆</sup>Shizuyo Horiyama<sup>1</sup>, Motohiro Shizuma<sup>2</sup>
- 1P-PM-13 <sup>☆</sup>Membrane Proteomic Analysis Revealed Resistant Mechanisms of Epidermal Growth Factor Receptor Tyrosine Kinase Inhibitors In Lung Cancer Cells (<sup>1</sup>NTU, <sup>2</sup>TMU) <sup>☆</sup>Yu Teng Jheng<sup>1</sup>, Chia Li Han<sup>2</sup>
- 1P-PM-14 <sup>☆</sup>Direct sampling mass spectrometry of samples on a petri dish using sheath-flow probe electrospray ionization (sfPESI) (Univ. of Yamanashi) <sup>☆</sup>Yuta Hase, Kenzo Hiraoka, Lee Chuin Chen, Satoshi Ninomiya
- 1P-PM-15 Comparison of rare earth elements as impurities in gadolinium-based contrast agents (GBCAs) (<sup>1</sup>Guerbet, <sup>2</sup>Gunma University) <sup>☆</sup>Hyuma Ohashi<sup>1</sup>, Naoki Kato<sup>1</sup>, Yoshito Tsushima<sup>2</sup>
- 1P-PM-16 <sup>☆</sup>Development of Hexafluoro-2-propanol-Free LC/MS Method for Oligonucleotide Analysis (<sup>1</sup>Univ. Osaka, <sup>2</sup>Univ. Osaka Shimadzu Lab., <sup>3</sup>Shimadzu Corp.) <sup>☆</sup>Takashi Miyazaki<sup>1,2,3</sup>, Natsuyo Asano<sup>3</sup>, Takao Yamaguchi<sup>1</sup>, Satoshi Obika<sup>1</sup>
- 1P-PM-17 A Novel Benchtop MALDI-TOF/TOF Platform for Top-Down Protein Characterization (<sup>1</sup>BRUKERSG, <sup>2</sup>BRUKER, <sup>3</sup>BRUKERDAL) <sup>☆</sup>Wen Donq Looi<sup>1</sup>, Sergei Dikler<sup>2</sup>, Arndt Asperger<sup>3</sup>
- 1P-PM-18 <sup>☆</sup>Multi-omics analysis of CHO cells for improvement of monoclonal antibody production process (AGC Inc.) <sup>☆</sup>Shigenori Takeda, Yumi Yamanaka, Kana Tanabe, Yasuhiro Kawano, Nobuyoshi Nagao
- 1P-PM-19 <sup>☆</sup>Glycoproteomic Characterization of Colorectal Cancer FFPE Tissue Sections. (Yokohama City Univ.) <sup>☆</sup>Manato Oishi, Daisuke Takakura, Nana Kawasaki
- 1P-PM-20 Sequential plasma metabolome and proteome analyses to develop a novel monitoring strategy for patients with epithelial ovarian cancer (<sup>1</sup>INGEM, Tohoku Univ., <sup>2</sup>ToMMo, Tohoku Univ., <sup>3</sup>Grad. Sch. Med., Tohoku Univ.) <sup>☆</sup>Eiji Hishinuma<sup>1,2</sup>, Shogo Shigeta<sup>3</sup>, Naomi Matsukawa<sup>2</sup>, Yasunobu Okamura<sup>1,2</sup>, Ikuko Motoike<sup>2</sup>, Kengo Kinoshita<sup>1,2</sup>, Seizo Koshiba<sup>1,2</sup>, Muneaki Shimada<sup>1,2,3</sup>
- 1P-PM-21 Development of the Workflow for PFAS Analysis in Plating Films Using LC-MS/MS (Shimadzu) <sup>☆</sup>Kota Ishioka, Ryo Yamaguchi, Junichi Masuda
- 1P-PM-22 Optimizing Sequence Coverage for Modified Oligonucleotides: A Study Using CID MS/MS and Ion Mobility (Nihon Waters) <sup>☆</sup>Taiji Kawase, Tatsuya Ezaki, Kenji Hirose
- 1P-PM-23 <sup>☆</sup>Identification and quantification of host cell proteins in recombinant adeno-associated virus by data-independent acquisition mass spectrometry (Osaka Univ.) <sup>☆</sup>Yuma Furuta, Yuki Yamaguchi, Yasuo Tsunaka, Mitsuko Fukuahara, Tetsuo Torisu, Susumu Uchiyama
- 1P-PM-24 <sup>☆</sup>Increasing the Flexibility of Electrospray Ionization Mass Spectrometry by Introduction of Multiple Modifier Vapors (NTHU CHEM) <sup>☆</sup>Ying-Rong Hwang, Decibel Elpa, Pawel Urban
- 1P-PM-25 <sup>☆</sup>Large-scale profiling of protease and proteolysis in non-small cell lung cancer cell lines using protein terminomics (<sup>1</sup>Kyoto Univ., Japan, <sup>2</sup>Niigata Univ., Japan) <sup>☆</sup>Risa Chisaka<sup>1</sup>, Yuto Taniguchi<sup>1</sup>, Tatsuya Sagawa<sup>1</sup>, Kaho Takamuro<sup>1</sup>, Ayana Tomioka<sup>1</sup>, Hiroshi Nishida<sup>1</sup>, Shujiro Okuda<sup>2</sup>, Yasushi Ishihama<sup>1</sup>

Day 1, June 22 (Sun.)

- 1P-PM-26 Identification of Pannexin-3 as a Missing Protein in the Human Proteome Using Liquid Chromatography-Tandem Mass Spectrometry (<sup>1</sup>KBSI\_DORC, <sup>2</sup>KMU\_DBC, <sup>3</sup>KMU\_ARI, <sup>4</sup>KBSI\_BRC, <sup>5</sup>KRIBB, <sup>6</sup>UST) <sup>o</sup>Hae Min Ju<sup>1</sup>, Kyung Hee Kim<sup>2,3</sup>, Soojin Park<sup>4</sup>, Jin Young Kim<sup>1,5</sup>, Heeyoun Hwang<sup>1,6</sup>
- 1P-PM-27 Eco-friendly agents for mitigating *Schistosoma mansoni* infection: bioassay-guided identification and mass spectrometry analysis (<sup>1</sup>UniSC/CBI, <sup>2</sup>UniSC/SSTE, <sup>3</sup>QIMR, <sup>4</sup>StFX) Conor Fogarty<sup>1,2</sup>, Saowaros Suwansa-ard<sup>1,2</sup>, Phong Phan<sup>1</sup>, Donald McManus<sup>3</sup>, Mary Duke<sup>3</sup>, Russell Wyethd<sup>4</sup>, Scott Cummins<sup>1,2</sup>, <sup>o</sup>Tianfang Wang<sup>1,2</sup>
- 1P-PM-28 Comparison of Amino Acid Analyzer and Triple Quadrupole LC-MS/MS for the Analysis of Biological Free Amino Acids (Tottori Univ.) <sup>o</sup>Mizuki Yokono
- 1P-PM-29 ☆ Medium-molecular-weight Metabolomics Platform with a Focus on Peptides, Developed Based on Capillary Electrophoresis-Mass Spectrometry (HMT) <sup>o</sup>Tomoaki Nitta, Kazunori Sasaki, Hiroyuki Yamamoto, Hajime Tomatsu, Kenjiro Kami
- 1P-PM-30 ☆ Proteomic Profiling of Serum Extracellular Vesicles Reveals RARRES2 as a New Potential Biomarker for PCOS Detection (<sup>1</sup>School of Nutrition and Health Sciences, TMU, <sup>2</sup>Research Center of Nutritional Medicine, TMU, <sup>3</sup>Graduate Institute of Cancer Biology and Drug Discovery, TMU, <sup>4</sup>PhD Program for Cancer Molecular Biology and Drug Discovery, TMU, <sup>5</sup>Graduate Institute of Medical Sciences, NDMC, <sup>6</sup>Department of Research and Development, NDMC) <sup>o</sup>Jun Yi Chong<sup>1</sup>, Shih-Min Hsia<sup>1,2</sup>, Tsui-Chin Huang<sup>3,4</sup>, Hsin-Yi Chang<sup>5,6</sup>
- 1P-PM-31 Efficient Exosome Enrichment from Urine Using Polyethylene Glycol (<sup>1</sup>CNU, <sup>2</sup>Chungnam National Univ.) <sup>o</sup>Jonggil Won<sup>1</sup>, Jeongkwon Kim<sup>2</sup>
- 1P-PM-32 ☆ Characterizing Microglia in Alzheimer's Disease (AD) and Cerebral Amyloid Angiopathy (CAA) with MALDI HiPLEX-IHC (<sup>1</sup>Doshisha Univ., <sup>2</sup>Bruker Japan, <sup>3</sup>JASRI/SPRING-8, <sup>4</sup>BBAR) <sup>o</sup>Naoki Tsujimura<sup>1</sup>, Rikuya Yoshimura<sup>1</sup>, Takashi Nirasawa<sup>2</sup>, Yumiko Toyama<sup>1</sup>, Maiko Okamura<sup>1</sup>, Masato Hoshino<sup>3</sup>, Shuji Yamashita<sup>1</sup>, Yuko Saito<sup>4</sup>, Shigeo Murayama<sup>4</sup>, Kazuhiro Irie<sup>1</sup>, Masaya Ikegawa<sup>1</sup>

- 1P-PM-33 ☆ Spatial Lipidomics Mapping in 3D Cell Models via DESI Mass Spectrometry Imaging (Chang Gung Univ.) <sup>o</sup>Chen Yu Chang, Cheng Hung Yang
- 1P-PM-34 ☆ A Novel 18O-Labeled Water Approach for Investigating Intracellular Nucleotide Synthesis Kinetics (<sup>1</sup>Kyoto Univ., <sup>2</sup>Kwansei Gakuin Univ.) <sup>o</sup>Ryoma Kizu<sup>1,2</sup>, Ikuko Yao<sup>2</sup>, Yuki Sugiyura<sup>1</sup>
- 1P-PM-35 ☆ Extraction and Analysis of Metabolites from *Bacillus anthracis* Spores Using GC-MS (CNU) <sup>o</sup>Yongju Jo
- 1P-PM-36 ☆ Ketogenic diet promotes muscular endurance by altering muscle fiber composition in gastrocnemius not soleus muscle (<sup>1</sup>GILS National Defense Medical Center, <sup>2</sup>PhD Program for CBDD Taipei Medical Univ., <sup>3</sup>CBDD Taipei Medical Univ., <sup>4</sup>GIMS National Defense Medical Center) <sup>o</sup>Cheng-Yi Ma<sup>1</sup>, Tsui-Chin Huang<sup>2,3</sup>, Hsin-Yi Chang<sup>4</sup>
- 1P-PM-37 ☆ Native Digestion-Based Sample Preparation for Plasma Proteomics (<sup>1</sup>Kyoto Univ., <sup>2</sup>NIBIOHN) <sup>o</sup>Hiroto Kakiuchi<sup>1</sup>, Ayana Tomioka<sup>1</sup>, Kosuke Ogata<sup>1</sup>, Eisuke Kanao<sup>1,2</sup>, Yasushi Ishihama<sup>1,2</sup>
- 1P-PM-38 ☆ Mitochondrial Acetyl-CoA Potentiates Beige Adipocyte Thermogenesis through BNIP3-mediated Autophagy (<sup>1</sup>CBDD, TMU, <sup>2</sup>PhD Program for CBDD, TMU, <sup>3</sup>Master Program in Clinical Genomics and Proteomics, TMU, <sup>4</sup>Medical Sciences, NDMC, <sup>5</sup>Department of Research and Development, NDMC) <sup>o</sup>Yii-Jwu Lo<sup>1,2</sup>, Tsui-Chin Huang<sup>1,2,3</sup>, Hsin-Yi Chang<sup>4,5</sup>
- 1P-PM-39 Withdrawn
- 1P-PM-40 ☆ Mass Spectrometry of Dimethyl Sulfide Oxidation Products Formed in Atmospheric Pressure Corona Discharges (Yokohama City Univ.) <sup>o</sup>Yuta Hamamoto, Kanako Sekimoto
- 1P-PM-41 ☆ Metabolic signatures of prenatal exposure to 'Cocktails' of benzotriazoles and benzothiazoles and its health implications (<sup>1</sup>SJTU, <sup>2</sup>HKBU) <sup>o</sup>Yanqiu Zhou<sup>1,2</sup>
- 1P-PM-42 ☆ Spatial multi-omics study delineates possible link between copper dyshomeostasis and macrophage driven inflammation in Dilated Cardiomyopathy (<sup>1</sup>Doshisha Univ., <sup>2</sup>SHIMADZU, <sup>3</sup>Kyoto Univ., <sup>4</sup>NCNP, <sup>5</sup>NCVC, <sup>6</sup>Hokusetsu General Hospital) <sup>o</sup>Maiko Okamura<sup>1</sup>, Koji Okuda<sup>2</sup>, Shinichi Yamaguchi<sup>2</sup>, Takushi Yamamoto<sup>2</sup>, Kenji Minatoya<sup>3</sup>, Shuji Yamashita<sup>1</sup>, Ichizo Nishino<sup>4</sup>, Hatsue Ishibashi-Ueda<sup>5,6</sup>, Masaya Ikegawa<sup>1</sup>

Day 1, June 22 (Sun.)

1P-PM-43 ☆ Gas-Phase Photoelectron Spectroscopy and Reactivity of the Phenylacetylide PhCC<sup>-</sup> and Copper Bis(phenylacetylide) [Cu(CCPH)<sub>2</sub>]<sup>-</sup> Anions (<sup>1</sup>unimelb, <sup>2</sup>PNNL) <sup>o</sup>Howard Ma<sup>1</sup>, Wenjin Cao<sup>2</sup>, Yufei Xie<sup>1</sup>, Xue-Bin Wang<sup>2</sup>, Richard O'hair<sup>1</sup>

1P-PM-44 ☆ Reliability on MS image of citric acid distribution in a strawberry fruit specimen created using positive/negative ion mode associated with potassium distribution (<sup>1</sup>Hokkaido Univ., <sup>2</sup>Shimadzu) <sup>o</sup>Takumi Fujiki<sup>1</sup>, Kaoru Nakagawa<sup>2</sup>, Koji Okuda<sup>2</sup>, A. Tanabe<sup>2</sup>, M. Kiyama<sup>2</sup>, Manami Kobayashi<sup>2</sup>, Takashi Suzuki<sup>1</sup>

**<Late Breaking Posters>**

[1P-LB] Late Breaking Posters

Poster Display : 13:00 ~ 18:15

Core time (Odd numbers) : 16:15 ~ 17:15

Core time (Even numbers) : 17:15 ~ 18:15

#For welcome mixer participants, the poster removal time is preferably at 20:00.

1P-LB-01 Measurement of Metals in Human Liver Using LA-ICP-MS and an Organic Matrix-Based Standard (<sup>1</sup>Agilent, <sup>2</sup>Kyoto Univ., <sup>3</sup>Tokushima Univ.) <sup>o</sup>Tetsuo Kubota<sup>1</sup>, Yuki Sugiura<sup>2</sup>, Koichi Tsuneyama<sup>3</sup>

1P-LB-02 Rapid Analysis of Psychotropic Drugs and Metabolites in Urine Using Thermal Desorption Electrospray Ionization Mass Spectrometry (<sup>1</sup>Hanyang Univ., <sup>2</sup>FGC, SPO Korea, <sup>3</sup>NSYSU) <sup>o</sup>Kyunghwa Kee<sup>1</sup>, Jinyoung Kim<sup>2</sup>, Jaechul Cheong<sup>2</sup>, Namhee Kwon<sup>2</sup>, Jentae Shiea<sup>3</sup>, Hyehyun Yoo<sup>1</sup>

1P-LB-03 Versatile Mass Spectrometry : In-House RGA and Portable MS for Expanding Molecular Analysis Capabilities (<sup>1</sup>Sogang Univ., <sup>2</sup>Affiliation 1, <sup>3</sup>Affiliation 2) <sup>o</sup>Seungho Ha<sup>1</sup>, Han Bin Oh<sup>2</sup>, Dong Young Lim<sup>3</sup>

1P-LB-04 Proteomic analysis of corneal layers after trigeminal denervation: insights into inflammation and intracellular clearance in the epithelium, stroma, and endothelium (<sup>1</sup>NTUH, <sup>2</sup>NTU) <sup>o</sup>Pei-Shan Wu<sup>1</sup>, I-Lan Tsai<sup>1</sup>, Miao-Hsia Lin<sup>2</sup>, Hsin-Yu Liu<sup>1</sup>

1P-LB-05 Decoding O-Antigen Substructures in Pathogenic *E. coli* O111: Insights from MALDI Glycotyping of Cell Culture and Commercial LPS (Hokkaido Univ.) <sup>o</sup>June Chelyn Lee, Shogo Urakami, Hinou Hiroshi

1P-LB-06 Analysis of Sulfated N-glycans as a Potential Biomarker for the Early Detection of Breast Cancer (<sup>1</sup>Hokkaido Univ., <sup>2</sup>De La Salle Univ., <sup>3</sup>Addis Ababa Univ) <sup>o</sup>Dereje Feleke<sup>1</sup>, Bryan Montalban<sup>2</sup>, Solomon Gizaw<sup>3</sup>, Hiroshi Hinou<sup>1</sup>

1P-LB-07 Live Single-Cell Mass Spectrometry to Study the Metabolic Mechanisms Behind Triple Negative Breast Cancer Cell Migration. (Leiden University) <sup>o</sup>Xiaoyue Huang, Sylvia Le Devedec, Thomas Hankemeier, Ahmed Ali

1P-LB-08 Hierarchical Porous Nanofibers Containing Zeolitic-Imidazolate Frameworks and Hydroxyapatite Nanoparticles for Efficient Atmospheric Pollution Control (<sup>1</sup>Pusan University, <sup>2</sup>Pusan Univ., <sup>3</sup>PNU, <sup>4</sup>Pusan Univ.(PNU)) <sup>o</sup>Changgyun Kim<sup>1</sup>, Kwonho Jang<sup>2</sup>, Sungkyun Park<sup>3</sup>, Kanghyun Park<sup>4</sup>

1P-LB-09 Developing Multiple Biomarkers of Human Lung Cancer Using Multiomics. (NTOU) <sup>o</sup>Fang-Hsuan Chang

1P-LB-10 New Concept for Detection of charge and m/z of Multiply Charged Particles with High Signal Gain (<sup>1</sup>Ningbo University, <sup>2</sup>South-east University) Dongdong Zhou<sup>1</sup>, Baiyu Chen<sup>2</sup>, Mei Xiao<sup>2</sup>, Li Ding<sup>1</sup>

1P-LB-11 Development of a sheathless CE-MS method for limited sample volume (Keio Univ.) <sup>o</sup>Akiyoshi Hirayama, Yushi Kamei

1P-LB-12 MALDI-Spiral-TOFMS Analysis of Photochromic Diarylethene Derivatives with Labile Groups and Their Photopolymerization Reactions (NAIST) <sup>o</sup>Taichi Muto, Kaho Irie, Chigusa Goto, Yoshiko Nishikawa, Tsuyoshi Kawai

Day 2, June 23 (Mon.)

Room A (Maesato West)

⟨Plenary Lecture⟩

[2-PL] Plenary Lecture II

#This session will take place in Rooms A and B and will be available for live viewing via online streaming in Room C.

(8:30 ~ 9:30) Chair: Yasushi Ishihama (Kyoto University)

2-PL-0830      Exploiting the Mass Spectrometry Toolkit for Biomedical Discoveries and Clinical Translation (Mayo Clinic)  
                  °Akhilesh Pandey

⟨Oral Sessions⟩

[2A-01] Current Issues in Polymer Material Characterization and Recent Approaches with Mass Spectrometry

(11:40 ~ 12:55) Chair: Takaya Satoh (JEOL) / Shogo Yamane (AIST)

2A-01-1140      Detection of Different Additives from Evolved Gas Analysis-Mass Spectrometry Data Using Two-dimensional Correlation Spectroscopy (AIST) °Shogo Yamane, Yasumasa Suzuki, Hideyuki Shinzawa

2A-01-1155      Analysis of Highly Multiply Charged Intact Polymers in Cyclic Ion Mobility-Mass Spectrometry with Collision Induced Charge Stripping (NITech) °Isa Guducu, Iiguni Yoshinori, Shinya Kitagawa

2A-01-1210      Structural Analysis of EO-PO Copolymers Using LC-QTOF MS (Aichi Pref.) °Goro Funakoshi

2A-01-1225 (3P-AM-43)      ☆ An Ambient Microwave Plasma Torch Desorption/Ionization Mass Spectrometry (MPT-MS) Strategy for Microplastic Detection (Zhejiang Univ.) °Qing Li, Weiwei Chen, Fengjian Chu, Jing Luo, Hongru Feng, Yuanjiang Pan

2A-01-1240      Multifaceted degradation evaluation of PET bottles subjected to outdoor exposure test (¹JEOL, ²The Council for PET Bottle Recycling) °Takaya Satoh<sup>1</sup>, Azusa Kubota<sup>1</sup>, Chikako Nakayama<sup>1</sup>, Yuseke Sakuda<sup>1</sup>, Kouji Takahashi<sup>2</sup>, Masahiko Asano<sup>2</sup>

⟨Luncheon Seminar⟩

[2A-L] Luncheon Seminar (Presented by Thermo Fisher Scientific)

(13:00 ~ 14:00)

2A-L-1300      ADVANCEMENTS IN TECHNOLOGY THAT REVEAL BIOLOGICAL INSIGHTS INTO DISEASE MECHANISMS AND CLINICAL RESEARCH OUTCOMES (<sup>1</sup>Academia Sinica, <sup>2</sup>Thermo Fisher Scientific) °Yu-Ju Chen<sup>1</sup>, Maciej Bromirski<sup>2</sup>

⟨Oral Sessions⟩

[2A-02] AOMSC Special Session

(14:10 ~ 15:25) Chair: Tomoya Kinumi (AIST)

2A-02-1410      [Invited] Deciphering PM<sub>2.5</sub>-disrupted Energy Metabolism via Mass Spectrometry Analysis (HKBU) °Zhu Yang

2A-02-1425      [Invited] Ion behavior in the Evaporating Charged Droplets Generated by Electrospray Ionization (POSTECH) Seongjae Jang, Minsu Kim, °Jongcheol Seo

2A-02-1440      [Invited] LncRNA HIFCAR Sequesters ER Resident Protein to Hinder Antigen Presentation Process in Pancreatic Ductal Adenocarcinoma (<sup>1</sup>R&D, NDMC, <sup>2</sup>PhD CBDD, TMU, <sup>3</sup>GIMS, NDMC, <sup>4</sup>CBDD, TMU) Tze-Ting Kuo<sup>1,2</sup>, Jia-Jun He<sup>3</sup>, Bai-Chia Liu<sup>4</sup>, Tsui-Chin Huang<sup>2,4</sup>, °Hsin-Yi Chang<sup>1,3</sup>

2A-02-1455      Integrative Structural Mass Spectrometry for Understanding the Protein-Protein/Drug Interaction Dynamics (SYSU) Yuxiang Luo, Minhan Nie, °Huilin Li

2A-02-1510      Quantitative metabolomics for human plasma using stable isotope-labeled internal standard mixture (SILIS) (<sup>1</sup>MIB, Kyushu Univ., <sup>2</sup>Kyushu Univ., <sup>3</sup>AIST, <sup>4</sup>Taiyo Nippon Sanso, <sup>5</sup>Keio Univ., <sup>6</sup>SAIL Technologies) °Masatomo Takahashi<sup>1,2</sup>, Yuki Soma<sup>3</sup>, Akari Ikeda<sup>4</sup>, Akiyoshi Hirayama<sup>5</sup>, Kanako Tokito<sup>1</sup>, Michiyo Hishikawa<sup>6</sup>, Satsuki Ikeda<sup>5</sup>, Yuri Imado<sup>2</sup>, Tsutomu Terauchi<sup>6</sup>, Takayoshi Matsuda<sup>6</sup>, Yoshihiro Izumi<sup>1,2</sup>, Takeshi Bamba<sup>1,2</sup>

Day 2, June 23 (Mon.)

[2A-03] Frontiers in Mass Spectrometry Imaging -Applications-

(15:40 ~ 16:55) Chair: Shuichi Shimma (The University of Osaka)

2A-03-1540 [Keynote]Mass spectrometry imaging to create a Lipidome Atlas (<sup>1</sup>Keio Univ., <sup>2</sup>WPI-Bio2Q, <sup>3</sup>RIKEN-IMS) <sup>o</sup>Makoto Arita<sup>1,2,3</sup>

2A-03-1610 Comparative Distribution of Free Eribulin and Eribulin Liposomal Formulation in Mouse Syngeneic Tumors Using Desorption Electrospray Ionization Mass Spectrometry Imaging (<sup>1</sup>Eisai, DMPK, <sup>2</sup>Eisai, DCV function) <sup>o</sup>Tomomi Ishida<sup>1</sup>, Yuki Niwa<sup>2</sup>, Koichiro Hotta<sup>1</sup>, Taro Semba<sup>2</sup>, Yuji Mano<sup>1</sup>

2A-03-1625 Hybrid Imaging Analysis reveals molecular localization reflecting brain function (<sup>1</sup>Dokkyo Medical Univ., <sup>2</sup>QST, <sup>3</sup>Tokyo Univ. Pharm. Life Sci., <sup>4</sup>Univ. Tokyo) <sup>o</sup>Tadayuki Ogawa<sup>1</sup>, Shino Takeda<sup>2</sup>, Tomonari Umemura<sup>3</sup>, Takafumi Hirata<sup>4</sup>

2A-03-1640 (3P-AM-52) ☆ Exploring the Chemical Communication of Australian Native Flower *Corymbia ficifolia* Using Mass Spectrometry Imaging (<sup>1</sup>ESC, GU, <sup>2</sup>CMM, UQ, <sup>3</sup>QBI, UQ) <sup>o</sup>Rachel Jackson<sup>1</sup>, Brett Hamilton<sup>2</sup>, Robert Sullivan<sup>3</sup>, Darren Holland<sup>1</sup>, Joshua Hayton<sup>1</sup>, Anthony Carroll<sup>1</sup>

Room B (Maesato Center)

**〈Plenary Lecture〉**

[2-PL] Plenary Lecture II

#This session will take place in Rooms A and B and will be available for live viewing via online streaming in Room C.

(8:30 ~ 9:30) Chair: Yasushi Ishihama (Kyoto University)

2-PL-0830 Exploiting the Mass Spectrometry Toolkit for Biomedical Discoveries and Clinical Translation (Mayo Clinic)  
<sup>o</sup>Akhilesh Pandey

**〈Oral Sessions〉**

[2B-01] Young Researcher Session 1

(11:40 ~ 12:55) Chair: Kohta Nakatani (Niigata University) / Chao-Jung Chen (China Medical University)

2B-01-1140 [Invited]The discovery of clinical disease biomarkers by LC-MS-based global metabolomics (<sup>1</sup>China Medical Uni., <sup>2</sup>China Medical Univ. Hospit.) <sup>o</sup>Chao-Jung Chen<sup>1,2</sup>

2B-01-1155 (3P-AM-49) ☆ Phosphatase reactivity-based profiling of the local environment of phosphorylation sites on proteins (<sup>1</sup>Kyoto Univ., <sup>2</sup>NIBIOHN) <sup>o</sup>Yuna Hiranuma<sup>1</sup>, Kosuke Ogata<sup>1</sup>, Yasushi Ishihama<sup>1,2</sup>

2B-01-1210 (3P-AM-51) ☆ First Look at the Integrated Phospholipid Metabolism in an Insect Endosymbiosis (<sup>1</sup>NIBB, <sup>2</sup>Keio University, <sup>3</sup>RIKEN IMS) <sup>o</sup>Dolma Michellod<sup>1</sup>, Kathrine Tan<sup>1</sup>, Makoto Arita<sup>2,3</sup>, Shuji Shigenobu<sup>1</sup>

2B-01-1225 (3P-AM-15) ☆ Development and Applications of Portable Gas Chromatograph-Mass Spectrometer System with Built-in Preconcentrator (<sup>1</sup>Graduate School of Science, Osaka Univ., <sup>2</sup>College of Science, NTNU) <sup>o</sup>Ping Chen<sup>1,2</sup>, Tsung-Han Lee<sup>2</sup>, Chia-Jung Lu<sup>2</sup>, Michiato Toyoda<sup>1</sup>

2B-01-1240 (3P-AM-04) ☆ Chiral Recognition by Mass Spectrometry with the Combinations of Two Chiral Selectors (<sup>1</sup>PolyU, <sup>2</sup>CityU) <sup>o</sup>Qi Yi<sup>1</sup>, Yiqi Sheng<sup>2</sup>, Chi-Kit Siu<sup>2</sup>, Zhong-Ping Yao<sup>1</sup>

**〈Luncheon Seminar〉**

[2B-L] Luncheon Seminar (Presented by Waters Corporation)

(13:00 ~ 14:00)

2B-L-1300 Impact of viral protein stoichiometry on the biological activity of virus vector for gene therapy (The Univ. of Osaka)  
<sup>o</sup>Susumu Uchiyama

Day 2, June 23 (Mon.)

⟨Oral Sessions⟩

[2B-02] Environmental Pollution and Its Effects Evaluation

(14:10 ~ 15:25) Chair: Atsushi Yamamoto (Tottori University of Environmental Studies) / Runzeng Liu (Shandong University)

2B-02-1410 [Keynote]The Release of Dye and Microplastic-Related Chemicals into Nature by Humans: How Much is Discharged, and What Are Their Global Effects? (KNU) <sup>o</sup>Sunghwan Kim

2B-02-1440 [Invited]Synthetic Antioxidants as New Pollutants Revealed by Mass Spectrometry: From Environmental Occurrence to Human Exposure (Shandong Univ.) <sup>o</sup>Runzeng Liu, Xiaoxia Feng, Xiaomeng Ji

2B-02-1455 [Invited]Bacteria in the atmosphere: Insights into their production and transformation of biological and organic matter in cloud water (<sup>1</sup>SEE CityUHK, <sup>2</sup>SRI CityUHK, <sup>3</sup>SKLMEH) <sup>o</sup>Theodora Nah<sup>1,2,3</sup>, Yushuo Liu<sup>1,2</sup>, Chee Kent Lim<sup>1</sup>, Zhiyong Shen<sup>1</sup>, Patrick Lee<sup>1,3</sup>

2B-02-1510 Investigating the Health- and Climate-Relevant Chemical Composition of Wildfire Smoke Particles and Marine Aerosols by a Novel On-Line Single Particle Mass Spectrometry Technology (<sup>1</sup>Univ. Rostock/HMGU, <sup>2</sup>Univ. Eastern Finland/Kuopio, <sup>3</sup>Photonion GmbH) Johannes Passig<sup>1</sup>, Olli Sippula<sup>2</sup>, Hassib Hakim<sup>1</sup>, Annele Virtanen<sup>2</sup>, Mika Ihalainen<sup>2</sup>, Iva Rosewig<sup>1</sup>, Robert Irsig<sup>3</sup>, <sup>o</sup>Ralf Zimmermann<sup>1</sup>

[2B-03] Fundamentals & Emerging Applications of Ionization and Gas Phase Ion Processes - Part I

(15:40 ~ 16:55) Chair: Lee Chuin Chen (University of Yamanashi) / Kanako Sekimoto (Yokohama City University)

2B-03-1540 [Keynote]Exploring Microdroplet Interactions in Electrospray-like Ion Sources (NTHU) <sup>o</sup>Pawel Urban

2B-03-1610 [Invited]Investigation of Microdroplet Chemistry with Mass Spectrometry (Univ. Nankai) <sup>o</sup>Xinxing Zhang

2B-03-1625

[Invited]Noninvasive Sampling Devices Combined with Ambient Ionization Tandem Mass Spectrometry for Rapid Characterization of Metabolic Biomarkers, Ingested Medicine, and Abused Drugs in Breath (NSYSU/Taiwan)  
<sup>o</sup>Jentiae Shiea

2B-03-1640

[Invited]Masked Reactivity of Hydrated Clusters of Monovalent Manganese Ion: H<sub>2</sub>O Insertion vs. N<sub>2</sub>O Activation — A DFT Investigation (City U Hong Kong) <sup>o</sup>Chi-Kit Siu

Room C (Top of Yaima)

⟨Plenary Lecture⟩

[2-PL] Plenary Lecture II

#This session will take place in Rooms A and B and will be available for live viewing via online streaming in Room C.

(8:30 ~ 9:30) Chair: Yasushi Ishihama (Kyoto University)

2-PL-0830

Exploiting the Mass Spectrometry Toolkit for Biomedical Discoveries and Clinical Translation (Mayo Clinic)  
<sup>o</sup>Akhilesh Pandey

⟨Oral Sessions⟩

[2C-01] Clinical Mass Spectrometry and Reverse Translational Research -From Diagnostic and Treatment Application to Pathological Analysis- Part I

(11:40 ~ 12:55) Chair: Hsiao-Wei Liao (National Yang Ming Chiao Tung University) / Masamitsu Maekawa (Tohoku University)

2C-01-1140

[Keynote]Quantitative Measurements of Circulating Ceramides as Markers for Cardiometabolic Disorders (Duke-NUS) <sup>o</sup>Federico Torta

2C-01-1210

Determination of Clonality of Monoclonal Serum Free Light Chains by On-Probe Extraction Coupled with Liquid Chromatography-Mass Spectrometry (<sup>1</sup>Stanford Univ, <sup>2</sup>Stanford Health Care) Priscilla Yeung<sup>1,2</sup>, Yajing Liu<sup>1</sup>, Ashley Ruan<sup>1</sup>, Christina Kerr<sup>1</sup>, Run-Zheng Shi<sup>1,2</sup>, David Iberri<sup>1</sup>, <sup>o</sup>Ruben Luo<sup>1,2</sup>

Day 2, June 23 (Mon.)

2C-01-1225	Exploring Serum Amyloid A Variant Barcode in Colorectal Cancer by Nano-probe-based Affinity Mass Spectrometry ( <sup>1</sup> IOC, NTU, <sup>2</sup> JZ, <sup>3</sup> IOBI, NYCU, <sup>4</sup> KMUH, <sup>5</sup> IOC, AS) <sup>◦</sup> Jia-Rong Li <sup>1</sup> , Mira dela Rosa <sup>2</sup> , Ping-Song Li <sup>2</sup> , Kun-Pin Wu <sup>3</sup> , Deng-Chyang Wu <sup>4</sup> , Yu-Ju Chen <sup>5</sup>	2C-02-1455	Specific Enhancement of Neoantigen Presentation by Targeted Proteasomal Degradation ( <sup>1</sup> SIgN, A <sup>*</sup> STAR, <sup>2</sup> NUS) <sup>◦</sup> Ilisia Ow <sup>12</sup> , Amanda Lee <sup>1</sup> , Justin Low <sup>1</sup> , Wei Wu <sup>12</sup>
2C-01-1240	A novel newborn screening modality : Non-targeted proteome analysis using low-cost iron powders (KDRI) <sup>◦</sup> Daisuke Nakajima, Masaki Ishikawa, Ryo Konno, Hideo Sasai, Osamu Ohara, Yu-suke Kawashima	2C-02-1510 (3P-PM-16)	☆ Advancing Bottom-up Proteomics with Protease Type XIII from <i>Aspergillus saitoi</i> ( <sup>1</sup> Kyoto Univ., <sup>2</sup> SHIONOGI, <sup>3</sup> NIBN) <sup>◦</sup> Ryota Tomioka <sup>1,2</sup> , Ayana Tomioka <sup>1</sup> , Kosuke Ogata <sup>1</sup> , Yasushi Ishihama <sup>1,3</sup>
<b>[2C-03] Advanced Technology in Proteomics</b>			
(15:40 ~ 16:55) Chair: Miao-Hsia Lin (National Taiwan University) / Naoyuki Sugiyama (National Cerebral and Cardiovascular Center)			
2C-L-1300	Expanding the world of TIMS-enriched applications - Introduction of new Bruker MS technologies including the timsOmni MS platform ( <sup>1</sup> Bruker LLC, <sup>2</sup> Bruker Singapore, <sup>3</sup> Fasmatech) <sup>◦</sup> Mike Greig <sup>1</sup> , Wen Dong Looi <sup>2</sup> , Dimitris Papanastasiou <sup>3</sup> , Athanasios Smyrnakis <sup>3</sup> , Mariangela Kosmopoulou <sup>3</sup> , Anastasios Grigoriadis <sup>3</sup> , Ioannis Orfanopoulos <sup>3</sup> , Nikolaos Manolis <sup>3</sup> , Ilias Panagiotopoulos <sup>3</sup> , Rafail Gioves <sup>3</sup> , Alexandros Lekkas <sup>3</sup>	2C-03-1540	[Keynote]Decoding functional signalling with personalized phosphoproteomics ( <sup>1</sup> Murdoch Children's Research Institute (MCRI), <sup>2</sup> Charles Perkins Centre, University of Sydney, <sup>3</sup> Cardiovascular Epidemiology Unit, University of Cambridge, <sup>4</sup> Flinders Health and Medical Research Institute, <sup>5</sup> Section of Molecular Physiology, University of Copenhagen) <sup>◦</sup> Sean Humphrey <sup>1</sup> , Elise Needham <sup>3</sup> , Magnus Leandersson <sup>5</sup> , Hannah Huckstep <sup>1</sup> , Janni Petersen <sup>4</sup> , David James <sup>2</sup> , Jorgen Wojtaszewski <sup>5</sup>
2C-02-1410	[Keynote]Mapping Nanoscale-to-Single Cell Proteome Landscape and Beyond towards Precision Oncology (Academia Sinica) <sup>◦</sup> Yu-Ju Chen	2C-03-1555	A Methanolic Urea-enhanced Protein Extraction Enabling the Largest Bacterial Protein O-Phosphorylation Atlas ( <sup>1</sup> NTU, <sup>2</sup> Kyoto Univ., <sup>3</sup> NIBIOHN) Pei-Shan Wu <sup>1,2</sup> , Ting-An Chen <sup>1</sup> , Yasushi Ishihama <sup>2,3</sup> , <sup>◦</sup> Miao-Hsia Lin <sup>1,2</sup>
2C-02-1425	[Invited]Prognostic MALDI-MSI: Predicting Chemotherapy Responses and Identifying Metastasis in Gynecological Cancers ( <sup>1</sup> UniSA, <sup>2</sup> RAH) <sup>◦</sup> Peter Hoffmann <sup>1</sup> , Parul Mittal <sup>1</sup> , Manuela Klingler-Hoffmann <sup>1</sup> , Martin Oehler <sup>2</sup>	2C-03-1610	Chromatography to the Rescue – Confident Differentiation Between Citrullination and Deamidation in Bottom-up Proteomic Experiments (U. of Manitoba) <sup>◦</sup> Oleg Krokhine
2C-02-1440 (3P-PM-41)	☆ Proteome-Wide Degreron Screening ( <sup>1</sup> UNSW, <sup>2</sup> UTS) <sup>◦</sup> Jake Violi <sup>1</sup> , Suhyeon Kwon <sup>1</sup> , Priyanka Kundu <sup>1</sup> , Connor Phillips <sup>2</sup> , William Donald <sup>1</sup>	2C-03-1625	Development of a Non-Target Analysis Method for Isomeric Peptides in LC-IM-TOFMS (NITEch) <sup>◦</sup> Shinya Kitagawa, Reina Ogawa, Rio Suzumura, Takehiro Hirose, Yosinori Iiguni
2C-03-1640 (4P-AM-47) ☆ Proteome-Wide Profiling of Protein Structural Dynamics by Phospho-Probing with Multiple Kinases ( <sup>1</sup> Kyoto Univ., <sup>2</sup> NCVC, <sup>3</sup> NIBIOHN) <sup>◦</sup> Asato Maeda <sup>1</sup> , Kosuke Ogata <sup>1</sup> , Naoyuki Sugiyama <sup>1,2</sup> , Yasushi Ishihama <sup>1,3</sup>			

Day 2, June 23 (Mon.)

⟨Poster Presentations⟩

Room P (Maesato East, Foyer, Ocean Wing)

[2P-AM] Poster Session 2P-AM

Poster Display : 8:15 ~ 19:00

Core time (Odd numbers) : 9:30 ~ 10:30

Core time (Even numbers) : 10:30 ~ 11:30

2P-AM-01 Development of New Crystalline Sponges with Solvent and Vacuum Resistance (<sup>1</sup>The Univ. of Tokyo, <sup>2</sup>IMS, <sup>3</sup>Daicel Corp.) °Sota Sato<sup>1,2</sup>, Keisuke Gondo<sup>3</sup>, Tomoko Adachi<sup>3</sup>

2P-AM-02 ☆ The remarkable but varied photosensitized oxidation by atmospheric humic-like substances at the air-water interface (Nankai Univ.) °Xufeng Gao, Xinxing Zhang

2P-AM-03 ☆ Overcoming Neoadjuvant Chemotherapy Resistance by Clinical Phosphoproteomics of Colorectal Cancer Liver Metastasis (<sup>1</sup>NIBIOHN, <sup>2</sup>Kyoto Univ. Gastrointestinal surg., <sup>3</sup>Ujitoku, <sup>4</sup>JFCR, <sup>5</sup>Kyoto Univ. Pharmaceutical Sci.) °Akina Shinkura<sup>1,2</sup>, Satoshi Muraoka<sup>1</sup>, Narimi Takaai<sup>1</sup>, Yoko Takada<sup>1</sup>, Masayo Hirano<sup>1</sup>, Satoshi Nagayama<sup>3,4</sup>, Yu Takahashi<sup>4</sup>, Yosuke Fukunaga<sup>4</sup>, Kazutaka Obama<sup>2</sup>, Jun Adachi<sup>1,5</sup>

2P-AM-04 ☆ High Electric Fields on Water Micro-droplets Catalyze Spontaneous and Fast Reactions in Halogen-Bond Complexes (Nankai Univ.) °Chenghui Zhu, Xinxing Zhang

2P-AM-05 Paleoenvironmental Reconstruction Using Sulfur Isotope Compositions in Sedimentary Rocks (Univ. Tsukuba) °Teruyuki Maruoka

2P-AM-06 Wide-target Lipidomic Analysis Reveals Novel Functionalities of Edible Insects (<sup>1</sup>Agilent, <sup>2</sup>Setsunan University) °Kyoko Yasuda<sup>1</sup>, Takeshi Serino<sup>1</sup>, Mami Ando<sup>2</sup>, Yoshichika Hirahara<sup>2</sup>

2P-AM-07 ☆ SIZE-DEPENDENT PULMONARY TOXICITY AND WHOLE-BODY DISTRIBUTION OF INHALED MICRO/NANO PLASTIC PARTICLES IN MALE MICE FROM CHRONIC EXPOSURE (HKBU) °Leijian Chen

2P-AM-08 ☆ Rapid Quantification of Free Aromatic Amines and Related Metabolites in Human Urine Using LC-MS/MS (NYCU) °Yuanzhang Hsu, Guorjen Wei

2P-AM-09 *De Novo* Structural Elucidation of Cnidarian Metabolites by Non-Targeted LC-ESI-MS/MS (<sup>1</sup>OIST, <sup>2</sup>Kyushu Univ., <sup>3</sup>Osaka Univ., <sup>4</sup>Mirunion Inc.) °Yayoi Hongo<sup>1</sup>, Hiroshi Watanabe<sup>1</sup>, Kenji Hamase<sup>2</sup>, Chiharu Ishii<sup>2</sup>, Shuichi Shimma<sup>3,4</sup>, Hiromi Saito<sup>4</sup>

2P-AM-10 Development of Global Machine Learning Models for Understanding Retention Mechanisms and Predicting Retention Time in Supercritical Fluid Chromatography/Mass Spectrometry (<sup>1</sup>Kyushu Univ., <sup>2</sup>Div. of Metabolomics, MIB, Kyushu Univ.) °Omidreza Heravizadeh<sup>1</sup>, Kohta Nakatani<sup>1,2</sup>, Noriyuki Tomiyasu<sup>2</sup>, Taihei Torigoe<sup>2</sup>, Toshiyuki Yamashita<sup>2</sup>, Masatomo Takahashi<sup>1,2</sup>, Yoshihiro Izumi<sup>1,2</sup>, Takeshi Bamba<sup>1,2</sup>

2P-AM-11 ☆ Comprehensive structural annotation of unidentified hydrophilic metabolites based on LC/HRMS/MS and in silico epimetabolite database (IEMDB) (<sup>1</sup>MIB, Kyushu Uni., <sup>2</sup>SLS, Kyushu Uni., <sup>3</sup>AIST) °Taihei Torigoe<sup>1</sup>, Masatomo Takahashi<sup>1,2</sup>, Omidreza Heravizadeh<sup>2</sup>, Kazuki Ikeda<sup>1</sup>, Kohta Nakatani<sup>1,2</sup>, Yuki Soma<sup>3</sup>, Takeshi Bamba<sup>1,2</sup>, Yoshihiro Izumi<sup>1,2</sup>

2P-AM-12 ☆ Multiphysics Numerical Modeling of Ion Transport Dynamics in a Photoionization Mass Spectrometry Setup (USTC) °Zhiwei Wen, Jiuzhong Yang, Chengyuan Liu, Minggao Xu, Yang Pan

2P-AM-13 ☆ Determination of parabens, bisphenol A, and benzophenone-UV filters in milk powder by SPE and UHPLC-MS/MS (<sup>1</sup>NYCU, <sup>2</sup>NYC University) °Shabir Ahmad<sup>1</sup>, Yu-Fang Huang<sup>2</sup>

2P-AM-14 ☆ Matrix-Enhanced SALDI Imaging of Consecutive Tape Strips for Visualizing Skin Penetration of Cosmetic Ingredients (KOSÉ Corporation) °Yi Lyu, Shunichi Suga, Masatoshi Sekiya, Daiki Yamakoshi, Ken Tanaka, Tsuyoshi Hata

2P-AM-15 Investigation of the mechanism of action of Kampo medicines utilizing limited digestion mass spectrometry. (Tsumura) °Masashi Hiramoto, Takashi Matsumoto

2P-AM-16 The utility of combining two database search methods to identify phosphoserine and/or phosphothreonine in peptides in phosphoproteomics (<sup>1</sup>BRC, Kobe Univ., <sup>2</sup>ICMS, Med. Kobe Univ., <sup>3</sup>Agric. Sci. Kobe Univ.) °Ken-ichi Yoshino<sup>1,2</sup>, Miyu Uehara<sup>3</sup>, Shuji Ueda<sup>3</sup>

2P-AM-17 ☆ Streamlining LC-MS Sample Preparation through 3D Printing Technology (Sogang Univ.) °Hwa-Yong Jang, Han Bin Oh

2P-AM-18 Semi-automated detection and identification of multiplex-labeled metabolomics data (<sup>1</sup>MKI, <sup>2</sup>Taiyo Nippon Sanso, <sup>3</sup>Lipidome Lab) °Noritaka Masaki<sup>1</sup>, Akari Ikeda<sup>2</sup>, Mei Tanabe<sup>2</sup>, Yasuto Yokoi<sup>1</sup>, Takayo Ohto<sup>3</sup>, Hiroki Nakanishi<sup>3</sup>

Day 2, June 23 (Mon.)

- 2P-AM-19** Parallel targeted and untargeted metabolite analysis of mouse plasma samples using a benchtop multi-reflecting time of flight mass spectrometer (<sup>1</sup>Waters Corp, <sup>2</sup>Liverpool Uni)  
°Jayne Kirk<sup>1</sup>, Adam King<sup>1</sup>, Lee Gethings<sup>1</sup>, Ian Wilson<sup>2</sup>
- 2P-AM-20** ☆ Multi-omics analyses reveal the potential mechanism of nematode resistance in tomato resistant and susceptible cultivars (<sup>1</sup>DBBS, NCKU, <sup>2</sup>CSD, TARI, <sup>3</sup>CGRBD, TARI) °Ying-An Chen<sup>1</sup>, Le Kang<sup>2</sup>, Yuan-Kai Tu<sup>3</sup>, Ying-Lan Chen<sup>1</sup>
- 2P-AM-21** ☆ Phosphoproteomic Analysis Reveals the Role of HAESA in IDA-Mediated Lateral Root Development (<sup>1</sup>NCKU, <sup>2</sup>IPMB, Sinica)  
°Li-Hsuan Yu<sup>1</sup>, I-Fan Wang<sup>1</sup>, Kuan-Hao Huang<sup>1</sup>, Chuan-Chih Hsu<sup>2</sup>, Ying-Lan Chen<sup>1</sup>
- 2P-AM-22** Mass spectrometry based on a nitrilotriacetic acid affinity probe for the rapid enrichment and comprehensive profiling of cellular porphyrins (<sup>1</sup>IoC Academia Sinica, <sup>2</sup>FHS Macau Univ, <sup>3</sup>DoC NTU) °Mei-Chun Tseng<sup>1</sup>, Elias Mernie<sup>1</sup>, Rofeamor Obena<sup>1</sup>, Fu-Lien Huang<sup>2</sup>, Tzu-Ming Liu<sup>2</sup>, Yu-Ju Chen<sup>1,3</sup>
- 2P-AM-23** ☆ Investigation of Mode of Action : Sorgolone Analogs Using Metabolomics (<sup>1</sup>Kangwon Nat'l Univ., <sup>2</sup>Konkuk Univ.) °Jung-Hoon Lee<sup>1</sup>, Eun-Song Choi<sup>1</sup>, Min-Ho Song<sup>1</sup>, Ha-Jin Son<sup>2</sup>, Ji-Yeon Lee<sup>2</sup>, Ji-Woo Yu<sup>1,2</sup>, Ji-Ho Lee<sup>1</sup>
- 2P-AM-24** ☆ Effect of Iprodione on Adult Female and Male Zebrafish based on Hormone and Lipidome Analysis using LC-MS/MS (<sup>1</sup>Konkuk Univ., <sup>2</sup>Kangwon Nat'l Univ., <sup>3</sup>KIT) °Ji-Woo Yu<sup>1</sup>, Min-Ho Song<sup>2</sup>, Eun-Song Choi<sup>2</sup>, Jung-Hoon Lee<sup>2</sup>, Jong-Hwan Kim<sup>3</sup>, Young-Soo Keum<sup>1</sup>, Ji-Ho Lee<sup>2</sup>
- 2P-AM-25** Optimization of probe electrospray ionization-mass spectrometry (PESI-MS) for the analysis of an *in vitro* enzyme reaction system (<sup>1</sup>Grad. Sch. IST, Osaka Univ., <sup>2</sup>OTRI, Osaka Univ., <sup>3</sup>ICBiotech., Osaka Univ., <sup>4</sup>JSPS, <sup>5</sup>Shimadzu) °Nobuyuki Okahashi<sup>1,2</sup>, Takeo Taniguchi<sup>1</sup>, Takuma Suzuki<sup>3,4</sup>, Takanari Hattori<sup>5</sup>, Hidenori Takahashi<sup>5</sup>, Kohsuke Honda<sup>2,3</sup>, Fumio Matsuda<sup>1,2</sup>
- 2P-AM-26** Structural Analysis of the Aroma Compounds in the Japanese Pickles by Gas Chromatography Olfactometry Time-of-Flight Mass Spectrometry (JEOL) °Naomi Watanabe, Azusa Kubota, Yoshio Abe, Haruo Iwabuchi, Masaaki Ubukata

- 2P-AM-27** ☆ Application of LC-MS-Based Metabolomics and Proteomics for Bee Pollen Authentication and Food Fraud Prevention (NCHU)  
°Ya-Ting Pan, Chun-Sheng Wang, Chien-Chen Lai
- 2P-AM-28** ☆ Conformational Dynamics of Beta-Lactamase by Hydrogen Deuterium Exchange Mass Spectrometry (<sup>1</sup>CPS-ZJU, <sup>2</sup>ABCT-HKPU)  
°Li-Wen Huang<sup>1</sup>, Zhong-Ping Yao<sup>2</sup>
- 2P-AM-29** ☆ The Relative Affinities of Amino Acids towards Divalent Metal Ions in the Gas Phase (<sup>1</sup>PolyU SZRI, <sup>2</sup>PolyU) °Xuewei Lin<sup>1,2</sup>, Qi Yi<sup>1,2</sup>, Zhong-Ping Yao<sup>1,2</sup>
- 2P-AM-30** ☆ High-Resolution DIA-Based Proteomic Profiling Uncovers Regional Specialisation in the Human Retina (<sup>1</sup>SSI USyd, <sup>2</sup>CPC USyd)  
°Azhar Arafah<sup>1</sup>, Ling Zhu<sup>1</sup>, Xiaosuo Wang<sup>2</sup>, Mark Gillies<sup>1</sup>
- 2P-AM-31** ☆ Noble gas isotope analyses of the volcanic rocks in Ioto island (Iwo-Jima) from the latest eruptions since 2022 (<sup>1</sup>Univ. Tokyo, Komaba, <sup>2</sup>Univ. Tokyo, RCAST, <sup>3</sup>NIED) °Soho Yamamoto<sup>1</sup>, Hirochika Sumino<sup>2</sup>, Masashi Nagai<sup>3</sup>
- 2P-AM-32** ☆ Unique Fragmentation of Indole Alkaloids Induced by Neutral Reactive Species Formed From Microwave Hydrogen and Water Plasma (<sup>1</sup>Univ. Melbourne, <sup>2</sup>Nagasaki Univ., <sup>3</sup>RIKEN, <sup>4</sup>Shimadzu Corp.) °Jack Li<sup>1</sup>, Chris Bowen<sup>1</sup>, Bun Chan<sup>2,3</sup>, Hidenori Takahashi<sup>4</sup>, Richard O'hair<sup>1</sup>
- 2P-AM-33** ☆ Biomonitoring of BPA and Parabens In The Urine of Children Aged 6 to 8 Years (<sup>1</sup>IF-SHRA, NYCU, <sup>2</sup>IEOHS, NYCU) °Yu-Xing Cheng<sup>1</sup>, Mei-Lien Chen<sup>2</sup>, Yu-Fang Huang<sup>2</sup>
- 2P-AM-34** ☆ Examining the subcellular localisation of ceramides in mouse tissue using targeted mass spectrometry (<sup>1</sup>VCCRI, <sup>2</sup>SoCM UNSW Sydney, <sup>3</sup>SBMS UNSW Sydney, <sup>4</sup>SCh UNSW Sydney) °Laura Choong<sup>1,2</sup>, Sarah Hancock<sup>1,3</sup>, Amy Nguyen<sup>1</sup>, Iliya Dragutinovic<sup>4</sup>, Elysha Taylor<sup>4</sup>, Jonathan Morris<sup>4</sup>, Nigel Turner<sup>1,3</sup>
- 2P-AM-35** Improvement of Multi-Isotope Analytical Procedure of Extraterrestrial Materials and Its Implications for Material Transport in the Solar Protoplanetary Disk (<sup>1</sup>Univ. of Osaka, <sup>2</sup>UW-Madison, <sup>3</sup>Univ. of Tokyo, <sup>4</sup>NOAA, <sup>5</sup>JAMSTEC, <sup>6</sup>Okayama Univ.) °Kohei Fukuda<sup>1,2</sup>, Yuki Hibiya<sup>3</sup>, Craig Kastelle<sup>4</sup>, Katsuhiko Suzuki<sup>5</sup>, Tsuyoshi Iizuka<sup>3</sup>, Katsuyuki Yamashita<sup>6</sup>, Thomas Helser<sup>4</sup>, Noriko Kita<sup>2</sup>

Day 2, June 23 (Mon.)

2P-AM-36 Analysis of Hydrophilic Metabolites in Rice from Different Production Areas (Shimadzu) <sup>o</sup>Yutaka Umakoshi, Hitomi Tsujihata, Nana-mi Sakashita, Yuki Sakamoto

2P-AM-37 Technical improvement of plant hormone quantification from very small tissues (<sup>1</sup>RIKEN CSRS, <sup>2</sup>TEU, <sup>3</sup>TBRC) <sup>o</sup>Yumiko Takebayashi<sup>1</sup>, Hiromi Suzuki<sup>1,2</sup>, Masami Hirai<sup>1</sup>, Mitsu-nori Seo<sup>1,3</sup>

2P-AM-38 Maternal and Fetal Nicotine Metabolite Levels: An LC-MS/MS Study on ETS Exposure in the TBPS II Cohort (<sup>1</sup>NTU EOHS, <sup>2</sup>IPHS NHRI, <sup>3</sup>NTCH, <sup>4</sup>NTU PH, <sup>5</sup>NTU MED, <sup>6</sup>NIEHS NHRI) <sup>o</sup>Sih Yu Chen<sup>1</sup>, Mei Huei Chen<sup>2,3</sup>, Ching Chun Lin<sup>1</sup>, Pau Chung Chen<sup>1,4,5,6</sup>

2P-AM-39 ☆ Residue Characteristics and Analytical Assessment of Pesticides in *Heracleum moellendorffii* Hance Using Mass Spectrometry (<sup>1</sup>Konkuk Univ., <sup>2</sup>Kangwon Nat'l Univ.) <sup>o</sup>Ha-Jin Son<sup>1</sup>, Ji-Woo Yu<sup>1,2</sup>, Eun-Song Choi<sup>2</sup>, Jung-Hoon Lee<sup>2</sup>, Hui-Yeon Ahn<sup>1</sup>, Geon-Woo Park<sup>1</sup>, Ji-Won Shin<sup>1</sup>, Ji-Yeon Lee<sup>1</sup>, Min-Ho Song<sup>2</sup>, Ji-Ho Lee<sup>2</sup>

2P-AM-40 INSIGHTS INTO DIET AND EXERCISE INDUCED CHANGES IN ZEBRAFISH LIPIDOME VIA LC-MS AND CHEMOMETRIC ANALYSES (<sup>1</sup>IQ-UFG, <sup>2</sup>UFLA, <sup>3</sup>DB-UFPR, <sup>4</sup>DQ-UFPR) <sup>o</sup>Andrea Chaves<sup>1</sup>, Almir Batista Ju-nior<sup>1</sup>, Jussara Roque<sup>1</sup>, Lanaia Ítala Maciel<sup>1</sup>, Mois-es Martins<sup>2</sup>, Willian Carneiro<sup>2</sup>, André Viana<sup>3</sup>, Luis David Murgas<sup>2</sup>, Ricardo Bernardo<sup>4</sup>

2P-AM-41 Establishment of technology for single-cell tissue metabolome imaging analysis (<sup>1</sup>Osaka Univ., <sup>2</sup>Jichi Med. Univ.) <sup>o</sup>Shuichi Shimma<sup>1</sup>, Hirotaka Nagai<sup>2</sup>

2P-AM-42 ☆ Exploration of unknown bacterial growth substrates in tap water by non-targeted analysis and fragmentation pathway prediction based on quantum chemical calculation (<sup>1</sup>UTokyo, <sup>2</sup>Kagoshima Univ) <sup>o</sup>Yutaro Uehara<sup>1</sup>, Hiroka-zu Takanashi<sup>2</sup>, Ikuro Kasuga<sup>1</sup>, Futoshi Kurisu<sup>1</sup>

2P-AM-43 Development of a Solid-Phase Microextraction Combined with GC-MS Platform for The Differentiation of Frozen Concentrated Milk and Fresh Milk. (<sup>1</sup>NCHU/Food Safety, <sup>2</sup>NCHU/ Molecular Biology) <sup>o</sup>Ya-Ting Zhuang<sup>1</sup>, Chien-Chen Lai<sup>1,2</sup>

2P-AM-44 ☆ A Metabolomic LC-HRMS Approach for the Administration Route Classification of Altrenogest in Racehorses (<sup>1</sup>University of Technology Sydney, <sup>2</sup>Racing Analytical Services Limited, <sup>3</sup>Australian Racing Forensic Laboratory) <sup>o</sup>Madysen Elbourne<sup>1</sup>, Adam Cawley<sup>2</sup>, John Keled-jian<sup>3</sup>, Shanlin Fu<sup>1</sup>

2P-AM-45 Withdrawn

2P-AM-46 ☆ The investigation into the metabolic pathways of synthetic cannabinoid receptor ago-nists (SCRAs) using human liver microsomes (HLM) (<sup>1</sup>CFS / UTS, <sup>2</sup>MaPS / UTS, <sup>3</sup>C3 / UTS, <sup>4</sup>Brain and Mind Centre / USyd) <sup>o</sup>Eathan Walker<sup>1</sup>, Eric Sparkes<sup>4</sup>, Morgan Alonzo<sup>2</sup>, Unnikrishnan Kuzhumparambil<sup>3</sup>, Shanlin Fu<sup>1</sup>

2P-AM-47 Development of carbon isotopic measurement for pre-solar grains using TOF-SIMS M6 (Osaka Univ) <sup>o</sup>Nao Eguchi, Kei Sato, Kentaro Terada

2P-AM-48 Comparison Of Fast Scanning Data Dependent And Data Independent Acquisition Methods For A Multi-OMIC Cancer Study Using High-Speed Chromatography (Waters Corpora-tion) <sup>o</sup>Davina Stewart

2P-AM-49 ☆ Nonnegative Tensor Factorization Enables Precursor-Peptide-Protein Deconvolu-tion in Data-independent Acquisition Mass Spec-trometry (<sup>1</sup>Kyoto Univ. (Pharma), <sup>2</sup>Kyoto Univ. (Engr), <sup>3</sup>Kyoto Univ. (Info), <sup>4</sup>NIBIOHN) <sup>o</sup>Jherico Geronca<sup>1</sup>, Kazuyoshi Yoshii<sup>2</sup>, Toshiyuki Tanaka<sup>3</sup>, Yasushi Ishihama<sup>1,4</sup>

2P-AM-50 Is branching coral distributed in the Ja-pan Sea? (<sup>1</sup>JAMSTEC, <sup>2</sup>BSIP, <sup>3</sup>AORI, <sup>4</sup>TCU) <sup>o</sup>Kaoru Kubota<sup>1</sup>, Pawan Govil<sup>2</sup>, Kotaro Shirai<sup>3</sup>, Kentaro Tanaka<sup>4</sup>, Yusuke Yokoyama<sup>1,3</sup>

2P-AM-51 Characterization of lentiviral vector proteins by LC-MS/MS (<sup>1</sup>Sumitomo Pharma, <sup>2</sup>Osaka Univ., <sup>3</sup>Thermo Fisher Scientific) <sup>o</sup>Satomi Kasahara<sup>1,2</sup>, Yuki Yamaguchi<sup>2</sup>, Shio Watanabe<sup>3</sup>, Daisuke Higo<sup>3</sup>, Tetsuo Torisu<sup>2</sup>, Susumu Uchiya-ma<sup>2</sup>

Day 2, June 23 (Mon.)

[2P-PM] Poster Session 2P-PM

Poster Display : 8:15 ~ 19:00

Core time (Odd numbers) : 17:00 ~ 18:00

Core time (Even numbers) : 18:00 ~ 19:00

2P-PM-01 Phosphoproteomics Identifies CDK18 as a Key Driver in ccRCC Progression and Potential Therapeutic Target (<sup>1</sup>Fu Jen Univ., <sup>2</sup>Department of Medical Research, Cathay General Hospital, <sup>3</sup>National Defense Medical Center, <sup>4</sup>Sijhih Cathay General Hospital, <sup>5</sup>Cathay General Hospital) <sup>0</sup>Wei-Chi Ku<sup>1</sup>, Chi-Jung Huang<sup>2,3</sup>, Shao-Kuan Chen<sup>4</sup>, Yen-Chieh Wang<sup>1,5</sup>

2P-PM-02 Small-molecule Fingerprinting Discriminated between Geographic Origins of White Shrimp (<sup>1</sup>NTU, <sup>2</sup>NTOU) <sup>0</sup>Wen-Ling Chen<sup>1</sup>, Hsiao-Chi Hu<sup>1</sup>, Fan-Hua Nan<sup>2</sup>, Chien-Wei Tu<sup>2</sup>

2P-PM-03 Characterization of Lymphocyte-Rich Hepatocellular Carcinoma and the Prognostic Role of Tertiary Lymphoid Structures Using Spatial Proteomics (<sup>1</sup>Univ. of Ulsan, <sup>2</sup>Asan Medical Center, <sup>3</sup>Yonsei University, <sup>4</sup>Semyung University) Jiyoung Yu<sup>2</sup>, Bokyung Kim<sup>1</sup>, Yelin Lee<sup>1</sup>, Jihyeon Kim<sup>1</sup>, Minjoong Kim<sup>1</sup>, Jung-Yoon Yoo<sup>3</sup>, Sungryul Yu<sup>4</sup>, Kyung Kon Kim<sup>1,2</sup>

2P-PM-04 ☆ Atomization by Acoustic Levitation Facilitates Contactless Microdroplet Reactions (Nankai Univ.) <sup>0</sup>Xiaoxu Li, Xinxing Zhang

2P-PM-05 (3C-03-1645) ☆ A Streamlined Workflow for Rapid and Accurate Identification of Novel Bioavailable Forms of Microbial Metabolites in vivo by LC-Orbitrap-MSn with Smart Searchable Databases (<sup>1</sup>FSN/POLYU, <sup>2</sup>RiFood/POLYU, <sup>3</sup>RCMI/POLYU, <sup>4</sup>CEVR) <sup>0</sup>Jianing Liu<sup>1,2</sup>, Weipeng Li<sup>1,2</sup>, Fanghui Deng<sup>1,2</sup>, Man-Kin Wong<sup>1</sup>, Danyue Zhao<sup>1,2,3,4</sup>

2P-PM-06 ☆ Studying Unfolding of Peptides and Glycopeptides Using Gas-Phase FRET Hyphenated with Mass Spectrometry (ETH Zurich) <sup>0</sup>Kim Greis, Linus Busse, Lukas Benzenberg, Ri Wu, Renato Zenobi

2P-PM-07 Case study of inter-laboratory multi-attribute method (MAM) data comparison in Japan using NIST mAb (Protein Metrics) <sup>0</sup>Ayako Kurimoto, Kadir Sen

2P-PM-08 A Comprehensive LC/MS Workflow for Host Cell Protein Identification Utilizing A Novel, Multi-reflecting ToF Mass Spectrometry Providing High Confidence Characterization And Quantification (<sup>1</sup>Nihon Waters, <sup>2</sup>Waters) <sup>0</sup>Etsuko Yada<sup>1</sup>, Jonathan Fox<sup>2</sup>, Ying Qing Yu<sup>2</sup>, Kenji Hirose<sup>1</sup>

2P-PM-09 Theoretical Study on Single-Stage Reflectron TOF MS Attaining an Ultra-High Resolution for High m/z Ions (GRC) <sup>0</sup>Yi-Hong Cai, Yi-Sheng Wang

2P-PM-10 ☆ Volatilomic Analysis on Authenticity Verification and Quality Assessment of Taiwan Oriental Beauty Oolong Tea (<sup>1</sup>IMB, NCHU, Taiwan, <sup>2</sup>NCYU, Taiwan, <sup>3</sup>Tea and Beverage Research Station, MOA, Taiwan) <sup>0</sup>Wei-Chen Wang<sup>1</sup>, Cheng-Yu Kuo<sup>1</sup>, Yi-Feng Cheng<sup>1</sup>, Yen-Ching Lin<sup>1</sup>, Han-Ju Chien<sup>2</sup>, Chih-Chun Kuo<sup>3</sup>, Hsu-an-Han Huang<sup>3</sup>, Hsien-Tsung Tsai<sup>3</sup>, Tsung-Chen Su<sup>3</sup>, Chien-Chen Lai<sup>1</sup>

2P-PM-11 A metabolomic study of distinguishing roasted coffee beans from Taiwan and Brazil. (<sup>1</sup>BCST, NCYU, <sup>2</sup>IMB, NCHU, <sup>3</sup>APBC, NCHU, <sup>4</sup>CMS, CMU, <sup>5</sup>CITFA, NCYU) <sup>0</sup>Jyun Cih Jian<sup>1</sup>, Chien-Chen Lai<sup>2,3,4</sup>, Han-Ju Chien<sup>1,5</sup>

2P-PM-12 High-Resolution Imaging and Rapid Detection of Ustalic Acid in *Tricholoma kakishimeji* Using MALDI-IMS and PESI-MS/MS (<sup>1</sup>Gifu Univ. Med. Sci., <sup>2</sup>Nagoya Univ., <sup>3</sup>Fukushima Univ., <sup>4</sup>Shinshu Univ., <sup>5</sup>Gifu Pref. Inst. Health Env. Sci.) <sup>0</sup>Tetsuro Ito<sup>1</sup>, Shintaro Aritaki<sup>2</sup>, Shu Taira<sup>3</sup>, Wataru Aoki<sup>4</sup>, Mimori Tsuji<sup>4</sup>, Hiroyuki Nagai<sup>5</sup>, Masashi Fukaya<sup>1</sup>, Kaori Ryu<sup>1</sup>, Katsuhiro Shiratake<sup>2</sup>, Akiyoshi Yamada<sup>4</sup>

2P-PM-13 Proteomic Insights into Plant-PGPR Interactions: Elucidating Key Mechanisms During Commensalism (Academia Sinica) <sup>0</sup>Kai-Ting Fan, Ching-Huang Yu, Yet-Ran Chen

2P-PM-14 ☆ Effects of Additional Gases on the Ions Generated by Atmospheric Pressure Plasmas (<sup>1</sup>NIT, Kochi Col., <sup>2</sup>Toyohashi Tech.) <sup>0</sup>Kokone Michikura<sup>1</sup>, Kenkichi Nagato<sup>1</sup>, Hirofumi Kurita<sup>2</sup>

2P-PM-15 ☆ Pleckstrin Serves as a Prognostic Marker for COVID-19 and Promotes Pro-Thrombotic Symptoms via ERK Activation (<sup>1</sup>HKBU, <sup>2</sup>HKU) <sup>0</sup>Li Zhong<sup>1</sup>, Lin Zhu<sup>1</sup>, Runhong Zhou<sup>2</sup>, Zhiwei Chen<sup>2</sup>, Zongwei Cai<sup>1</sup>

2P-PM-16 (4B-02-1455) ☆ Mass Spectrometric Analysis of Carcinogenic Areca Nut-Specific Alkaloids in Cooked *Areca catechu* L.: A Cautious Note on Dietary Exposure (<sup>1</sup>NDMC, <sup>2</sup>CSMU) <sup>0</sup>Szu-Yi Chao<sup>1</sup>, Chiao-Jou Yu<sup>2</sup>, Yuan-Jhe Chang<sup>2</sup>, Chiung-Wen Hu<sup>2</sup>, Mu-Rong Chao<sup>2</sup>

Day 2, June 23 (Mon.)

2P-PM-17 ☆ PSD Fragmentation Characteristics of Linear and Cyclic O-Linked Glycopeptides and Their Peptide Backbones in MALDI-TOF/TOF MS (Hokkaido univ.) <sup>0</sup>Kohki Fukushi, Shogo Urakami, Hiroshi Hinou

2P-PM-18 MALDI-TOF MS analysis of unique *O*- and *N*-glycans on proteins in unfertilized salmon eggs using aminolysis-SALSA method (<sup>1</sup>Nagoya Univ. 1, <sup>2</sup>Nagoya Univ. 2) <sup>0</sup>Masaki Kuroguchi<sup>1</sup>, Kai Suzuki<sup>1,2</sup>, Di Wu<sup>1,2</sup>, Hisatoshi Hanamatsu<sup>1</sup>, Ken Kitajima<sup>1</sup>, Chihiro Sato<sup>1,2</sup>, Jun-ichi Furukawa<sup>1</sup>

2P-PM-19 Application of Metal-free Column with InertMask technology in LC-MS/MS (GL Sciences Inc.) <sup>0</sup>Nozomi Murayama, Masanori Moto-kawa, Mika Kano, Junichi Hashimoto

2P-PM-20 AI-Based Detection of Sesame Oil Adulteration Using Metabolomics and Lipidomics Analysis (Sogang Univ.) <sup>0</sup>Seungwoo Hong, Han Bin Oh

2P-PM-21 ☆ Development and validation of neon-icotinoid insecticides in rice and tea leaves using isotope-dilution-UHPLC-MS/MS (<sup>1</sup>NYCU, <sup>2</sup>NYC Univ.) <sup>0</sup>Cheng-Bin Zhan<sup>1</sup>, Yu-Fang Huang<sup>2</sup>

2P-PM-22 ☆ Development of Targeted LC-MS/MS Platform for Precise NADHX Detection (Waseda Univ.) <sup>0</sup>Kodai Takahashi, Kazuki Nakajima, Nobuhito Goda

2P-PM-23 Targeted MS-Based Approach: Investigating the Role of Water in Cooking Oil Oxidation (<sup>1</sup>CSMU OSH, <sup>2</sup>CSMU PH) <sup>0</sup>Yan-Jhen Lin<sup>1</sup>, Yi-Jhen Wang<sup>1</sup>, Yuan-Jhe Chang<sup>1</sup>, Mu-Rong Chao<sup>1</sup>, Chiung-Wen Hu<sup>2</sup>

2P-PM-24 ☆ An analytical platform for the comprehensive and efficient discovery of metabolite ligands for orphan receptors (<sup>1</sup>MIB, Kyushu Univ., <sup>2</sup>SLS, Kyushu Univ., <sup>3</sup>RIMD, Osaka Univ.) <sup>0</sup>Keisuke Nakata<sup>1</sup>, Masatomo Takahashi<sup>1,2</sup>, Taihei Torigoe<sup>1</sup>, Noriyuki Tomiyasu<sup>1,2</sup>, Kosuke Hata<sup>1</sup>, Sho Yamasaki<sup>3</sup>, Takeshi Bamba<sup>1,2</sup>, Yoshihiro Izumi<sup>1,2</sup>

2P-PM-25 Withdrawn

2P-PM-26 ☆ Mass Analysis of Ultra-High Molecular Weight Polystyrene: a Comparison of Copper and Silver Salts Using MALDI LIT-MS (<sup>1</sup>Department of Physics, National Dong Hwa Univ., <sup>2</sup>Department of Chemistry, National Dong Hwa Univ.) <sup>0</sup>Thị Khanh Ly Lại<sup>1</sup>, Avinash Patil<sup>1</sup>, Ching-Chieh Lee<sup>1</sup>, Yi-Pang Chiu<sup>1</sup>, Zhe-Xuan Liu<sup>1</sup>, Che-Jen Lin<sup>2</sup>, Wen-Ping Peng<sup>1</sup>

2P-PM-27 Enhancing Ion Introduction Efficiency with Two Types of Ion Deflection Electrodes in an Electrospray Ion Source (<sup>1</sup>Hitachi, <sup>2</sup>Hitachi High-Tech Science) <sup>0</sup>Motoki Date<sup>1</sup>, Shun Kumano<sup>1</sup>, Masaki Watanabe<sup>2</sup>

2P-PM-28 ☆ Role of intracellular calcium increase in biological response to cold stress in human hepatoma HepG2 cells (Chiba Univ.) <sup>0</sup>Ayano Fukuda, Yoshikazu Yamagishi, Sayaka Nagasawa, Yasumitsu Ogra

2P-PM-29 Facilitating Proteomics Data Sharing: Automated Extraction and Annotation of Mass Spectrometry Metadata (<sup>1</sup>RIKEN TRIP, <sup>2</sup>Niigata Univ.) <sup>0</sup>Yusuke Azuma<sup>1</sup>, Masami Koike<sup>1</sup>, Yushi Takahashi<sup>2</sup>, Akiyasu Yoshizawa<sup>2</sup>, Shujiro Okuda<sup>2</sup>, Shuichi Onami<sup>1</sup>

2P-PM-30 ☆ Visualization of Food Compounds in Banana (*Musa* spp.) Tissue by Graphite Carbon Black-Assisted Laser Desorption Ionization-Mass Spectrometry Imaging (<sup>1</sup>Kyushu Univ., <sup>2</sup>Kyoto Univ., <sup>3</sup>NII, <sup>4</sup>Chuo Univ., <sup>5</sup>KISTEC) <sup>0</sup>Zhuofei Liu<sup>1</sup>, Yuzuki Koga<sup>1</sup>, Takenobu Ogawa<sup>2</sup>, Imari Sato<sup>3</sup>, Yukio Kawano<sup>4,5</sup>, Toshiro Matsui<sup>1</sup>, Mitsuru Tanaka<sup>1</sup>

2P-PM-31 Analysis of Allergens in Food using LC-MS/MS (<sup>1</sup>Shimadzu, <sup>2</sup>SAIKA) <sup>0</sup>Nozomi Maeshima<sup>1</sup>, Kasumi Tokami<sup>2</sup>, Eri Inagaki<sup>2</sup>, Manami Kobayashi<sup>1</sup>

2P-PM-32 ☆ A Mass Spectrometric Study of the Role of Water on the Paternò-Büchi (PB) Reaction between 2-Acetylpyridine and Unsaturated Fatty Acids (CUHK) <sup>0</sup>Danna Hu

2P-PM-33 (4B-01-1140) ☆ Investigation of ligand transfer mechanism during collisional activation of protein complexes in native mass spectrometry (Zhejiang Univ.) <sup>0</sup>Shiwen Zhou, Mowei Zhou, Hongru Feng, Yuanjiang Pan

2P-PM-34 ☆ Dissipation and Metabolic Fate of Sulfoxoflour in Thistle and Olive (<sup>1</sup>Kangwon Nat'l Univ., <sup>2</sup>Konkuk Univ.) <sup>0</sup>Eun-Song Choi<sup>1</sup>, Min-Ho Song<sup>1</sup>, Ji-Woo Yu<sup>1,2</sup>, Jung-Hoon Lee<sup>1</sup>, Hui-Yeon Ahn<sup>2</sup>, Geon-Woo Park<sup>2</sup>, Ji-Won Shin<sup>2</sup>, Ji-Yeon Lee<sup>2</sup>, Ha-Jin Son<sup>2</sup>, Young-Soo Keum<sup>2</sup>, Ji-Ho Lee<sup>1</sup>

2P-PM-35 Optimization of a new peak detection function and comparison for selecting a fit-for-purpose multi-attribute method system. (KKC) <sup>0</sup>Eriko Numao, Kumi Yanagisawa, Yuki Yagi, Daisuke Tsuchida, Katsuyoshi Yamazaki

Day 2, June 23 (Mon.)

- 2P-PM-36 Uniting amplified immuno-mass spectrometry imaging and fluorescent microscopy with lipid imaging by MALDI-MS in murine brain (<sup>1</sup>UTS, <sup>2</sup>UOW) <sup>o</sup>Mika Westerhausen<sup>1,2</sup>, Jayden Mckinnon<sup>2</sup>, Tassiani Sarreto<sup>2</sup>, Shane Ellis<sup>2</sup>, David Bishop<sup>1</sup>
- 2P-PM-37 ☆ Characterization of Q $\beta$  Virus-Like Particles Using Orbitrap-Based Charge Detection Mass Spectrometry (CDMS) Approaches (<sup>1</sup>NCKU CHEM, <sup>2</sup>NCKU BME, <sup>3</sup>Thermo Fisher Scientific) <sup>o</sup>Hsi-Wen Wang<sup>1</sup>, Ying-Ting Chiou<sup>1</sup>, Hung-Wei Yang<sup>2</sup>, Weijing Liu<sup>3</sup>, Szu-Hsueh Lai<sup>1</sup>
- 2P-PM-38 ☆ Cerebrospinal fluid metabolomics and lipidomics in autistic regression (<sup>1</sup>UTS, <sup>2</sup>NUS, <sup>3</sup>USYD) <sup>o</sup>Jinni Yan<sup>1</sup>, Velda Han<sup>2</sup>, Russell Dale<sup>3</sup>
- 2P-PM-39 ☆ Probing Protein Structural Heterogeneity in Living Cells Using In-Cell Mass Spectrometry and Vacuum Ultraviolet Photodissociation (<sup>1</sup>DICP, <sup>2</sup>UCAS) <sup>o</sup>Shirui Yang<sup>1,2</sup>, Zheyi Liu<sup>1,2</sup>, Fangjun Wang<sup>1,2</sup>
- 2P-PM-40 ☆ Thiol Profiling Based on Live-Cell Derivatization (CCME, PKU) <sup>o</sup>Daiyu Miao, Yu Bai
- 2P-PM-41 ☆ Comparative Metabolome Analysis of *Saccharomyces cerevisiae* under different Aeration Conditions (<sup>1</sup>Osaka Univ., <sup>2</sup>OTRI, <sup>3</sup>Osaka Univ. Shimadzu Lab.) <sup>o</sup>Tomoki Kitamura<sup>1</sup>, Takafumi Iwakura<sup>1</sup>, Taisuke Seike<sup>1,2</sup>, Nobuyuki Okahashi<sup>1,2,3</sup>, Fumio Matsuda<sup>1,2,3</sup>
- 2P-PM-42 ☆ Evaluation of metabolite extraction methods applicable to various yeast species (<sup>1</sup>Osaka Univ., <sup>2</sup>OTRI, <sup>3</sup>Osaka Univ. Shimadzu Lab.) <sup>o</sup>Hiroaki Ueno<sup>1</sup>, Ayumu Fuke<sup>1</sup>, Taisuke Seike<sup>1,2</sup>, Nobuyuki Okahashi<sup>1,2,3</sup>, Fumio Matsuda<sup>1,2,3</sup>
- 2P-PM-43 Advanced *De Novo* Peptide Sequencing Using N-terminal Coumarin Derivatization Aided LC-MS/MS for Peptidomics Analysis (Kyushu Univ.) <sup>o</sup>Mitsuru Tanaka, Hui Luan, Fumiya Honda, Yizhi Xiao, Risa Katagihara, Ryosuke Kaneko, Toshiro Matsui
- 2P-PM-44 Exploring of antifungal compounds produced by *Streptomyces* sp. ES9 (<sup>1</sup>Grad. Sch. BOST, Kindai Univ., <sup>2</sup>TGA Co., Ltd) <sup>o</sup>Asahi Kawabe<sup>1</sup>, Tatsuya Ohike<sup>1,2</sup>, Ayano Fujisawa<sup>1</sup>, Tetsuya Matsukawa<sup>1</sup>, Takashi Ano<sup>1</sup>, Shin'ichiro Kajiyama<sup>1</sup>

- 2P-PM-45 (4A-02-1455) ☆ Real-time environmental monitoring method of clean rooms for extraterrestrial samples with GED-ICP-MS/MS (<sup>1</sup>JAXA, <sup>2</sup>Marin Work Japan) <sup>o</sup>Ryota Fukai<sup>1</sup>, Arisa Nakano<sup>1</sup>, Masahiro Nishimura<sup>1</sup>, Yuya Hitomi<sup>2</sup>
- 2P-PM-46 Cyclopeptides from *Amaioua*, a new mass spectrometry approach (<sup>1</sup>UFG/ Goias Fed. Univ., <sup>2</sup>CRTI/UFG) <sup>o</sup>Lucilia Kato<sup>1</sup>, Emiret de Faria<sup>1</sup>, Cecilia de Oliveira<sup>2</sup>
- 2P-PM-47 ☆ Advancing Herbal Medicine Evaluation Through Pharmacokinetic-Driven Bioinformatics Strategies (Hanyang Univ.) <sup>o</sup>Jeong In Seo, Hye Hyun Yoo
- 2P-PM-48 ☆ Localization of neutral sugar and lipid compounds in strawberry fruit organs during ripening (<sup>1</sup>Kyoto Univ., <sup>2</sup>Agilent) <sup>o</sup>Misaki Ishibashi<sup>1</sup>, Kyoko Yasuda<sup>2</sup>, Takeshi Serino<sup>2</sup>, Aki-ra Oikawa<sup>1</sup>
- 2P-PM-49 ☆ Dual Ionization Ion Mobility Mass Spectrometry Hyphenated with Catalytic Oxygenation-Mediated Extraction (NTHU) <sup>o</sup>Tzu-Ching Tsai, Maheswar Chamarthi, Pawel Urban
- 2P-PM-50 ☆ Si Pillar Structure for Efficient Laser Soft Ionization (<sup>1</sup>Hokkaido Univ., <sup>2</sup>JEOL, <sup>3</sup>Osaka Univ., <sup>4</sup>RIES, Hokkaido Univ.) <sup>o</sup>Yusuke Fujii<sup>1</sup>, Junichi Osuga<sup>2</sup>, Hiroshi Furutani<sup>3</sup>, Michisato Toyoda<sup>3</sup>, Yasutaka Matsuo<sup>4</sup>
- 2P-PM-51 Probing single-molecule protein glycosylation and its structural impact using PTR-based native mass spectrometry (<sup>1</sup>IBC, Academia Sinica, <sup>2</sup>IBS, NTU) <sup>o</sup>Hsin-Yung Yen<sup>1,2</sup>, Ning-En Chang<sup>1</sup>, Guan-Ting Lian<sup>1,2</sup>, Yi-An Chen<sup>1</sup>, Yu-Xi Tsai<sup>1</sup>, Kay-Hooi Khoo<sup>1,2</sup>, Shang-Te Hsu<sup>1,2</sup>
- 2P-PM-52 Spatial Lipidomics with High Structural Specificity by Ion Mobility Modulation (Tsinghua Univ.) <sup>o</sup>Xiaoxiao Ma, Yao Qian
- ⟨Corporate Posters⟩**  
[2P-CP] Corporate Posters 2P-CP  
Poster Display and Presentation : 8:15 ~ 19:00  
2P-CP-01 IMMUNOPEPTIDE ANALYSIS WITH A MODIFIED ORBITRAP ASTRAL MASS SPECTROMETER MAXIMIZES PEPTIDE DETECTION AND QUANTITATION IN PROTEIN DEGRADER APPLICATIONS (<sup>1</sup>AbbVie, Inc., <sup>2</sup>Thermo Fisher Singapore San Jose, <sup>3</sup>Thermo Fisher Scientific Singapore) Angeline Chen<sup>1</sup>, Fernanda Salvato<sup>2</sup>, Nicole Zhang<sup>3</sup>

Day 2, June 23 (Mon.)

2P-CP-02        LC-MS WORKFLOWS FOR DIVERSE  
OMICS ANALYSIS OF PLASMA SAMPLES IN  
A MINI CANCER COHORT USING THE OR-  
BITRAP ASTRAL MASS SPECTROMETER  
(<sup>1</sup>Thermo Fisher Scientific San Jose, <sup>2</sup>Thermo  
Fisher Scientific Singapore) Kevin Yang<sup>1</sup>, <sup>o</sup>Ni-  
cole Zhang<sup>2</sup>

2P-CP-03        REVOLUTIONIZING TRANSLATION-  
AL RESEARCH: LARGE-SCALE TARGETED  
PRM PROTEOMICS ASSAYS ENABLED BY  
STELLAR MASS SPECTROMETER (MS)  
(<sup>1</sup>Thermo Fisher Scientific, <sup>2</sup>Thermo Fisher Sci-  
entific San Jose, <sup>3</sup>Thermo Fisher Scientific Singa-  
pore) Scott Peterman<sup>1</sup>, Qingling Li<sup>2</sup>, <sup>o</sup>Nicole  
Zhang<sup>3</sup>

Day 3, June 24 (Tue.)

Room A (Maesato West)

⟨Plenary Lecture⟩

[3-PL] Plenary Lecture III

#This session will take place in Rooms A and B and will be available for live viewing via online streaming in Room C.

(8:15 ~ 9:15) Chair: Masahiro Miyashita (Kyoto University)

3-PL-0815 From Toxins to Therapeutics: Atrial Natriuretic Peptide Analogs for the Tailored Treatment of Acute Decompensated Heart Failure (<sup>1</sup>Natl Univ Singapore, <sup>2</sup>VCU Richmond VA) <sup>o</sup>Mannunatha Kini<sup>1,2</sup>

⟨Oral Sessions⟩

[3A-01] Mass Spectrometry in Therapeutic Modality Research-1

(11:25 ~ 12:40) Chair: Susumu Uchiyama (The University of Osaka) / Nana Kawasaki (Yokohama City University)

3A-01-1125 [Keynote] Metabolomics-Based Approaches to Drive the Development of Optimal Biotherapeutics Production Processes and the Unravelling of Disease Mechanisms (<sup>1</sup>A\*STAR BTI, <sup>2</sup>A\*STAR IMCB, <sup>3</sup>A\*STAR GIS, <sup>4</sup>Duke-NUS, <sup>5</sup>SNEC, <sup>6</sup>SERI, <sup>7</sup>Ozaki Eye Hospital, <sup>8</sup>YLL School of Medicine, NUS, <sup>9</sup>Dept. of Biological Sciences, NUS) <sup>o</sup>Ying Swan Ho<sup>1</sup>, Yin Ying Ho<sup>1</sup>, Annie Soh<sup>1</sup>, Shi Ya Mak<sup>1</sup>, Shuwen Chen<sup>1</sup>, Esther Peh<sup>1</sup>, Yu Hui Kang<sup>1</sup>, Boon Min Poh<sup>2</sup>, Boon Seng Soh<sup>2,9</sup>, Gamal Ahmed Elfar<sup>2</sup>, Chit Fang Cheok<sup>2,8</sup>, Sai Kiang Lim<sup>2</sup>, Meiyappan Lakshmanan<sup>1</sup>, Zhenxun Wang<sup>3,4,6</sup>, Chiea Chuen Khor<sup>3,6,8</sup>, Zach Pang<sup>1</sup>, Say Kong Ng<sup>1</sup>, Andy Tan<sup>1</sup>, Xuezhi Bi<sup>1,4</sup>, Tin Aung<sup>5,6,8</sup>, Mineo Ozaki<sup>6,7</sup>, Andre Choo<sup>1</sup>

3A-01-1155 [Invited] Reference material: Tool for traceable measurement and characterization of monoclonal antibody (<sup>1</sup>NMIJ/AIST, <sup>2</sup>Yokohama City Univ., <sup>3</sup>Kindai Univ.) <sup>o</sup>Tomoya Kinumi<sup>1</sup>, Daisuke Takakura<sup>2</sup>, Nana Kawasaki<sup>2</sup>, Mitsuhiro Kinoshita<sup>3</sup>

3A-01-1210 [Invited] Multi Attribute Method for antibody therapeutics (Astellas Pharma Inc.) <sup>o</sup>Naoki Kawase

3A-01-1225 Utilizing of Antigens with Uniformed N-linked Glycans Facilitate Epitope Analysis of Glycoproteins via HDX-MS (<sup>1</sup>Pharmaceutical Technology Research Division, SHIONOGI, <sup>2</sup>Vaccine Business Division, SHIONOGI) <sup>o</sup>Takeshi Ota<sup>1</sup>, Masahiro Takayama<sup>1</sup>, Takeshi Ishihara<sup>2</sup>, Masaaki Sato<sup>2</sup>, Sawaka Ono<sup>1</sup>, Ryota Futamata<sup>2</sup>, Masaya Fujitani<sup>2</sup>, Miwa Aoki<sup>2</sup>, Akio Suzuki<sup>2</sup>, Shinya Omoto<sup>2</sup>, Masatomo Rokushima<sup>2</sup>, Hiroshi Ueda<sup>1</sup>

⟨Luncheon Seminar⟩

[3A-L] Luncheon Seminar (Presented by SCIEX)

(12:45 ~ 13:45)

3A-L-1245-1 Evolution of DIA in SCIEX: SWATH, Zeno-SWATH, and ZT-Scan DIA, The Radicals Strike Back: Enhancing electron-activated dissociation of fatty acids using caged-radical derivatives (Kumamoto Univ) <sup>o</sup>Sumio Ohtsuki  
3A-L-1245-2 The Radicals Strike Back: Enhancing electron-activated dissociation of fatty acids using caged-radical derivatives (Queensland University of Technology)  
<sup>o</sup>Stephen Blanksby

⟨Oral Sessions⟩

[3A-02] Mass Spectrometry in Therapeutic Modality Research-2

(13:55 ~ 15:10) Chair: Nana Kawasaki (Yokohama City University) / Susumu Uchiyama (The University of Osaka)

3A-02-1355 [Keynote] Biophysical characterization of virus vectors for gene therapy by mass spectrometry (Osaka Univ.) <sup>o</sup>Susumu Uchiyama

3A-02-1410 [Invited] Comprehensive Glycomic Profiling of Immunoglobulin G, A, and M in Tuberculosis: Insights into Active and Latent Infection in the Elderly (<sup>1</sup>Taipei Medical University, Taiwan, <sup>2</sup>Wan-Fang Hospital, Taiwan) Yun-Jung Yang<sup>1</sup>, Chih-Hsin Lee<sup>2</sup>, <sup>o</sup>I-Lin Tsai<sup>1</sup>

Day 3, June 24 (Tue.)

- 3A-02-1425 Quantitative proteomic analysis of SC-N1A gene knockout in cerebral organoids during differentiation for underlying Dravet syndrome (<sup>1</sup>KRISS, <sup>2</sup>KRICT, <sup>3</sup>GIST) Young Eun Kim<sup>1,3</sup>, Byunmseok Koh<sup>2</sup>, Sung Bum Park<sup>2</sup>, Sung-Hee Cho<sup>2</sup>, Tae-Young Kim<sup>3</sup>, Myung Ae Bae<sup>2</sup>, Ki Young Kim<sup>2</sup>, <sup>o</sup>Dukjin Kang<sup>1</sup>
- 3A-02-1440 Sequence Characterization for RNA Therapeutics: Leveraging Multiple Ribonucleases and DIA Mass Spectrometry (<sup>1</sup>MKI, <sup>2</sup>Waters) <sup>o</sup>Yuki Matsubara<sup>1</sup>, Akari Ito<sup>1</sup>, Catalin Doneanu<sup>2</sup>, Yasuto Yokoi<sup>1</sup>
- 3A-02-1455 (4P-AM-27) ☆ Multimass Analysis of Adeno-Associated Virus Vectors by Orbitrap-Based Charge Detection Mass Spectrometry (<sup>1</sup>Osaka Univ., <sup>2</sup>Shimadzu Corp., <sup>3</sup>Osaka Univ. Shimadzu AIRL, <sup>4</sup>U-Medico Inc.) <sup>o</sup>Ryoji Nakatsuka<sup>1,2,3</sup>, Yuki Yamaguchi<sup>1</sup>, Kiichi Hirohata<sup>1</sup>, Saki Shimojo<sup>1</sup>, Makoto Murakami<sup>1</sup>, Mark Allen Rocafort<sup>4</sup>, Yasuo Tsunaka<sup>1</sup>, Mitsuko Fukuhara<sup>1,4</sup>, Tetsuo Torisu<sup>1</sup>, Susumu Uchiyama<sup>1</sup>

#### ⟨Teatime Session⟩

[3A-T] Teatime Session (Technical Seminar for Staff Scientists & Core Lab Managers)

(15:10 ~ 15:40)

- 3A-T-1510 Technical Seminar for Staff Scientists & Core Lab Managers

#### ⟨Oral Sessions⟩

[3A-03] Mass Spectrometry of Bioactive Molecules

(15:45 ~ 17:00) Chair: Masahiro Miyashita (Kyoto University) / Tohru Yamagaki (Suntory Foundation for Life Sciences)

- 3A-03-1545 [Keynote] Mass Spectrometry in the de novo Sequencing of Bioactive Non-trypic Amphibian Peptides (MSU-BIT Shenzhen Univ.) <sup>o</sup>Albert Lebedev, Tatiana Samgina

- 3A-03-1615 Comparison of the components of the *Liocheles australasiae* scorpion venom between different growth stages or colors (Kyoto Univ.) Kentaro Kojima, Ryo Shimase, Yoshiaki Nakagawa, <sup>o</sup>Masahiro Miyashita

- 3A-03-1630 (4P-AM-20) ☆ Investigating the distribution of azetidine-2-carboxylic acid (A2C) in plants using HILIC-MS/MS (<sup>1</sup>UTS, <sup>2</sup>HyMaS, <sup>3</sup>UNSW) <sup>o</sup>Connor Phillips<sup>1,2</sup>, Jake Violi<sup>3</sup>, David Bishop<sup>2</sup>, Kenneth Rodgers<sup>1</sup>
- 3A-03-1645 Synthesis of Core-Shell Mesoporous Silica-TiO<sub>2</sub> Nanocomposite Functionalized with Boronic Acid for Selective and Efficient Glycopeptide Enrichment (CNU) <sup>o</sup>Mohamed Gab-Allah, Jeongk-won Kim

#### Room B (Maesato Center)

##### ⟨Plenary Lecture⟩

[3-PL] Plenary Lecture III

#This session will take place in Rooms A and B and will be available for live viewing via online streaming in Room C.

(8:15 ~ 9:15) Chair: Masahiro Miyashita (Kyoto University)

- 3-PL-0815 From Toxins to Therapeutics: Atrial Natriuretic Peptide Analogs for the Tailored Treatment of Acute Decompensated Heart Failure (<sup>1</sup>Natl Univ Singapore, <sup>2</sup>VCU Richmond VA) <sup>o</sup>Manjunatha Kini<sup>1,2</sup>

##### ⟨Oral Sessions⟩

[3B-01] Frontiers in Mass Spectrometry Imaging -Methods and Instrumentation-

(11:25 ~ 12:40) Chair: Shuichi Shimma (The University of Osaka) / Yoichi Otsuka (The University of Osaka)

- 3B-01-1125 Developments of laser desorption Post-photoionization Mass Spectrometry Imaging Techniques (Univ. Sci. Tech. China) <sup>o</sup>Yang Pan

- 3B-01-1140 (4P-AM-02) ☆ Single Tissue Multimodal Imaging for Cellular-level Spatial Metabolomics and Transcriptomics Analysis (<sup>1</sup>HKBU, <sup>2</sup>EIT Ningbo) <sup>o</sup>Thomas Ka Yam Lam<sup>1</sup>, Bingxu Zhang<sup>1</sup>, Jining Wang<sup>1</sup>, Zongwei Cai<sup>1,2</sup>, Yiji Xia<sup>1</sup>

## Day 3, June 24 (Tue.)

3B-01-1155	Fully automated surface lipidomics by LC/differential ion mobility spectrometry/MS reveals alteration of brain lipid metabolism in prodromal Parkinson's disease model mice ( <sup>1</sup> Juntendo Univ., <sup>2</sup> RIKEN, <sup>3</sup> Kyoto Univ.) <sup>0</sup> Hisako Akiyama <sup>1,2</sup> , Keiko Fukasawa <sup>1,2</sup> , Tomoyuki Taguchi <sup>3</sup> , Masashi Ikuno <sup>3</sup> , Hodaka Yamakado <sup>3</sup> , Peter Greimel <sup>2</sup> , Ryosuke Takahashi <sup>3</sup> , Nobutaka Hattori <sup>1,2</sup> , Hiroyuki Kamiguchi <sup>2</sup>	3B-02-1410	[Invited]Development of LC-MS/MS Software for Controlled Substance Identification (Sogang Univ.) So Yeon Lee, <sup>0</sup> Han Bin Oh
3B-01-1210	MS Imaging of Natural Moisturizing Factors in Mouse Skin. ( <sup>1</sup> Kobe Univ, <sup>2</sup> Shimadzu Corp.) <sup>0</sup> Akiko Kubo <sup>1</sup> , Kaoru Nakagawa <sup>2</sup> , Takeshi Fukumoto <sup>1</sup> , Manami Kobayashi <sup>2</sup> , Akiharu Kubo <sup>1</sup>	3B-02-1425	AI-Driven Analysis of Mass Spectrometry Imaging (Hamamatsu Univ Sch Med) <sup>0</sup> Mitsutoshi Setou
3B-01-1225	Targeted spatial metabolomics and transcriptomics for mapping metabolism in the human lung ( <sup>1</sup> Karolinska Institute, <sup>2</sup> Stockholm University, <sup>3</sup> Karolinska University Hospital) Matthew Smith <sup>1</sup> , Jesper Säfholm <sup>1,3</sup> , Alexandra Firsova <sup>2</sup> , Christos Samakovlis <sup>2</sup> , <sup>0</sup> Craig Wheelock <sup>1,3</sup>	3B-02-1440	Improving structure elucidation using machine learning for non-target analysis using Gas Chromatograph-Mass Spectrometer (JEOL) <sup>0</sup> Ayumi Kubo, Azusa Kubota, Kenji Nagatomo, Masaaki Urukata
		3B-02-1455	Multiple Omics Data Repositories for Comprehensive Reanalysis of Mass Spectrometry Data ( <sup>1</sup> Niigata Univ., <sup>2</sup> Osaka Univ., <sup>3</sup> Soka Univ., <sup>4</sup> Kyoto Univ.) <sup>0</sup> Yushi Takahashi <sup>1</sup> , Akiyasu Yoshizawa <sup>1</sup> , Fumio Matsuda <sup>2</sup> , Kiyoko Aoki-Kinoshita <sup>3</sup> , Yasushi Ishihama <sup>4</sup> , Shujiro Okuda <sup>1</sup>

### ⟨Luncheon Seminar⟩

[3B-L] Luncheon Seminar (Presented by Shimadzu Corporation)

(12:45 ~ 13:45)

3B-L-1245 Approach to cutting-edge research by MALDI-TOF MS (Shimadzu Corp.) <sup>0</sup>Takushi Yamamoto, Tsukasa Takeuchi, Ryo Yamaguchi

### ⟨Oral Sessions⟩

[3B-02] Sharing and Analysis of Mass Spectrometry Data

(13:55 ~ 15:10) Chair: Fumio Matsuda (The University of Osaka)

3B-02-1355 [Invited]Network-based Integration of Cross-Study Metabolomics Data (<sup>1</sup>Kyushu Inst. Tech., <sup>2</sup>RIKEN, <sup>3</sup>Keio Univ., <sup>4</sup>HMT, <sup>5</sup>Tokyo Univ. Agr. Tech., <sup>6</sup>Kitasato Univ.) <sup>0</sup>Eisuke Hayakawa<sup>1,2</sup>, Kozo Nishida<sup>2</sup>, Mikiko Takahashi<sup>2</sup>, Rira Matsuta<sup>3</sup>, Takaki Oka<sup>5</sup>, Hiroyuki Yamamoto<sup>4</sup>, Hiroshi Tsugawa<sup>2,5</sup>, Shin Kawano<sup>6</sup>

### ⟨Teatime Session⟩

[3B-T] Teatime Session (Presented by BRUKER)

(15:10 ~ 15:40)

3B-T-1510 Advances in Magnetic Resonance Mass Spectrometry (MRMS) Magnet Technologies and Instrumentation – Built to Enable World Class Science (<sup>1</sup>Bruker, <sup>2</sup>Bruker Daltonics) <sup>0</sup>Mike Greig<sup>1</sup>, Christopher Wootton<sup>2</sup>, Paul Speir<sup>1</sup>, Jochen Friedrich<sup>2</sup>, Michael Easterling<sup>1</sup>

### ⟨Oral Sessions⟩

[3B-03] Advances in Mass Spectrometry for the Detection of Ultra-Trace Elements and Isotopes in Earth and Space Sciences

(15:45 ~ 17:00) Chair: Yusuke Yokoyama (The University of Tokyo) / Hirochika Sumino (The University of Tokyo)

3B-03-1545 [Keynote]Accelerator Mass Spectrometry: Enabling Measurements of Ultra-Trace Radionuclides for Applications in Earth and Space Sciences (NPAA / RSPhys / CoSM / ANU) <sup>0</sup>Michaela Froehlich

Day 3, June 24 (Tue.)

- 3B-03-1600 [Invited] Accelerator Mass Spectrometry Development and Capabilities at the Australian National University (ANU)  
°Stephen Tims, Keith Fifield, Stefan Pavetich, Michaela Froehlich, Peter Medley
- 3B-03-1615 Carbon cycle study with regards to climate and bio-sciences using PIMS and SSAMS at Atmosphere and Ocean Research Institute, The University of Tokyo (<sup>1</sup>AORI, UTokyo, <sup>2</sup>DEPS, UTokyo, <sup>3</sup>GPES, UTokyo, <sup>4</sup>RSPhys., ANU)  
°Yusuke Yokoyama<sup>1,2,3,4</sup>
- 3B-03-1630 [Invited] Highly-sensitive LA-ICP-MS approaches for the determination of ultra-trace rare earth elements (REEs) and U-Th isotopes in stalagmites (<sup>1</sup>Nanjing Normal University, <sup>2</sup>National Taiwan University, <sup>3</sup>ETH Zurich) °Chung-Che Wu<sup>1</sup>, Chuan-Chou Shen<sup>2</sup>, Detlef Günther<sup>3</sup>, Bodo Hattendorf<sup>3</sup>
- 3B-03-1645 Improvement of sensitivity of electron ionization source for noble gas mass spectrometer using ion beam focusing by electrostatic quadrupole lenses (Univ. Tokyo) °Hirochika Sumino

Room C (Top of Yaima)

⟨Plenary Lecture⟩

[3-PL] Plenary Lecture III

#This session will take place in Rooms A and B and will be available for live viewing via online streaming in Room C.

(8:15 ~ 9:15) Chair: Masahiro Miyashita (Kyoto University)

3-PL-0815 From Toxins to Therapeutics: Atrial Natriuretic Peptide Analogs for the Tailored Treatment of Acute Decompensated Heart Failure (<sup>1</sup>Natl Univ Singapore, <sup>2</sup>VCU Richmond VA) °Manjunatha Kini<sup>1,2</sup>

⟨Oral Sessions⟩

[3C-01] Clinical Mass Spectrometry and Reverse Translational Research -From Diagnostic and Treatment Application to Pathological Analysis- Part II

(11:25 ~ 12:40) Chair: Daisuke Saigusa (Teikyo University) / Masamitsu Maekawa (Tohoku University)

3C-01-1125 [Invited] RNA epitranscriptome in clinical diagnosis and beyond (<sup>1</sup>Tohoku Univ. IDAC, <sup>2</sup>Tohoku Univ. Pharm. Sci.)  
°Fan-Yan Wei<sup>1,2</sup>, Akiko Ogawa<sup>1,2</sup>

3C-01-1140 Xlinking MS for structure analysis of tau/phosphorylated tau and other proteins (PTB) °Cristian Arsene, Anne-Katrin Römmert

3C-01-1155 (4P-AM-01) ☆ Towards Rapid and Accurate Bacterial Serotyping Using MALDI Glycotyping (Hokkaido Univ.)  
°Shogo Urakami, Hiroshi Hinou

3C-01-1210 Breath biomarkers for monitoring lipid peroxidation and ferroptosis in vivo (Kyoto Univ.) °Yuta Matsuoka, Yuki Sugiura

3C-01-1225 (4P-AM-15) ☆ Molecular composition and imaging profiles of thrombi in acute coronary syndrome (Dokkyo Medical Univ.) °Mayo Wada, Tadayuki Ogawa, Setsu Nishino, Masashi Sakuma, Sigeru Toyoda

⟨Luncheon Seminar⟩

[3C-L] Luncheon Seminar (Presented by Waters Corporation)

(12:45 ~ 13:45)

3C-L-1245 Mastering Metabolomic and Lipidomic Workflows: Strategies, Challenges, and Essential Tools (<sup>1</sup>Waters Corp, <sup>2</sup>Tsinghua Uni) °Jayne Kirk<sup>1</sup>, Zheng Ouyang<sup>2</sup>

⟨Oral Sessions⟩

[3C-02] Single-Cell Omics and Multiomics

(13:55 ~ 15:10) Chair: Yasushi Ishihama (Kyoto University) / Takeshi Bamba (Kyushu University)

3C-02-1355 [Keynote] Dynamic single-cell metabolomics platform and the application in cell-cell interaction (Peking Univ.) °Yu Bai

Day 3, June 24 (Tue.)

- 3C-02-1410 [Invited] Localization Analysis of Metabolites in Living Cells by Live Single-cell Mass Spectrometry (<sup>1</sup>Meijo Univ., <sup>2</sup>Univ. Shizuoka, <sup>3</sup>Yokogawa Electric Corp., <sup>4</sup>ITO EN) <sup>◦</sup>Hajime Mizuno<sup>1</sup>, Aogo Furusho<sup>2</sup>, Takuma Yanagisawa<sup>1,2</sup>, Eiji Sugiyama<sup>1</sup>, Yuta Terui<sup>3</sup>, Masafumi Iharada<sup>3</sup>, Hironori Takai<sup>3</sup>, Susumu Imanishi<sup>1</sup>, Kenichiro Todoroki<sup>2</sup>, Iwao Sakane<sup>4</sup>
- 3C-02-1425 Application of ultrasensitive mass spectrometry-based single cell proteomics to address individual cell response (IMCB, A\*STAR Singapore) Tianyun Zhao, Maxine Lam, Hiromi Koh, <sup>◦</sup>Radoslaw Sobota
- 3C-02-1440 (4P-AM-32) ☆ MiProChip : Microfluidic Device for Multiplexed Isotopic labeling-based Streamlined Single-cell Profiling (<sup>1</sup>IoC, AS, <sup>2</sup>NTU) <sup>◦</sup>Huan-Chi Chiu<sup>1,2</sup>, Tsai-Fang Chou<sup>1</sup>, Sofani Gebreyesus<sup>1</sup>, Guan-Fu Chen<sup>1</sup>, Hsiung-Lin Tu<sup>1</sup>, Yu-Ju Chen<sup>1,2</sup>
- 3C-02-1455 [Invited] Multi-omics measurement platform driving next-generation biomanufacturing (<sup>1</sup>Kyushu Univ., <sup>2</sup>NAIST, <sup>3</sup>Waseda Univ., <sup>4</sup>Niigata Univ., <sup>5</sup>Yamaguchi Univ., <sup>6</sup>Tokushima Univ.) <sup>◦</sup>Yoshihiro Izumi<sup>1</sup>, Yuki Soma<sup>2</sup>, Masahito Hosokawa<sup>3</sup>, Atsushi Hatano<sup>4</sup>, Kazuki Ikeda<sup>1</sup>, Kosuke Hata<sup>1</sup>, Taihei Torigoe<sup>1</sup>, Masatomo Takahashi<sup>1</sup>, Masahiro Ando<sup>3</sup>, Shin-suke Uda<sup>5</sup>, Shinsuke Inuki<sup>6</sup>, Haruko Takeyama<sup>3</sup>, Masaki Matsumoto<sup>4</sup>, Takeshi Bamba<sup>1</sup>
- [3C-03] Cutting-Edge Metabolomics Technology and Applied Research  
(15:45 ~ 17:00) Chair: Takeshi Bamba (Kyushu University) / Akiyoshi Hirayama (Keio University)
- 3C-03-1545 [Keynote] Integrated MS-based OMICS to Reveal Intercellular Communication Events in Plant Systemic Immunity (Academia Sinica) <sup>◦</sup>Yet-Ran Chen
- 3C-03-1600 [Invited] Two-Dimensional Imaging of <sup>13</sup>C-Glucose Tracing in Metabolome Analysis Using DESI-TQ-MS (Kyoto Univ.) <sup>◦</sup>Yuki Sugiura
- 3C-03-1615 A High-Sensitivity Derivatization Strategy for Enhanced Hydroxyl Metabolite Detection in LC-MS and DESI-MS (<sup>1</sup>National Yang Ming Chiao Tung University, <sup>2</sup>National Taiwan University Hospital, <sup>3</sup>National Taiwan University) Yen-Chu Lin<sup>1</sup>, Guan-Yuan Chen<sup>2,3</sup>, <sup>◦</sup>Hsiao-Wei Liao<sup>1</sup>
- 3C-03-1630 [Invited] Development and Application of Unified-HILIC/AEX/MS for Comprehensive and Practical Metabolomics (<sup>1</sup>Niigata Univ., <sup>2</sup>Kyushu Univ./MiB) <sup>◦</sup>Kohta Nakatani<sup>1,2</sup>, Yoshihiro Izumi<sup>2</sup>, Masatomo Takahashi<sup>2</sup>, Takeshi Bamba<sup>2</sup>
- 3C-03-1645 (2P-PM-05) ☆ A Streamlined Workflow for Rapid and Accurate Identification of Novel Bioavailable Forms of Microbial Metabolites in vivo by LC-Orbitrap-MSn with Smart Searchable Databases (<sup>1</sup>FSN/POLYU, <sup>2</sup>RiFood/POLYU, <sup>3</sup>RCMI/POLYU, <sup>4</sup>CEVR) <sup>◦</sup>Jianing Liu<sup>1,2</sup>, Weipeng Li<sup>1,2</sup>, Fanghui Deng<sup>1,2</sup>, Man-Kin Wong<sup>1</sup>, Danyue Zhao<sup>1,2,3,4</sup>

### ⟨Poster Presentations⟩

Room P (Maesato East, Foyer, Ocean Wing)

[3P-AM] Poster Session 3P-AM

Poster Display : 8:15 ~ 19:00

Core time (Odd numbers) : 9:15 ~ 10:15

Core time (Even numbers) : 10:15 ~ 11:15

#For banquet participants, the poster removal time is preferably at 21:00.

3P-AM-01 Capture of Hydroxyl Radicals by Hydronium Cations and the Spontaneous Oxidation of I- in Water Microdroplets (Nankai Univ.) <sup>◦</sup>Dong Xing, Xinxing Zhang

3P-AM-02 A metabolomic study of the temperature impact of hand-drip brewing of washed coffee beans (<sup>1</sup>NCYU, <sup>2</sup>ITFA) <sup>◦</sup>Han-Ju Chien<sup>1,2</sup>, Ya-Ting Pan<sup>1</sup>

3P-AM-03 Visualization of Ginger Polyphenols at Different Heating Times Using MALDI-MSI (Osaka Univ.) <sup>◦</sup>Rika Fujimoto

3P-AM-04 (2B-01-1240) ☆ Chiral Recognition by Mass Spectrometry with the Combinations of Two Chiral Selectors (<sup>1</sup>PolyU, <sup>2</sup>CityU) <sup>◦</sup>Qi Yi<sup>1</sup>, Yiqi Sheng<sup>2</sup>, Chi-Kit Siu<sup>2</sup>, Zhong-Ping Yao<sup>1</sup>

Day 3, June 24 (Tue.)

- 3P-AM-05 ☆ Biomarker Discovery of Cerebrospinal Fluids for the Infantile Epilepsy by the Lipidomic Profiling of Extracellular Vesicles (<sup>1</sup>Teikyo Univ., <sup>2</sup>Okayama Univ., <sup>3</sup>Tohoku Univ.) <sup>o</sup>Arisa Ishii<sup>1</sup>, Tomoko Fukuuchi<sup>1</sup>, Noriko Yamaoka<sup>1</sup>, Tomoyuki Akiyama<sup>2</sup>, Daisuke Saigusa<sup>1,3</sup>
- 3P-AM-06 ☆ Fluorinated Liquid Crystal Monomer (FLCM) Induces Kidney Dysfunction by Disrupting PPAR $\alpha$ -mediated Fatty Acid Oxidation (HKBU) <sup>o</sup>Lin Peng, Zongwei Cai
- 3P-AM-07 ☆ Development of In-situ High-pressure Electrospray Mass Spectrometry for Continuous Flow Hydrothermal Reactor (<sup>1</sup>Univ. of Yamanashi/HDU, <sup>2</sup>HDU, <sup>3</sup>Univ. of Yamanashi) <sup>o</sup>Xiang Zhang<sup>1</sup>, Zhi Hua Ying<sup>2</sup>, Lee Chuin Chen<sup>3</sup>
- 3P-AM-08 Differentially expressed proteins in 4-cell stage porcine embryos derived from somatic cell nuclear transfer and parthenogenetic activation (<sup>1</sup>NCHU Univ., <sup>2</sup>ATRI, <sup>3</sup>CMU) <sup>o</sup>Shu-Ping Chang<sup>1</sup>, Chi-Hong Wong<sup>2</sup>, Shu-Hui Peng<sup>2</sup>, Hsin-Yi Liao<sup>3</sup>, Pin-Chi Tang<sup>1</sup>, Ching-Fu Tu<sup>2</sup>, Chao-Jung Chen<sup>3</sup>, San-Yuan Huang<sup>1</sup>
- 3P-AM-09 A Novel Approach for Quantifying Therapeutic Monoclonal Antibodies in Blood through Liquid Chromatography-Tandem Mass Spectrometry (<sup>1</sup>NTUH, <sup>2</sup>NTU) <sup>o</sup>Huai-Hsuan Chiu<sup>1</sup>, Tsun-Hao Chi<sup>2</sup>, Chiao Lo<sup>1</sup>, Shin-Yi Lin<sup>1</sup>, Ching-Hua Kuo<sup>2</sup>
- 3P-AM-10 A machine learning model for site-specific classification of N-glycoprotein fucosylation using tandem mass spectrometry and deep neural network (<sup>1</sup>KBSI, <sup>2</sup>KRIBB, <sup>3</sup>UST) <sup>o</sup>Mina Park<sup>1</sup>, Jin Young Kim<sup>1,2</sup>, Heeyoun Hwang<sup>1,3</sup>
- 3P-AM-11 ☆ Simulation and Experimental Study of a Photoionization Linear Ion Trap Mass Spectrometer (NSRL, USTC) <sup>o</sup>Guangqi Wang
- 3P-AM-12 An Easy Workflow for the Characterization and Relative Quantification of Recombinant Adeno-Associated Viruses (rAAVs) using Charge Detection Mass Spectrometry (<sup>1</sup>Nihon Waters, <sup>2</sup>Waters) <sup>o</sup>Kenji Hirose<sup>1</sup>, Etsuko Yada<sup>1</sup>, Anisha Haris<sup>2</sup>, Rebecca D'esposito<sup>2</sup>, Kevin Giles<sup>2</sup>
- 3P-AM-13 Quantitative proteomics using high-sensitivity data-independent acquisition (<sup>1</sup>K.K. AB SCIEX, <sup>2</sup>SCIEX, Canada) <sup>o</sup>Takeshi Shibata<sup>1</sup>, Ushio Takeda<sup>1</sup>, Ihor Batruch<sup>2</sup>, Patrick Pribil<sup>2</sup>
- 3P-AM-14 ☆ Quantitative Peptidomics Revealed a Novel Peptide Cytokine for Eliciting Plant Immunity by Pathogen-Associated Molecular Pattern (<sup>1</sup>ABRC, Academia Sinica, <sup>2</sup>IOB, National Taiwan Univ.) <sup>o</sup>Sheng-Chi Hung<sup>1,2</sup>, Kai-Ting Fan<sup>1</sup>, Jia-Wei Hsu<sup>1</sup>, Yet-Ran Chen<sup>1,2</sup>
- 3P-AM-15 (2B-01-1225) ☆ Development and Applications of Portable Gas Chromatograph-Mass Spectrometer System with Built-in Preconcentrator (<sup>1</sup>Graduate School of Science, Osaka Univ., <sup>2</sup>College of Science, NTNU) <sup>o</sup>Ping Chen<sup>1,2</sup>, Tsung-Han Lee<sup>2</sup>, Chia-Jung Lu<sup>2</sup>, Michisato Toyoda<sup>1</sup>
- 3P-AM-16 ☆ Metal-Organic Frameworks as Novel Platforms for Capturing and Identifying Tuberculosis Proteins Using MALDI-TOF Mass Spectrometry (<sup>1</sup>Dept. of Physics, NDHU, <sup>2</sup>Dept. of Laboratory Medicine and Biotechnology, TCU, <sup>3</sup>Dept. of Internal Medicine, HTC Hospital and BTM Foundation, TCU, <sup>4</sup>Dept. of Material Science, NDHU) <sup>o</sup>Vaishnavi Dhisale<sup>1</sup>, Mhikee Descanzo<sup>1</sup>, Avinash Patil<sup>1</sup>, Sanath Kumar<sup>4</sup>, Yu-Tze Horng<sup>2</sup>, Chih-Bin Lin<sup>3</sup>, Po-Chi Soo<sup>2</sup>, Yen-Pei Fu<sup>4</sup>, Wen-Ping Peng<sup>1</sup>
- 3P-AM-17 ☆ Analysis of serine-related lipid changes in Niemann-Pick disease type C model mice using an improved analytical method (<sup>1</sup>Grad. Sch. Pharm. Sci., Tohoku Univ., <sup>2</sup>Dept. Pharm. Sci., Tohoku Univ. Hosp., <sup>3</sup>Tohoku Univ. Grad. Sch. Med., <sup>4</sup>INGEM., Tohoku Univ.) <sup>o</sup>Keitaro Miyoshi<sup>1</sup>, Masamitsu Maekawa<sup>1,2,3,4</sup>, Mikiko Suzuki<sup>3,4</sup>, Nariyasu Mano<sup>1,2</sup>
- 3P-AM-18 Determination of Benzophenone-type UV filters in Urine of Taiwanese Young Adults by Liquid-Liquid Extraction-based UHPLC-MS/MS (<sup>1</sup>NYCU, <sup>2</sup>NYC Univ.) <sup>o</sup>Si-Yu Liu<sup>1</sup>, Yu-Fang Huang<sup>2</sup>
- 3P-AM-19 Development of a Compact t-SPESI System for High-sensitivity Mass Spectrometry Imaging of Biological Tissue (<sup>1</sup>Grad. Sch. Sci., Univ. Osaka, <sup>2</sup>FRC, Univ. Osaka, <sup>3</sup>Grad. Sch. Eng., Univ. Osaka) <sup>o</sup>Yoichi Otsuka<sup>1,2</sup>, Takao Yasuda<sup>1</sup>, Mengze Sun<sup>1</sup>, Zhou Yang<sup>1</sup>, Shuichi Shimma<sup>3</sup>, Michisato Toyoda<sup>1,2</sup>
- 3P-AM-20 ☆ Association between prenatal exposure to benzophenones and birth outcomes (IEOHS, NYCU) <sup>o</sup>Wei-Hsuan Tu, Mei-Lien Chen, Yu-Fang Huang

Day 3, June 24 (Tue.)

- 3P-AM-21 Accurate Mass Calibration Variability and Ion Species Complexity in Inter-Laboratory LC/MS Analysis (<sup>1</sup>Tottori Univ Env Stud, <sup>2</sup>Osaka Univ, <sup>3</sup>Natl Inst Environ Stud, <sup>4</sup>Iwate Pref Env Health Res Cent, <sup>5</sup>Nagasaki Pref Inst Env Pub Health, <sup>6</sup>Kobe Inst Health, <sup>7</sup>Res Inst Env Agric Fish Osaka Pref, <sup>8</sup>Fukuoka City Inst Health Env) <sup>o</sup>Atsushi Yamamoto<sup>1,2</sup>, Hidenori Matsukami<sup>3</sup>, Tomoko Ito<sup>4</sup>, Masafumi Egawa<sup>5</sup>, Yuya Deguchi<sup>5</sup>, Tomohiro Yoshino<sup>6</sup>, Junko Ono<sup>7</sup>, Etsuko Miyazaki<sup>8</sup>, Shunji Hashimoto<sup>3</sup>
- 3P-AM-22 ☆ Development of a Pin-point Probe ESI-MS system with Robotic Automation (<sup>1</sup>HDU/Univ. of Yamanashi, <sup>2</sup>HDU, <sup>3</sup>Univ. of Yamanashi) <sup>o</sup>Lei Li<sup>1</sup>, Qiangqiang Xie<sup>2</sup>, Lee Chuin Chen<sup>3</sup>, Satoshi Ninomiya<sup>3</sup>
- 3P-AM-23 Comparative Analysis of Effector Function-Related Anti-RBD IgG Glycosylation Profiles in End-Stage Renal Disease Patients After COVID-19 Vaccination (<sup>1</sup>Taipei Medical University, Taiwan, <sup>2</sup>Wan Fang Hospital-Nephrology, Taiwan, <sup>3</sup>Wan Fang Hospital-Pulmonary, Taiwan) <sup>o</sup>Kai-Tang Yu<sup>1</sup>, Chung-Yi Cheng<sup>2</sup>, Chih-Hsin Lee<sup>3</sup>, I-Lin Tsai<sup>1</sup>
- 3P-AM-24 ☆ Development of a Rapid and Highly Sensitive Detection Method for Per- and Polyfluoroalkyl Substances Using the Isotope Dilution Method and Its Application in Evaluating the PFAS Levels in Chronic Kidney Disease Patients Before and After Oral Activate (NYCU) <sup>o</sup>Yen-Erh Chen, Han-Hsing Tsou
- 3P-AM-25 Assessment of the solvent-accessible surfaces of proteins observed by LC-MS (<sup>1</sup>Sch. of Sci., Kitasato Univ., <sup>2</sup>Cent. Disease Proteomics, Sch. of Sci., Kitasato Univ.) Eiji Kojitani<sup>1</sup>, Arisa Suto<sup>1</sup>, Taichi Takasawa<sup>1</sup>, Yoshio Kodera<sup>1,2</sup>, <sup>o</sup>Takashi Matsui<sup>1,2</sup>
- 3P-AM-26 ☆ Enhanced Proteomic Profiling through Dual-Labeling BioID-MS Targeting the ER and Golgi Apparatus (<sup>1</sup>CityU, <sup>2</sup>HKSMS) <sup>o</sup>Fenglian Yang<sup>1,2</sup>, Liang Zhang<sup>1,2</sup>
- 3P-AM-27 Imaging Analysis of Steroids in Adrenal Glands Using SALDI/MS with Metal Films (<sup>1</sup>Toyama Prefectural University, <sup>2</sup>Kanazawa University) <sup>o</sup>Kokoro Okawa<sup>1</sup>, Riko Takata<sup>1</sup>, Shigehiro Karashima<sup>2</sup>, Issey Osaka<sup>1</sup>

- 3P-AM-28 LC-MS/MS-based approach for glycosylation of recombinant adeno-associated virus (<sup>1</sup>Osaka Univ., <sup>2</sup>GlycoTechnica, <sup>3</sup>Precision System Science, <sup>4</sup>AIST, <sup>5</sup>U-Medico, <sup>6</sup>Nagoya Univ., <sup>7</sup>Jichi Med. Univ. Sch. of Med., <sup>8</sup>Jichi Med. Univ.) <sup>o</sup>Yuki Yamaguchi<sup>1</sup>, Kentaro Ishii<sup>1</sup>, Sachiko Koizumi<sup>2,3</sup>, Hiroaki Sakaue<sup>4</sup>, Takahiro Maruno<sup>1,5</sup>, Mitsuiko Fukuhara<sup>1,5</sup>, Risa Shibuya<sup>1</sup>, Yasuo Tsunaka<sup>1</sup>, Aoba Matsushita<sup>1</sup>, Karin Bandoh<sup>1</sup>, Tetsuo Torisu<sup>1</sup>, Chie Murata-Kishimoto<sup>2</sup>, Azusa Tomioka<sup>4</sup>, Saho Mizukado<sup>4</sup>, Hiroyuki Kaji<sup>6</sup>, Yuji Kashiwakura<sup>7,8</sup>, Tsukasa Ohmori<sup>7,8</sup>, Atsushi Kuno<sup>4</sup>, Susumu Uchiyama<sup>1</sup>
- 3P-AM-29 ☆ Colorectal Cancer Diagnosis by Urine Metabolic Profiling, Using Graphite Sheet-Assisted Laser Desorption/Ionization Mass Spectrometry (GS-assisted LDI-MS) (<sup>1</sup>Kyushu Univ., <sup>2</sup>Fukuoka Dental College, <sup>3</sup>Shinshu Univ., <sup>4</sup>Panasonic) <sup>o</sup>Agnes Sekarjati<sup>1</sup>, Hinata Imamura<sup>1</sup>, Masataka Oeki<sup>1</sup>, Hideto Sonoda<sup>1,2</sup>, Yusuke Taha-ra<sup>3</sup>, Tomotsugu Rikitake<sup>1</sup>, Ryou Kuwabara<sup>4</sup>, Shinji Ishitani<sup>4</sup>, Ryosuke Kaneko<sup>1</sup>, Toshiro Matsui<sup>1</sup>, Mitsuru Tanaka<sup>1</sup>
- 3P-AM-30 ☆ Measurements of Depth Dependent Mass Fractionation of Solar Wind Noble Gases by LIMAS (<sup>1</sup>Hokkaido Univ., <sup>2</sup>Science Tokyo, <sup>3</sup>ETH) <sup>o</sup>Yuta Otsuki<sup>1</sup>, Ken-ichi Bajo<sup>1</sup>, Tomoya Obase<sup>1,2</sup>, Rainer Wieler<sup>3</sup>, Hisayoshi Yurimoto<sup>1</sup>
- 3P-AM-31 Shin (Neo)-MassBank Project: Enriching MassBank records using human metabolome datasets with FDR-controlled metabolite annotation (<sup>1</sup>Osaka Univ., <sup>2</sup>Keio Univ., <sup>3</sup>Kyushu Univ., <sup>4</sup>Tokyo Univ. Agr. Tech., <sup>5</sup>Niigata Univ.) <sup>o</sup>Fumio Matsuda<sup>1</sup>, Ryosuke Hayasaka<sup>2</sup>, Taihei Torigoe<sup>3</sup>, Yushi Takahashi<sup>5</sup>, Takaki Oka<sup>4</sup>, Yuki Matsuzawa<sup>4</sup>, Kozo Nishida<sup>4</sup>, Masatomo Takahashi<sup>3</sup>, Akiyasu Yoshizawa<sup>5</sup>, Takato Kiuchi<sup>5</sup>, Hiroshi Tsugawa<sup>4</sup>, Akiyoshi Hirayama<sup>2</sup>, Yoshihiro Izumi<sup>3</sup>, Shujiro Okuda<sup>5</sup>
- 3P-AM-32 ☆ <sup>13</sup>C-Metabolic Flux Analysis of *Saccharomyces cerevisiae* during early and late growth phases (<sup>1</sup>Osaka Univ., <sup>2</sup>OTRI, <sup>3</sup>Osaka Univ. Shimadzu Lab.) <sup>o</sup>Haruki Inoue<sup>1</sup>, Ryo Ishikawa<sup>1</sup>, Nobuyuki Okahashi<sup>1,2,3</sup>, Fumio Matsuda<sup>1,2,3</sup>
- 3P-AM-33 ☆ Integrative Analysis of Lipids in Plasma and Multiple Organs of MASH Mice Using LC/MS (<sup>1</sup>Hokkaido Univ. Health sciences, <sup>2</sup>Hokkaido Univ. GFR, <sup>3</sup>Univ. Sapporo Health Sciences) <sup>o</sup>Nao Inoue<sup>1</sup>, Hsin-Jung Ho<sup>1</sup>, Siddabasavve Gowda Bomme Gowda<sup>1,2</sup>, Miki Eguchi<sup>1</sup>, Minato Takeuchi<sup>1</sup>, Hitoshi Chiba<sup>3</sup>, Shu-ping Hui<sup>1</sup>

Day 3, June 24 (Tue.)

- 3P-AM-34 ☆ Interpretation of ambient mass spectra of  $\alpha$ -pinene (Yokohama City Univ.) <sup>o</sup>Ren Ishihara, Kanako Sekimoto
- 3P-AM-35 ☆ Search for Growth Factors Secreted from Mesenchymal Stem Cells (Yokohama City Univ.) <sup>o</sup>Yuzuka Kuba, Tohru Sugawara, Nana Kawasaki
- 3P-AM-36 ☆ Evaluation of Analytical Software Suitable for Metaproteome Analysis (Kitasato Univ.) <sup>o</sup>Ryota Fukumoto, Yoshio Kodera, Shin Kawano
- 3P-AM-37 ☆ Search for Differentiation markers of human iPSCs by EV using data-independent acquisition LC/MS/MS (Yokohama Univ.) <sup>o</sup>Mei Mikami, Shunsuke Hoshina, Eri Katsuno, Kansei Takashita, Daisuke Takakura, Nana Kawasaki
- 3P-AM-38 ☆ Unveiling the Overall Triglyceride Composition in Skin through Optimized Mono-phasic Sebutape Extraction and Pseudo-Targeted Lipidomics Strategy (Univ. Taiwan) <sup>o</sup>Ya-Chu Kuo, Ching-Hua Lee, Ching-Hua Kuo
- 3P-AM-39 ☆ Fundamental study of LC/MS/MS analytical conditions for tryptophan-derived metabolites in Niemann-Pick Disease Type C model cells (<sup>1</sup>Tohoku Univ., <sup>2</sup>Tohoku Univ. Hosp.) <sup>o</sup>Masahiro Watanabe<sup>1</sup>, Masamitsu Maekawa<sup>1,2</sup>, Naruyasu Mano<sup>1,2</sup>
- 3P-AM-40 End Group Analysis of Polycarbonates Using EGA-FI-TOFMS and Principal Component Analysis (PCA) (<sup>1</sup>AIST, <sup>2</sup>Nagoya Univ.) <sup>o</sup>Sayaka Nakamura<sup>1</sup>, Hiroaki Sato<sup>1</sup>, Takato Ishida<sup>2</sup>, Hideaki Hagihara<sup>1</sup>, Hideyuki Shinzawa<sup>1</sup>, Ryota Watanabe<sup>1</sup>
- 3P-AM-41 Analysis of local distribution and residence time of Nintedanib in fibrotic lung tissue using mass spectrometry imaging (<sup>1</sup>Shimadzu Corp., <sup>2</sup>Tokushima Univ.) <sup>o</sup>Takushi Yamamoto<sup>1</sup>, Seidai Sato<sup>2</sup>, Yasuhiko Nishioka<sup>2</sup>
- 3P-AM-42 Aroma profiling of various mango fruits using HS-SPME-GCMS (<sup>1</sup>BOST, Grad. Sch, Kindai Univ., <sup>2</sup>Experimental Farm, Kindai Univ.) <sup>o</sup>Risa Komemoto<sup>1</sup>, Tetsuya Matsukawa<sup>1,2</sup>, Kosuke Shimizu<sup>2</sup>, Shin'ichiro Kajiyama<sup>1</sup>
- 3P-AM-43 (2A-01-1225) ☆ An Ambient Microwave Plasma Torch Desorption/Ionization Mass Spectrometry (MPT-MS) Strategy for Microplastic Detection (Zhejiang Univ.) <sup>o</sup>Qing Li, Weiwei Chen, Fengjian Chu, Jing Luo, Hongru Feng, Yuanjiang Pan
- 3P-AM-44 ☆ Distinguishment of Terpenoids by Ambient Ionization CID Spectra (Yokohama City Univ.) <sup>o</sup>Renta Wakabayashi, Kanako Sekimoto
- 3P-AM-45 Development of a Combined Thermal and Laser Desorption Mass Spectrometry Approach for On-site Drug Detection (NSYSU) <sup>o</sup>Chun Wu, Min Huang, Chi Lee, Jentae Shiea
- 3P-AM-46 ☆ Identification and Quantification of Tire Additives in Urban and Road dust Using LC-MS (<sup>1</sup>KNU, <sup>2</sup>MSCRI) <sup>o</sup>Seungjun Oh<sup>1</sup>, Sungwan Kim<sup>1,2</sup>
- 3P-AM-47 ☆ Helium Isotopes in Olivine and Pyroxene Crystals in Volcanic Rocks Revealing the Magma Plumbing System of the Kirishima Volcano Group (<sup>1</sup>School of Science, UTokyo, <sup>2</sup>RCAST, UTokyo, <sup>3</sup>ERI, UTokyo, <sup>4</sup>Kumamoto Univ., <sup>5</sup>Nippon Koei) <sup>o</sup>Rai Yoneda<sup>1</sup>, Hirochika Sumino<sup>2</sup>, Masataka Kawaguchi<sup>3</sup>, Toshiaki Hasenaka<sup>4</sup>, Yasuhisa Tajima<sup>5</sup>, Nanae Fukushima<sup>2</sup>
- 3P-AM-48 ☆ Automatic Sample Additive Scans for Electrospray Ionization Mass Spectrometry (NTHU CHEM) <sup>o</sup>I-Ting Wu, Decibel Elpa, Pawel Urban
- 3P-AM-49 (2B-01-1155) ☆ Phosphatase reactivity-based profiling of the local environment of phosphorylation sites on proteins (<sup>1</sup>Kyoto Univ., <sup>2</sup>NIBIOHN) <sup>o</sup>Yuna Hiranuma<sup>1</sup>, Kosuke Ogata<sup>1</sup>, Yasushi Ishihama<sup>1,2</sup>
- 3P-AM-50 ☆ Molecular Mapping of the Formose Reaction via High-Resolution Mass Spectrometry (<sup>1</sup>Univ. Osaka, <sup>2</sup>Univ. Tokyo) <sup>o</sup>Hiroaki Nishijima<sup>1</sup>, Hiro Tabata<sup>1,2</sup>, Rika Miyake<sup>1</sup>, Shuji Nakanishi<sup>1</sup>
- 3P-AM-51 (2B-01-1210) ☆ First Look at the Integrated Phospholipid Metabolism in an Insect Endosymbiosis (<sup>1</sup>NIBB, <sup>2</sup>Keio University, <sup>3</sup>RIKEN IMS) <sup>o</sup>Dolma Michelod<sup>1</sup>, Kathrine Tan<sup>1</sup>, Makoto Arita<sup>2,3</sup>, Shuji Shigenobu<sup>1</sup>
- 3P-AM-52 (2A-03-1640) ☆ Exploring the Chemical Communication of Australian Native Flower *Corymbia ficifolia* Using Mass Spectrometry Imaging (<sup>1</sup>ESC, GU, <sup>2</sup>CMM, UQ, <sup>3</sup>QBI, UQ) <sup>o</sup>Rachel Jackson<sup>1</sup>, Brett Hamilton<sup>2</sup>, Robert Sullivan<sup>3</sup>, Darren Holland<sup>1</sup>, Joshua Hayton<sup>1</sup>, Anthony Carroll<sup>1</sup>

Day 3, June 24 (Tue.)

[3P-PM] Poster Session 3P-PM

Poster Display : 8 : 15 ~ 19 : 00

Core time (Odd numbers) : 17 : 00 ~ 18 : 00

Core time (Even numbers) : 18 : 00 ~ 19 : 00

#For banquet participants, the poster removal time is preferably at 21 : 00.

3P-PM-01 ☆ Spontaneous Reduction of Transition Metal Ions by One Electron in Water Micro-droplets and the Atmospheric Implications (Nankai Univ.) °Xu Yuan, Xinxing Zhang

3P-PM-02 ☆ Proteomic and Metabolomic Profiling of Taiwanese Quinoa for Functional Components (National Chung Hsing Univ.) °Yi-Feng Zheng, Chien-Chen Lai

3P-PM-03 Development of a GC-MS Method for Detecting 23 Commonly Abused Drugs in Taiwan (TVGH) °Hsiaochia Liao, Yanchiao Mao

3P-PM-04 Anti-inflammatory and Metabolic Regulatory Effects of Ocular-Accumulative Phenolic Compounds in An *In Vitro* Model of Dry Eye Disease (<sup>1</sup>CEVR, <sup>2</sup>PolyU FSN, <sup>3</sup>PolyU RiFood, <sup>4</sup>PolyU RCMI, <sup>5</sup>Univ. Waterloo) °Ke Wang<sup>1,2,3</sup>, Weipeng Li<sup>2,3</sup>, Pui-Kei Lee<sup>2,4</sup>, Wenjie Wu<sup>1,4</sup>, Kai-Ying Wong<sup>1,5</sup>, Man-Sau Wong<sup>1,2,3,4</sup>, Danyue Zhao<sup>1,2,3,4</sup>

3P-PM-05 Integrating Untargeted and Targeted Metabolomics with Machine Learning for Early Colorectal Cancer Biomarker Discovery (<sup>1</sup>NTOU, <sup>2</sup>NCKU) °Pang-Hung Hsu<sup>1</sup>, Chung-Fa Chang<sup>2</sup>, Chung-Hsien Lin<sup>2</sup>, Juan-Kai Wong<sup>2</sup>

3P-PM-06 Localized Transporter Inhibition and MSI: Advancing CNS Drug Penetration Studies (Eisai Co., Ltd.) °Yoko Nagaya, Tomomi Ishida, Yoshitane Nozaki

3P-PM-07 Spontaneous Reduction of Iodopentafluorobenzene and Ortho-diiodotetrafluorobenzene on Water Microdroplets (Nankai Univ.) °Huan Chen, Xinxing Zhang

3P-PM-08 ☆ Surveillance of Emerging Organic Pollutants in Thailand by Suspect Screening Using High-Resolution Mass Spectrometry (<sup>1</sup>KKU, <sup>2</sup>UTokyo) °Ittikorn Palee<sup>1</sup>, Phanwatt Phungsai<sup>1</sup>, Futoshi Kurisu<sup>2</sup>

3P-PM-09 ☆ Supervised Deep learning approach to automatically classify peaks of MALDI-TOF Datasets (GRC) °Ali Farhan, Yi-Sheng Wang

3P-PM-10 Routine EPA 1633 PFAS analysis with a novel slotted bandpass ion guide to improve signal response robustness (<sup>1</sup>Nihon Waters, <sup>2</sup>Waters) °Maki Terasaki<sup>1</sup>, Sherry Zhang<sup>1</sup>, Kari Organtini<sup>2</sup>, David Gould<sup>2</sup>, Peter Hancock<sup>2</sup>

3P-PM-11 ☆ The relationship between a trail pheromone and division of labor in *Lasius japonicus* (Hiroshima Univ.) °Mai Takatsu, Shunsuke Izumi

3P-PM-12 Decoding O-Antigen Substructures in Pathogenic *E. coli* O111: Insights from MALDI Glycotyping of Cell Culture and Commercial LPS (Hokkaido Univ.) °June Chelyn Lee, Shogo Urakami, Hinou Hiroshi

3P-PM-13 Ambient Pressure Laser Desorption Ionization/Post-photoionization Mass Spectrometry Imaging to Study the Permeation Process of Flavors and Fragrances in Tobacco Leaves (NSRL, USTC) °Chunchun Lv, Chengyuan Liu, Yang Pan

3P-PM-14 ☆ Capture the fleeting intermediates during thermal/photo catalytic reactions by photoionization mass spectrometry (USTC) °Chengyuan Liu, Yang Pan

3P-PM-15 ☆ Comparative proteomics analysis of female fibromyalgia and osteoarthritis using data-independent acquisition SWATH-based MS (<sup>1</sup>IMB/NCHU, <sup>2</sup>AIR/TCVGH, <sup>3</sup>MBHG/TCU) °Cheng-Yu Kuo<sup>1</sup>, Kuo-Tung Tang<sup>2</sup>, Wei-Chen Wang<sup>1</sup>, Yi-Feng Zheng<sup>1</sup>, Yi-Ling Wu<sup>1</sup>, Chih-Jui Chang<sup>3</sup>, Chien-Chen Lai<sup>1</sup>

3P-PM-16 (2C-02-1510) ☆ Advancing Bottom-up Proteomics with Protease Type XIII from *Aspergillus saitoi* (<sup>1</sup>Kyoto Univ., <sup>2</sup>SHIONOGI, <sup>3</sup>NIBN) °Ryota Tomioka<sup>1,2</sup>, Ayana Tomioka<sup>1</sup>, Kosuke Ogata<sup>1</sup>, Yasushi Ishihama<sup>1,3</sup>

3P-PM-17 ☆ Determination of parabens in condiments using SPE isotope-dilution-UHPLC-MS/MS and dietary risk (<sup>1</sup>IFSHRA, NYCU, <sup>2</sup>IEOHS, NYCU) °Yi-Lun Chung<sup>1</sup>, Yu-Fang Huang<sup>2</sup>

3P-PM-18 High Resolution DESI imaging Single Cell Analysis (<sup>1</sup>Nihon Waters, <sup>2</sup>Waters, <sup>3</sup>University of Surrey) °Motoji Oshikata<sup>1</sup>, Thanai Paxton<sup>1</sup>, Mark Towers<sup>2</sup>, Gary Harland<sup>2</sup>, Scarlet Ferrinho<sup>2</sup>, Lisa Towers<sup>2</sup>, Lee Gethings<sup>2</sup>, Preeti Mourya<sup>3</sup>, Shazneil Briones<sup>3</sup>, Olivier Cexus<sup>3</sup>, Paul Townsend<sup>3</sup>, Joanne Ballantyne<sup>2</sup>

3P-PM-19 ☆ Fundamental study for simultaneous analysis of capecitabine and its metabolites using liquid chromatography/tandem mass spectrometry (<sup>1</sup>Grad. Sch. Pharm. Sci., Tohoku Univ., <sup>2</sup>Dept. Pharm. Sci., Tohoku Univ. Hosp.) °Minami Yamauchi<sup>1</sup>, Masamitsu Maekawa<sup>1,2</sup>, Nariyasu Mano<sup>1,2</sup>

Day 3, June 24 (Tue.)

- 3P-PM-20 Non-Targeted Analysis of Air Pollutants Using Thermal Desorption GC-HRTOFMS with Machine Learning Structural Analysis (<sup>1</sup>JEOL Ltd., <sup>2</sup>TOYO UNIVERSITY) <sup>o</sup>Masahiro Hashimoto<sup>1</sup>, Chihiro Ueno<sup>2</sup>, Ryotaro Suzuki<sup>2</sup>, Katsuhito Yoshida<sup>2</sup>, Atsuyuki Sorimachi<sup>2</sup>, Masaaki Ubukata<sup>1</sup>
- 3P-PM-21 ☆ Compositional Analysis of Protein Corona on Diamond Nanoparticles Using Mass Spectrometry (<sup>1</sup>Physics / NDHU, <sup>2</sup>Biochem / NDHU, <sup>3</sup>IAMS, <sup>4</sup>TCU) <sup>o</sup>Mhikee Descanzo<sup>1</sup>, Yu-Chung Chen<sup>1</sup>, Ming-Chi Chung<sup>2</sup>, Nguyen Nghiem Bich Ngoc<sup>2</sup>, Po-Chi Soo<sup>4</sup>, Ruey-Yi Chang<sup>2</sup>, Chia-Liang Cheng<sup>1</sup>, Huan-Chen Chang<sup>3</sup>, Wen-Ping Peng<sup>1</sup>
- 3P-PM-22 ☆ Developing a Feedback System based on Image Processing for stability control of a high-pressure electrospray Ionization (<sup>1</sup>Univ. Yamanashi, <sup>2</sup>Hangzhou Dianzi Univ.) <sup>o</sup>Xiangting Chen<sup>1,2</sup>, Qiangqiang Xie<sup>2</sup>, Satoshi Ni-nomiya<sup>1</sup>, Lee Chuin Chen<sup>1</sup>
- 3P-PM-23 ☆ HCP Risk Assessment Using MS during Purification Process Changes in Biopharmaceutical Production (Kyowa Kirin) <sup>o</sup>Kazutomo Takaishi, Mamoru Yoneda, Akari Hiyama, Yukihito Ohyama, Daisuke Tsuchida
- 3P-PM-24 ☆ Development of a Simplified Estrogen Analysis Method: Liquid-Liquid Extraction and Derivatization Strategy Comparison (<sup>1</sup>Kangwon Nat'l Univ., <sup>2</sup>Konkuk Univ.) <sup>o</sup>Min-Ho Song<sup>1</sup>, Ji-Woo Yu<sup>1,2</sup>, Jung-Hoon Lee<sup>1</sup>, Eun-Song Choi<sup>1</sup>, Ji-Ho Lee<sup>1</sup>
- 3P-PM-25 ☆ Benzophenone-type UV filters in the hair of Taiwanese Young Adults by SLE and SPE-based UHPLC-MS/MS (NYCU) <sup>o</sup>Jiong-Heng Du, Yu-Fang Huang
- 3P-PM-26 ☆ Analysis of cataract pathophysiology by mass spectrometry imaging (Dokkyo Medical Univ) <sup>o</sup>Haruka Matsumoto, Tadayuki Ogawa, Hiroyuki Matsushima, Mayumi Nagata
- 3P-PM-27 ☆ Integrating DynamiCROP Model and Risk Assessment for Pesticide Residues in Spinach: Implications for Food Safety (<sup>1</sup>Konkuk Univ., <sup>2</sup>Kangwon Nat'l Univ., <sup>3</sup>NAS) <sup>o</sup>Ji-Woo Yu<sup>1</sup>, Min-Ho Song<sup>2</sup>, Jung-Hoon Lee<sup>2</sup>, Hui-Yeon Ahn<sup>1</sup>, Eun-Song Choi<sup>2</sup>, Young-Soo Keum<sup>1</sup>, Hyun Ho Noh<sup>3</sup>, Ji-Ho Lee<sup>2</sup>
- 3P-PM-28 (4B-01-1155) ☆ Prioritizing Candidate Structures in Non-Targeted LC/ESI/HRMS Analysis by Combining Machine Learning Predictions (<sup>1</sup>Stockholm Univ. Kemikum, <sup>2</sup>Stockholm Univ. ACES) <sup>o</sup>Wei-Chieh Wang<sup>1</sup>, Lucas Ferrando Plo<sup>1</sup>, Chimnaz Emrah<sup>1</sup>, Amina Souhi<sup>1</sup>, Pilleriin Peets<sup>1</sup>, Anneli Kruve<sup>1,2</sup>
- 3P-PM-29 Direct Detection of Vitamin D Analogue by Surface-Assisted Laser Desorption/Ionization Mass Spectrometry (<sup>1</sup>Toyama Pref. Univ., <sup>2</sup>Kanazawa Univ., <sup>3</sup>Hamamatsu Photonics) <sup>o</sup>Chouma Kurihashi<sup>1</sup>, Shigehiro Karashima<sup>2</sup>, Takamasa Ikeda<sup>3</sup>, Issey Osaka<sup>1</sup>
- 3P-PM-30 ☆ Development of a Nano-ESI-MS/MS Method with the In-Capillary Derivatization for the Single-Cell Amino Acid Metabolomics (<sup>1</sup>Univ. Shizuoka, <sup>2</sup>Meijo Univ., <sup>3</sup>Ajinomoto) <sup>o</sup>Aoga Furusho<sup>1</sup>, Daiki Hosojima<sup>1</sup>, Yukino Yamaguchi<sup>1</sup>, Hajime Mizuno<sup>1,2</sup>, Sachise Karakawa<sup>3</sup>, Kotoe Nakasha<sup>3</sup>, Akihiro Arakawa<sup>3</sup>, Akiho Murai<sup>3</sup>, Eiji Sugiyama<sup>1,2</sup>, Kenji Kojima<sup>1</sup>, Kenichiro Todoroki<sup>1</sup>
- 3P-PM-31 Understanding Enzyme-Inhibitor Interactions via Native Mass Spectrometry (<sup>1</sup>Zhejiang Univ., <sup>2</sup>HUST) <sup>o</sup>Mowei Zhou<sup>1</sup>, Shiwen Zhou<sup>1</sup>, Beiyao Fu<sup>1</sup>, Xinjie Yang<sup>2</sup>, Pengfei Ji<sup>1</sup>, Fangrui Zhong<sup>2</sup>, Yuanjiang Pan<sup>1</sup>
- 3P-PM-32 ☆ Fragmentation analysis of gas-phase oxidation products from several monoterpenes using high-resolution collision-induced dissociation mass spectrometry (HR-CID-MS) (Yokohama City Univ.) <sup>o</sup>Daisuke Fukuyama, Kanako Sekimoto
- 3P-PM-33 ☆ Structural Characterization of Human Mitochondrial Single-Stranded DNA-Binding Protein and Helicase Twinkle Using Native Mass Spectrometry (<sup>1</sup>NCKU CHEM, <sup>2</sup>NCKU BIMB, <sup>3</sup>NCKU BMS) <sup>o</sup>Ting-Yi Chiang<sup>1</sup>, Po-Jung Cien<sup>2</sup>, Chyuan-Chuan Wu<sup>3</sup>, Szu-Hsueh Lai<sup>1</sup>
- 3P-PM-34 ☆ Integrated Network Analysis and Enrichment Analysis of Proteome Data Obtained under Different Experimental Conditions (<sup>1</sup>Kitasato Univ., <sup>2</sup>Kumamoto Univ.) <sup>o</sup>Manaka Nishizaki<sup>1</sup>, Norie Araki<sup>2</sup>, Shin Kawano<sup>1</sup>
- 3P-PM-35 Proteomics and Lipidomics Approach to Comprehensive Understanding of Malignant Mesothelioma (<sup>1</sup>Nagoya Univ. / ITbM, <sup>2</sup>Aichi Cancer Center, <sup>3</sup>TUAT) <sup>o</sup>Keiko Kano<sup>1</sup>, Shinya Sato<sup>1</sup>, Tasuhiro Sato<sup>2</sup>, Takaki Oka<sup>3</sup>, Yuki Matsuzawa<sup>3</sup>, Hiroshi Tsugawa<sup>3</sup>, Emi Mishiro-Sato<sup>1</sup>

Day 3, June 24 (Tue.)

- 3P-PM-36 ☆ Investigation of the Antimicrobial Activity of *Lactobacillus sp.* SC-2001 Strain Isolated from *Quercus serrata* (Sumitomo Chemical) °Yumi Komori, Naoya Ozawa, Hiroshi Kuwahara, Mikio Aoki
- 3P-PM-37 ☆ Evaluation of Accuracy and Precision on the Multi-Turn Time-of-Flight Secondary Neutral Mass Spectrometry (MULTUM-SNMS) and Its Application to Extraterrestrial Materials (Univ. of Osaka) °Shigeru Ujita, Hiromu Shinozaki, Kohei Fukuda, Toshinobu Hondo, Yosuke Kawai, So Jinnouchi, Michisato Toyoda, Kentaro Terada
- 3P-PM-38 The next frontier in extractable screening analyses: Increased identification confidence provided by a benchtop multi-reflecting time-of-flight mass spectrometer (Waters Corp) °Jayne Kirk, Rachel Sanig, Lee Gethings
- 3P-PM-39 A steroid pathway-based DNN model for Biological Age prediction via LC-MS/MS steroid profiling (IPR, Osaka Univ.) °Zi Wang, Qiuyi Wang, Kenji Mizuguchi, Toshifumi Takao
- 3P-PM-40 ☆ Establishment of LC-MS/MS Analysis Approach of Folic Acid and Its Metabolites in Clinical Samples of Autistic Children (NTU Univ.) °Shuangshuang Zhu, Li Ching Pang, Wen Zheng Lo, Xueming Dong
- 3P-PM-41 (2C-02-1440) ☆Proteome-Wide Degron Screening (°UNSW, °UTS) °Jake Violi<sup>1</sup>, Suhyeon Kwon<sup>1</sup>, Priyanka Kundu<sup>1</sup>, Connor Phillips<sup>2</sup>, William Donald<sup>1</sup>
- 3P-PM-42 A Study on the Use of Nitrogen as an Alternative Gas to Helium in Gas Chromatography/Mass Spectrometry (GC/MS) for Forensic Toxicology (°Okinawa Prefectural Police, °Univ. Ryukyus, °Yokohama City Univ.) °Kazumichi Kakazu<sup>1,2</sup>, Kenji Ninomiya<sup>2</sup>, Chiaki Fuke<sup>3</sup>, Natsuki Ikematsu<sup>2</sup>, Maki Fukasawa<sup>2</sup>, Mio Takayama<sup>2</sup>, Akihisa Agena<sup>1</sup>
- 3P-PM-43 ☆Development of a Quantitative Analysis Method for Blood Metabolites Using a Multi-HPLC Analysis System for Accurate Health Monitoring (°MIB, Kyushu Univ., °Shimadzu) °Kotaro Harada<sup>1</sup>, Masatomo Takahashi<sup>1</sup>, Shoji Shinadama<sup>2</sup>, Keisuke Nakata<sup>1</sup>, Kazuki Ikeda<sup>1</sup>, Maiko Goto<sup>1</sup>, Yoshihiro Hayakawa<sup>2</sup>, Takeshi Bamba<sup>1</sup>, Yoshihiro Izumi<sup>1</sup>
- 3P-PM-44 Development of on-site analysis equipment using multi-turn time-of-flight MS (°Univ. Tokyo, °Univ. Tokyo RCAST) °Shogo Numata<sup>1</sup>, Hirochika Sumino<sup>2</sup>
- 3P-PM-45 Visualization of Tamoxifen Distribution and Sensitivity Assessment in Breast Cancer Tissues Using Imaging Mass Spectrometry (°Kyoto Pref. Univ. Med., °Shimadzu Corp.) °Chikage Kato<sup>1</sup>, Takushi Yamamoto<sup>1</sup>, Yasuto Naoi<sup>2</sup>
- 3P-PM-46 Smart On-Line Coffee Roasting Process Control by a Novel Rugged Photoionization Mass Spectrometer: Real-Time Prediction Models for Coffee-Roasting Degree, Brew Antioxidant Capacity and Sensory Attributes (°Univ. Rostock/HMGU, °Photonion GmbH, °Probat GmbH) Henryk Czech<sup>1</sup>, Jan Heide<sup>2</sup>, Sven Ehlert<sup>2</sup>, Thomas Koziorowski<sup>3</sup>, °Ralf Zimmermann<sup>1</sup>
- 3P-PM-47 Gas-Phase-Fractionation Spectral Library-Enhanced DIA Mass Spectrometry for Rapid and Deep Plasma Proteomics (°CLSMB, NTU, °IoC, AS, °MST-TiGP, AS, °Thermo Fisher San Jose, °Surgery, NTUH, °Thermo Fisher Bremen, °Internal Med., CSMUH, °Surgery, NTUH and NTU, °Internal Med., NTUH) Sung-Liang Yu<sup>1</sup>, Yi-Ju Chen<sup>2</sup>, °Kun-Hao Chang<sup>2,3</sup>, Jared Deyarmin<sup>4</sup>, Yi-Shuang Chuang<sup>2</sup>, Yi-Jing Hsiao<sup>2</sup>, Chong-Jen Yu<sup>5</sup>, Tabiwang Arrey<sup>6</sup>, Jana Richter<sup>6</sup>, Stephanie Samra<sup>4</sup>, Daniel Hermanson<sup>4</sup>, Gee-Chen Chang<sup>7</sup>, Jin-Shing Chen<sup>8</sup>, Pan-Chyr Yang<sup>9</sup>, Yu-Ju Chen<sup>2</sup>
- 3P-PM-48 (4B-01-1210) ☆ Two-step peptide solubilization increases coverage in high-sensitivity nanoHILIC/MS/MS-based proteomics (°Kyoto Univ., °NIBIOHN) °Koshin Akamatsu<sup>1</sup>, Eisuke Kanao<sup>1,2</sup>, Ayana Tomioka<sup>1</sup>, Yasushi Ishihama<sup>1,2</sup>
- 3P-PM-49 ☆ Exploring Chemical Interactions of the Soft Coral *Carijoa (Telesto) riisei* on Artificial Reefs in Southeast Queensland, Australia, using Mass Spectrometry. (°ESc/Griff. Univ., °GRIDD/Griff.Univ.) °Pauline Lindholm<sup>1</sup>, Darren Holland<sup>1,2</sup>, Joshua Hayton<sup>1</sup>, Tim Stevens<sup>1</sup>, Anthony Carroll<sup>1,2</sup>
- 3P-PM-50 (4C-01-1225) ☆ Large-Scale Libraries of Highly Specific Kinase Substrate Peptides for LC/MS-Based Kinome Profiling (°Kyoto Univ., °NCVC, °NIBIOHN) °Junqi Liang<sup>1</sup>, Saki Toi<sup>1</sup>, Junna Nakazono<sup>1</sup>, Dai Sakamoto<sup>1</sup>, Naoyuki Sugiyama<sup>1,2</sup>, Yasushi Ishihama<sup>1,3</sup>
- 3P-PM-51 (4A-01-1225) ☆ Acceleration of Iodide Oxidation by Ozone in Atmospheric Clusters (°Queensland Univ. Tech., °Univ. Melbourne, °Univ. Wollongong) °Samuel Brydon<sup>1</sup>, Evan Bieske<sup>2</sup>, Adam Trevitt<sup>3</sup>, Stephen Blanksby<sup>1</sup>

Day 3, June 24 (Tue.)

⟨Corporate Posters⟩

[3P-CP] Corporate Posters 3P-CP

Poster Display and Presentation : 8:15 ~ 19:00

3P-CP-01 GOING BEYOND SIMPLE DDMS2:

IMPROVING ANNOTATION CONFIDENCE  
IN UNTARGETED METABOLOMICS USING  
HIGH-RESOLUTION MS AND PARALLEL  
ION TRAP EXPERIMENTS (<sup>1</sup>Thermo Fisher  
Scientific, <sup>2</sup>Thermo Fisher Scientific, San Jose,  
<sup>3</sup>Thermo Fisher Scientific Singapore) Scott Pe-  
terman<sup>1</sup>, Brandon Bills<sup>2</sup>, <sup>0</sup>Nicole Zhang<sup>3</sup>

3P-CP-02 COMBINING TARGETED MS2 AND

MS3 APPROACHES FOR THE QUANTITA-  
TION OF BILE ACIDS IN BIOLOGICAL SPEC-  
IMENS USING THE STELLAR MASS SPEC-  
TROMETER (<sup>1</sup>Thermo Fisher Scientific,  
<sup>2</sup>Thermo Fisher Scientific San Jose, <sup>3</sup>Thermo  
Fisher Scientific Singapore) Scott Peterman<sup>1</sup>,  
Charles Maxey<sup>2</sup>, <sup>0</sup>Nicole Zhang<sup>3</sup>

3P-CP-03 SIMPLIFIED PFAS IN WASTEWA-

TER ANALYSIS THROUGH AUTOMATION,  
RETENTION TIME CONFIRMATION, AND  
HIGH RESOLUTION FULL SCAN DATA  
(<sup>1</sup>Thermo Fisher Scientific San Jose, <sup>2</sup>Thermo  
Fisher Scientific Singapore) Cynthia Grim<sup>1</sup>, <sup>0</sup>Ni-  
cole Zhang<sup>2</sup>

Day 4, June 25 (Wed.)

Room A (Maesato West)

⟨Plenary Lecture⟩

[4-PL] Plenary Lecture IV

#This session will take place in Rooms A and B and will be available for live viewing via online streaming in Room C.

(8:30 ~ 9:15) Chair: Takeshi Bamba (Kyushu University)

4-PL-0830 Development of CE-MS Metabolomics and Its Application in Cancer (Keio Univ.) °Tomoyoshi Soga

⟨Oral Sessions⟩

[4A-01] Fundamentals & Emerging Applications of Ionization and Gas Phase Ion Processes - Part II

(11:25 ~ 12:40) Chair: Kanako Sekimoto (Yokohama City University) / Lee Chuin Chen (University of Yamashita)

4A-01-1125 [Invited]Oxygen Attachment Dissociation-Enhanced MALDI Imaging for Spatially Resolved Isomer Identification (Shimadzu) °Hidenori Takahashi, Satoshi Kasamatsu, Kaoru Nakagawa, Naoto Mishina, Kenta Takigawa, Manami Kobayashi, Kengo Takeshita, Noriyuki Ojima

4A-01-1140 [Invited]Applications of Ion Mobility Mass Spectrometry in Metallosupramolecular Chemistry (QUT) °David Marshall, Michael Pfrunder, Jason Hong, Therese Fulloon, John Mcmurtrie, Stephen Blanksby, Kathleen Mullen

4A-01-1155 [Invited]Study Organic Reactive Intermediate via Mass Spectrometry: Bridge the Gap between the Solution and the Gas-phase (ZJU) °Yuanjiang Pan, Hongjian Chu

4A-01-1210 [Invited]Understanding the Binding and Structures of Model Complexes of Polypeptides and Cofactors: Insights into structural enzymology of radical proteins (<sup>1</sup>U of Hong Kong, <sup>2</sup>Shandong Public Health Clinical Center) °Ivan Chu<sup>1,2</sup>

4A-01-1225 (3P-PM-51) ☆ Acceleration of Iodide Oxidation by Ozone in Atmospheric Clusters (<sup>1</sup>Queensland Univ. Tech., <sup>2</sup>Univ. Melbourne, <sup>3</sup>Univ. Wollongong)

°Samuel Brydon<sup>1</sup>, Evan Bieske<sup>2</sup>, Adam Trevitt<sup>3</sup>, Stephen Blanksby<sup>1</sup>

⟨Luncheon Seminar⟩

[4A-L] Luncheon Seminar (Presented by Yokogawa Electric Corporation)

(12:45 ~ 13:45)

4A-L-1245 Unlocking Cellular Secrets: Cutting-Edge Single-Cell and Organelle Analysis for Drug Discovery (<sup>1</sup>Yokogawa, <sup>2</sup>Meijo Univ., <sup>3</sup>KCL) Yuta Terui<sup>1</sup>, °Hajime Mizuno<sup>2</sup>, Melanie Bailey<sup>3</sup>, Masafumi Ihara<sup>1</sup>

⟨Oral Sessions⟩

[4A-02] Instrument Developments for the Future of Mass Spectrometry

(13:55 ~ 15:10) Chair: Yoichi Otsuka (The University of Osaka) / Yi-Sheng Wang (Academia Sinica)

4A-02-1355 [Keynote]Instrumentation Strategies for Imaging and Single-Cell Structural Lipidomics (Tsinghua Univ.) °Zheng Ouyang, Zhijun Cai, Yao Qian, Dan Li, Xiaoxiao Ma

4A-02-1425 Development of Medium Vacuum Chemical Ionization (MVCI) for Mass Spectrometry: Micro-Tissue Analysis via Online Coupling of Supercritical Fluid Extraction/Chromatography (<sup>1</sup>Univ. Osaka/MS-Cheminfo., <sup>2</sup>Univ. Osaka) °Toshinobu Hondo<sup>1</sup>, Yumi Miyake<sup>2</sup>, Michisato Toyoda<sup>2</sup>

4A-02-1440 Extending capabilities of Orbitrap-based MS to cold ion spectroscopy for analytical applications (EPFL) °Oleg Boyarkine, Vyacheslav Kozlovskii, Andrei Zviagin, Vladimir Kopysov

4A-02-1455 (2P-PM-45) ☆ Real-time environmental monitoring method of clean rooms for extraterrestrial samples with GED-ICP-MS/MS (<sup>1</sup>JAXA, <sup>2</sup>Marin Work Japan) °Ryota Fukai<sup>1</sup>, Arisa Nakano<sup>1</sup>, Masahiro Nishimura<sup>1</sup>, Yuya Hitomi<sup>2</sup>

Day 4, June 25 (Wed.)

Room B (Maesato Center)

⟨Plenary Lecture⟩

[4-PL] Plenary Lecture IV

#This session will take place in Rooms A and B and will be available for live viewing via online streaming in Room C.

(8:30 ~ 9:15) Chair: Takeshi Bamba (Kyushu University)

4-PL-0830 Development of CE-MS Metabolomics and Its Application in Cancer (Keio Univ.) °Tomoyoshi Soga

⟨Oral Sessions⟩

[4B-01] Young Researcher Session 2

(11:25 ~ 12:40) Chair: Yuki Yamaguchi (The University of Osaka) / Pai-Shan Chen (National Taiwan University)

4B-01-1125 [Invited]Metabolomics Approaches for Organic Acidemias: Optimization of Derivatization Methods for Enhanced Biomarker Quantification and Accurate Diagnosis (<sup>1</sup>NTU, <sup>2</sup>Dept Pediatr NTUH, <sup>3</sup>Dept Pediatr NTU, <sup>4</sup>NTNU) Yung-Cheng Jair<sup>1</sup>, Ni-Chung Lee<sup>2,3</sup>, Yi-Hsin Liu<sup>4</sup>, °Pai-Shan Chen<sup>1</sup>

4B-01-1140 (2P-PM-33) ☆ Investigation of ligand transfer mechanism during collisional activation of protein complexes in native mass spectrometry (Zhejiang Univ.) °Shiwen Zhou, Mowei Zhou, Hongru Feng, Yuanjiang Pan

4B-01-1155 (3P-PM-28) ☆ Prioritizing Candidate Structures in Non-Targeted LC/ESI/HRMS Analysis by Combining Machine Learning Predictions (<sup>1</sup>Stockholm Univ. Kemikum, <sup>2</sup>Stockholm Univ. ACES) °Wei-Chieh Wang<sup>1</sup>, Lucas Ferrando Plo<sup>1</sup>, Chimnaz Emrah<sup>1</sup>, Amina Souhi<sup>1</sup>, Pilleriin Peets<sup>1</sup>, Anneli Kruve<sup>1,2</sup>

4B-01-1210 (3P-PM-48) ☆ Two-step peptide solubilization increases coverage in high-sensitivity nanoHILIC/MS/MS-based proteomics (<sup>1</sup>Kyoto Univ., <sup>2</sup>NIBIOHN) °Koshin Akamatsu<sup>1</sup>, Eisuke Kanao<sup>1,2</sup>, Ayana Tomioka<sup>1</sup>, Yasushi Ishihama<sup>1,2</sup>

4B-01-1225

Metal Ion-Enhanced ZIC-cHILIC StageTip for Simultaneous, Large-Scale Glycoproteomic and Phosphoproteomic Tissue Profiling in Breast Cancer (<sup>1</sup>NTU/ Academia Sinica, <sup>2</sup>Academia Sinica) °Hsiang-Chun Cheng<sup>1</sup>, Juanilita Waniwan<sup>2</sup>, Yu-Ju Chen<sup>2</sup>

⟨Luncheon Seminar⟩

[4B-L] Luncheon Seminar (Presented by Agilent Technologies Japan, Ltd.)

(12:45 ~ 13:45)

4B-L-1245 Cutting-edge Approaches in Life Science Utilizing Agilent Mass Spectrometry (Agilent Technologies Japan, Ltd) °Aya Anegawa, Kyoko Yasuda, Takeshi Serino

⟨Oral Sessions⟩

[4B-02] Mass Spectrometry in Agriculture and Food Science

(13:55 ~ 15:10) Chair: Akira Oikawa (Kyoto University)

4B-02-1355 [Invited]Mass Spectrometry-Based Metabolomics for Flavor and Bioactive Compound Discovery in Crops: Towards Product Development (Chulalongkorn Univ.) °Supaart Sirikantaramas

4B-02-1410 [Invited]Pesticide vs Plant medicine: Metabolomic Approach (Kangwon Nat'l Univ.) °Ji-Ho Lee

4B-02-1425 [Invited]Advanced Techniques for Flavor Analysis Utilizing Capillary Flow Technology (CFT) (Agilent Technologies Japan, Ltd.) °Aya Anegawa, Takeshi Otsuka, Sadao Nakamura

4B-02-1440 Monitoring Indoor Farming Growth Conditions Using Direct Analysis in Real Time Mass Spectrometry (DART-MS) (NUS) °Qifeng Lin, Norman Zhi Wei Teo, Xin Shan Lim, Qingsong Lin

Day 4, June 25 (Wed.)

- 4B-02-1455 (2P-PM-16) ☆ Mass Spectrometric Analysis of Carcinogenic Areca Nut-Specific Alkaloids in Cooked *Areca catechu* L.: A Cautionary Note on Dietary Exposure (<sup>1</sup>NDMC, <sup>2</sup>CSMU)  
°Szu-Yi Chao<sup>1</sup>, Chiao-Jou Yu<sup>2</sup>, Yuan-Jhe Chang<sup>2</sup>, Chiung-Wen Hu<sup>2</sup>, Mu-Rong Chao<sup>2</sup>

Room C (Top of Yaima)

⟨Plenary Lecture⟩

[4-PL] Plenary Lecture IV

#This session will take place in Rooms A and B and will be available for live viewing via online streaming in Room C.

(8:30 ~ 9:15) Chair: Takeshi Bamba (Kyushu University)

- 4-PL-0830 Development of CE-MS Metabolomics and Its Application in Cancer (Keio Univ.) °Tomoyoshi Soga

⟨Oral Sessions⟩

[4C-01] Chemical Proteomics / Pharmacoproteomics

(11:25 ~ 12:40) Chair: Wei Wu (National University of Singapore) / Jun Adachi (National Institutes of Biomedical Innovation, Health and Nutrition)

- 4C-01-1125 [Keynote] Clinical Functional Proteomics Applied to Pancreatic Cancer (SUS-Tech) °Ruijun Tian

- 4C-01-1140 [Invited] Mass spectrometry-based assay to screen for PTP dysregulation and activation: a case study in metabolic disease management and reversal.  
(<sup>1</sup>A\*STAR-SIgN, <sup>2</sup>NUS) Elisavet Kalaitisdou<sup>1,2</sup>, Ziliang Ma<sup>1</sup>, °Wei Wu<sup>1,2</sup>

- 4C-01-1155 Phosphoproteomic subtyping of gastric cancer reveals dynamic transformation with chemotherapy and guides targeted cancer therapy (<sup>1</sup>NIBN, <sup>2</sup>Kyoto Univ., <sup>3</sup>NCCH, <sup>4</sup>Osaka Univ., <sup>5</sup>NMS) °Jun Adachi<sup>1,2</sup>, Hirokazu Shoji<sup>3</sup>, Hidekazu Hirano<sup>3</sup>, Yosui Nojima<sup>1,4</sup>, Daigo Gunji<sup>1,2</sup>, Akina Shinkura<sup>1,2</sup>, Satoshi Muraoka<sup>1</sup>, Yuichi Abe<sup>1</sup>, Ryohei Narumi<sup>1</sup>, Chikako Nagao<sup>4</sup>, Masahiko Aoki<sup>3</sup>, Kazutaka Obama<sup>2</sup>, Kazufumi Honda<sup>5</sup>, Kenji Mizuguchi<sup>1,4</sup>, Takeshi Tomonaga<sup>1</sup>, Takaki Yoshikawa<sup>3</sup>, Ken Kato<sup>3</sup>, Narikazu Boku<sup>3</sup>

- 4C-01-1210 Chemical Proteomics and Cross-linking Mass Spectrometry for Identification of Protein-protein Interactions of drug-protein interactome (IMCB, A\*STAR)  
°Zheng Ser, Alicia Ong, Radoslaw Sobota

- 4C-01-1225 (3P-PM-50) ☆ Large-Scale Libraries of Highly Specific Kinase Substrate Peptides for LC/MS-Based Kinome Profiling (<sup>1</sup>Kyoto Univ., <sup>2</sup>NCVC, <sup>3</sup>NIBIOHN)  
°Junqi Liang<sup>1</sup>, Saki Toi<sup>1</sup>, Junna Nakazono<sup>1</sup>, Dai Sakamoto<sup>1</sup>, Naoyuki Sugiyama<sup>1,2</sup>, Yasushi Ishihama<sup>1,3</sup>

⟨Luncheon Seminar⟩

[4C-L] Luncheon Seminar (Presented by AMR, Inc.)

(12:45 ~ 13:45)

- 4C-L-1245 Cutting-edge Tools to Accelerate Metabolomics and Proteomics Research: Gelpack GL-HilicAex and Evosep (<sup>1</sup>Niigata Univ., <sup>2</sup>Kyushu Univ./MiB, <sup>3</sup>Evosep Biosystems) °Kohta Nakatani<sup>1,2</sup>, Michael Andersen<sup>3</sup>

⟨Oral Sessions⟩

[4C-02] Cutting-Edge Lipidomics Technology and Applied Research

(13:55 ~ 15:10) Chair: Takeshi Bamba (Kyushu University) / Kim Ekroos (Lipidomics Consulting Ltd)

- 4C-02-1355 [Keynote] Profiling of the Low-Abundance Lipidome by Selective Enrichment and Isomer-Resolved Tandem Mass Spectrometry (Tsinghua Univ.) Zidang Wang, Yichun Wang, °Yu Xia

- 4C-02-1410 [Invited] Remodelling of the yeast lipidome as an adaptation to temperature (<sup>1</sup>QUT, <sup>2</sup>UOW) °Stephen Blanksby<sup>1</sup>, Rangika Perera<sup>1</sup>, Reuben Young<sup>2</sup>, Aurelie Benefield<sup>1</sup>, Sonia Henriques<sup>1</sup>, Berwyck Poad<sup>1</sup>

- 4C-02-1425 Development of LC-MS methods to enhance lipidomics analysis and clinical investigation of stroke etiology (<sup>1</sup>NTU, <sup>2</sup>NTU Metacore) °Ching-Hua Kuo<sup>1,2</sup>, Ching-Hua Lee<sup>1,2</sup>, Wei-Chieh Wang<sup>1,2</sup>, Chih-Ning Cheng<sup>1,2</sup>

Day 4, June 25 (Wed.)

- 4C-O2-1440 [Invited]Development of a Non-Invasive Early Detection Technique for Graves' Disease Using Thyroid Hormones in Hair (<sup>1</sup>Kazusa DNA Res. Inst., <sup>2</sup>Aderans, <sup>3</sup>Ito hosp., <sup>4</sup>Tohoku Univ.) Kouhei Igarashi<sup>1,2</sup>, Chie Takita<sup>1,2</sup>, Masako Matsumoto<sup>3</sup>, Wataru Kitagawa<sup>3</sup>, Atsuko Ota<sup>2</sup>, Naoko Miyazaki<sup>3</sup>, Koichi Ito<sup>3</sup>, <sup>0</sup>Kazutaka Ikeda<sup>1,4</sup>
- 4C-O2-1455 [Invited]Standardization and Harmonization by the International Lipidomics Society (LC Ltd) <sup>0</sup>Kim Ekoos

### ⟨Poster Presentations⟩

Room P (Maesato East, Foyer, Ocean Wing)

[4P-AM] Poster Session 4P-AM

Poster Display : 8:15 ~ 17:15

Core time (Odd numbers) : 9:15 ~ 10:15

Core time (Even numbers) : 10:15 ~ 11:15

- 4P-AM-01 (3C-01-1155) ☆ Towards Rapid and Accurate Bacterial Serotyping Using MALDI Glycotyping (Hokkaido Univ.) <sup>0</sup>Shogo Urakami, Hiroshi Hinou

- 4P-AM-02 (3B-01-1140) ☆ Single Tissue Multimodal Imaging for Cellular-level Spatial Metabolomics and Transcriptomics Analysis (<sup>1</sup>HKBU, <sup>2</sup>EIT Ningbo) <sup>0</sup>Thomas Ka Yam Lam<sup>1</sup>, Bingxu Zhang<sup>1</sup>, Jianing Wang<sup>1</sup>, Zongwei Cai<sup>1,2</sup>, Yiji Xia<sup>1</sup>

- 4P-AM-03 Withdrawn

- 4P-AM-04 Exploring the Cellular ADP-Ribosylome in *Deinococcus radiodurans* (NTU) <sup>0</sup>Chun-Hua Hsu

- 4P-AM-05 ☆ Ultra-Fast Scanning Quadrupole Mass Spectrometry Combined with GCxGC for Comprehensive Analysis of Beverage Aroma (<sup>1</sup>Shimadzu Corp., <sup>2</sup>Osaka Univ.) <sup>0</sup>Kazuhiro Kawamura<sup>1,2</sup>, Yu Nagao<sup>1</sup>

- 4P-AM-06 Development of a Dual Photoionization/Electron Impact Ionization Quadrupole Mass Spectrometer (NSRL, USTC) <sup>0</sup>Jun Huang, Jiu-zhong Yang, Chengyuan Liu, Minggao Xu, Yang Pan

- 4P-AM-07 Elucidating the Potential Relationship between Metabolic Reprogramming and MicroRNA Behaviors in Activated Hepatic Stellate Cells through Multi-omic Analysis (<sup>1</sup>Kyushu Univ., <sup>2</sup>AIST) <sup>0</sup>Tomomi Ichinose<sup>1</sup>, Seong-Uk Lee<sup>1</sup>, Yi-Lan Huang<sup>1</sup>, Daisuke Miura<sup>2</sup>, Motofumi Kumazoe<sup>1</sup>, Hirofumi Tachibana<sup>1</sup>, Yoshinori Fujimura<sup>1</sup>

- 4P-AM-08 Optimising the Single Cell Pipeline using a Multi-Reflecting Q-ToF Platform (<sup>1</sup>Nihon Waters K.K., <sup>2</sup>University of Surrey, <sup>3</sup>Waters Corporation) <sup>0</sup>Thanai Paxton<sup>1</sup>, Scarlet Ferrinho<sup>2</sup>, Lee Gethings<sup>3</sup>, Nyasha Munjoma<sup>3</sup>, Paul Townsend<sup>2</sup>, Olivier Cexus<sup>2</sup>, David Heywood<sup>3</sup>, Robert Plumb<sup>3</sup>, Preeti Mourya<sup>2</sup>, Shazneil Birnes<sup>2</sup>, Clare Mills<sup>2</sup>, Matt Spick<sup>2</sup>

- 4P-AM-09 Simultaneous Quantification of Areca Nut- and Tobacco-Specific Nitrosamines in Human Saliva by Liquid Chromatography-Tandem Mass Spectrometry (<sup>1</sup>CSMU.OSH, <sup>2</sup>CSMU.PH) <sup>0</sup>Zi-Lin Lu<sup>1</sup>, Yin-Ting Kao<sup>1</sup>, Chiung-Wen Hu<sup>2</sup>, Mu-Rong Chao<sup>1</sup>, Yuan-Jhe Chang<sup>1</sup>

- 4P-AM-10 Analysis of Daily Urine Samples of Pregnant Rats Unveils Developmental Processes of Fetus as Well as Physiological Changes of Mother Rats (Beijing Normal Univ) <sup>0</sup>Youhe Gao

- 4P-AM-11 Analysis of Sulfated N-glycans as a Potential Biomarker for the Early Detection of Breast Cancer (<sup>1</sup>Hokkaido Univ., <sup>2</sup>De La Salle Univ., <sup>3</sup>Addis Ababa Univ) <sup>0</sup>Dereje Feleke<sup>1</sup>, Bryan Montalban<sup>2</sup>, Solomon Gizaw<sup>3</sup>, Hiroshi Hinou<sup>1</sup>

- 4P-AM-12 Expanded proteomics in the case of data-driven post-translational modification analysis (RIKEN CSRSCSRS) <sup>0</sup>Naoshi Dohmae

- 4P-AM-13 Precision Targeting of Ferroptosis in Colorectal Cancer: Sex and KRAS Mutation-Driven Metabolic Vulnerabilities and Drug Repurposing (<sup>1</sup>Yale/HKBU, <sup>2</sup>HKBU, <sup>3</sup>Harvard, <sup>4</sup>Yale, <sup>5</sup>Columbia University) <sup>0</sup>Hong Yan<sup>1</sup>, Xinyi Shen<sup>4</sup>, Chen Chen<sup>3</sup>, Yisha Yao<sup>5</sup>, Jieqing Feng<sup>2</sup>, John Quackenbush<sup>3</sup>, Sajid Khan<sup>4</sup>, Caroline Johnson<sup>4</sup>

- 4P-AM-14 Derivatization methods of sialylated glycans using lactone ring-opening aminolysis and lactone-driven ester-to-amide conversion for MALDI-TOF MS analysis (<sup>1</sup>Nagoya Univ., <sup>2</sup>Hokkaido Univ., <sup>3</sup>Shimadzu Corp.) <sup>0</sup>Jun-ichi Furukawa<sup>1,2</sup>, Takashi Nishikaze<sup>3</sup>, Masaki Kuroguchi<sup>1</sup>, Hisatoshi Hanamatsu<sup>1</sup>

Day 4, June 25 (Wed.)

- 4P-AM-15 (3C-01-1225) ☆ Molecular composition and imaging profiles of thrombi in acute coronary syndrome (Dokkyo Medical Univ.)  
°Mayo Wada, Tadayuki Ogawa, Setsu Nishino, Masashi Sakuma, Sigeru Toyoda
- 4P-AM-16 ☆ Development of highly sensitive and comprehensive method for single-cell phospholipid analysis (<sup>1</sup>Meijo Univ., <sup>2</sup>Univ. Shizuoka, <sup>3</sup>Yokogawa, <sup>4</sup>ITO EN) °Takuma Yanagisawa<sup>1,2</sup>, Eiji Sugiyama<sup>1</sup>, Yuta Terui<sup>3</sup>, Masafumi Ihara<sup>3</sup>, Hironori Takai<sup>3</sup>, Iwao Sakane<sup>4</sup>, Susumu Imanishi<sup>1</sup>, Kenichiro Todoroki<sup>2</sup>, Hajime Mizuno<sup>1</sup>
- 4P-AM-17 Using Proteomics and Metabolomics Approach to Explore Potential Early Biomarkers in Acute Respiratory Distress Syndrome Model Mice (<sup>1</sup>Graduate Institute of Medical Sciences, College of Medicine, Taipei Medical University, Taiwan, <sup>2</sup>Department of Anesthesiology and Integrative Research Center for Critical Care, Wan Fang Hospital, Taipei Medical University, Taiwan, <sup>3</sup>Department of Biomedical Sciences and Engineering, National Central University, Taiwan, <sup>4</sup>Department of Biochemistry and Molecular Cell Biology, School of Medicine, College of Medicine, Taipei Medical University, Taiwan)  
°Po-Tsang Chen<sup>1</sup>, Chun-Jen Huang<sup>2</sup>, Yi-Chiung Hsu<sup>3</sup>, I-Lin Tsai<sup>4</sup>
- 4P-AM-18 ☆ Investigation of Extraction-Ionization Process of t-SPESI by Current Measurement (<sup>1</sup>GSS, Univ. Osaka, <sup>2</sup>FRC, Univ. Osaka, <sup>3</sup>Univ. Yamanashi) °Mengze Sun<sup>1</sup>, Yoichi Otsuka<sup>1,2</sup>, Lee Chuin Chen<sup>3</sup>, Michisato Toyoda<sup>1,2</sup>
- 4P-AM-19 ☆ Fundamental study of a simultaneous analytical method of pyrimidine bases and metabolites using liquid chromatography/tandem mass spectrometry (<sup>1</sup>Tohoku Univ., <sup>2</sup>Tohoku Univ. Hosp., <sup>3</sup>INGEM., Tohoku Univ.) °Midori Kato<sup>1</sup>, Masamitsu Maekawa<sup>1,2,3</sup>, Eiji Hishinuma<sup>3</sup>, Masahiro Hiratsuka<sup>1,2,3</sup>, Nariyasu Mano<sup>1,2</sup>
- 4P-AM-20 (3A-03-1630) ☆ Investigating the distribution of azetidine-2-carboxylic acid (A2C) in plants using HILIC-MS/MS (<sup>1</sup>UTS, <sup>2</sup>HyMaS, <sup>3</sup>UNSW) °Connor Phillips<sup>1,2</sup>, Jake Violi<sup>3</sup>, David Bishop<sup>2</sup>, Kenneth Rodgers<sup>1</sup>
- 4P-AM-21 Identification of clenbuterol metabolites in livestock by LC-Q-Orbitrap-MS (Chiba Univ.)  
°Yoshikazu Yamagishi, Yuki Toda, Sayaka Nagasawa, Hirotaro Iwase, Yasumitsu Ogra
- 4P-AM-22 ☆ Quantitative Proteomics of Post-Translational Modification in Parkinson's Disease Model Cells (Yokohama City Univ.) °Shunsuke Hoshina, Eri Katsuno, Daisuke Takakura, Tohru Sugawara, Nana Kawasaki
- 4P-AM-23 Metal-organic framework-based dispersive solid-phase extraction coupled with UPLC-MS/MS for analysis of mono-, di-, and tri-phosphoadenosine compounds (<sup>1</sup>NTU, <sup>2</sup>NTNU)  
°Yu-Meng Wang<sup>1</sup>, Sung-Fang Chen<sup>2</sup>
- 4P-AM-24 ☆ MALDI Glycotyping for O-Antigen Serotyping in *Escherichia albertii* (<sup>1</sup>Hokkaido Univ., <sup>2</sup>Miyazaki Pref. Inst. Public Health Environ., <sup>3</sup>Akita Pref. Res. Cent. Public Health Environ., <sup>4</sup>NIID, <sup>5</sup>Jumonji Univ., <sup>6</sup>Kagoshima Univ.) °Shogo Urakami<sup>1</sup>, Yumi Okabe<sup>2</sup>, Takayuki Konno<sup>3</sup>, Shinichiro Hirai<sup>4</sup>, Koichi Murakami<sup>5</sup>, Tadasuke Ooka<sup>6</sup>, Hiroshi Hinou<sup>1</sup>
- 4P-AM-25 ☆ Using an online GC-EI-TOF-MS for the source apportionment of an air pollution episode in March 2023 at a suburban site in Hong Kong (<sup>1</sup>HKUST (CHEM), <sup>2</sup>HKUST (ENVR))  
°Anna Mae Vorwerk<sup>1</sup>, Wing Sze Chow<sup>1</sup>, Jian Zhen Yu<sup>1,2</sup>
- 4P-AM-26 ☆ Development of a Miniature Ultrasonic Device for Rapid Enzymatic Digestion of Protein (NCKU Chem) °Po-Yu Chou, Szu-Hsueh Lai
- 4P-AM-27 (3A-02-1455) ☆ Multimass Analysis of Adeno-Associated Virus Vectors by Orbitrap-Based Charge Detection Mass Spectrometry (<sup>1</sup>Osaka Univ., <sup>2</sup>Shimadzu Corp., <sup>3</sup>Osaka Univ. Shimadzu AIRL, <sup>4</sup>U-Medico Inc.) °Ryoji Nakatsuka<sup>1,2,3</sup>, Yuki Yamaguchi<sup>1</sup>, Kiichi Hirohata<sup>1</sup>, Saki Shimojo<sup>1</sup>, Makoto Murakami<sup>1</sup>, Mark Allen Rocafort<sup>4</sup>, Yasuo Tsunaka<sup>1</sup>, Mitsuko Fukuvara<sup>1,4</sup>, Tetsuo Torisu<sup>1</sup>, Susumu Uchiyama<sup>1</sup>
- 4P-AM-28 ☆ Residual Characteristics of Five Insecticides and their metabolites in *Cirsium japonicum* var. *spinosissimum* (<sup>1</sup>Konkuk Univ., <sup>2</sup>Kangwon Nat'l Univ.) °Ji-Yeon Lee<sup>1</sup>, Min-Ho Song<sup>2</sup>, Ji-Woo Yu<sup>1</sup>, Jung-Hoon Lee<sup>2</sup>, Hui-Yeon Ahn<sup>1</sup>, Geon-Woo Park<sup>1</sup>, Ji-Won Shin<sup>1</sup>, Ha-Jin Son<sup>1</sup>, Eun-Song Choi<sup>2</sup>, Ji-Ho Lee<sup>2</sup>
- 4P-AM-29 Differential Proteomic Analysis of Microplastic Impact on Mouse Liver Using SWATB-Based Mass Spectrometry (NTNU)  
°Pei Chen Lin, Sung-Fang Chen

Day 4, June 25 (Wed.)

- 4P-AM-30 ☆ Product ion species in CID spectra change depending on mass spectrometers and ionization methods (Yokohama City University)  
^Haruki Nagata, Yuuto Kiuchi, Yukumi Kita, Kanako Sekimoto
- 4P-AM-31 ☆ Fundamental Study on Ionization Conditions for MALDI Mass Spectrometry Imaging of Novel Agents for Boron Neutron Capture Therapy. (Univ. Osaka) ^Rena Yamashita
- 4P-AM-32 (3C-02-1440) ☆ MiProChip : Microfluidic Device for Multiplexed Isotopic labeling-based Streamlined Single-cell Profiling (^IoC, AS, <sup>2</sup>NTU) ^Huan-Chi Chiu<sup>12</sup>, Tsai-Fang Chou<sup>1</sup>, Sofani Gebreyesus<sup>1</sup>, Guan-Fu Chen<sup>1</sup>, Hsiung-Lin Tu<sup>1</sup>, Yu-Ju Chen<sup>12</sup>
- 4P-AM-33 Overcoming Bioanalytical Challenges in ADCs : A High-Sensitivity LC-MS Approach (Astellas Pharma Inc.) ^Toshiko Yahata, Masanori Nagata, Takafumi Akabane
- 4P-AM-34 iprm-PASEF MALDI MS/MS Imaging Reveals Specialized Metabolites Produced by the Cheese Rind Microbiome (^UCSC, <sup>2</sup>BRUKER, <sup>3</sup>BRUKERSG) ^Wen Dong Looi<sup>3</sup>, Robert Shepard<sup>1</sup>, Gordon Luu<sup>2</sup>, Sumankalai Ramachandran<sup>2</sup>, Azad Eshghi<sup>2</sup>, Laura Sanchez<sup>1</sup>
- 4P-AM-35 Proteomic Profiling of 5-Fluorouracil Resistance in Colorectal Cancer: Unveiling Molecular Signatures for Targeted Therapy (^CBDD, Taipei Med. Univ., <sup>2</sup>PhD CBDD, Taipei Med. Univ., <sup>3</sup>R&D, Natl. Defense Med. Cent., <sup>4</sup>GIMS, Natl. Defense Med. Cent.) ^Tsui-Chin Huang<sup>12</sup>, Tze-Ting Kuo<sup>23</sup>, Li-Chun Lin<sup>2</sup>, Hsin-Yi Chang<sup>34</sup>
- 4P-AM-36 ☆ Identification of coffee aroma using atmospheric pressure corona discharge ionization mass spectrometry (APCDI-MS) (Yokohama City Univ.) ^Momomi Morita, Kanako Sekimoto
- 4P-AM-37 Development of an Automated System for the Pretreatment of Small Amounts of Samples for Radiocarbon Measurements Using Accelerator Mass Spectrometry (Univ. Tokyo)  
^Yosuke Miyairi, Takahiro Aze, Yusuke Yokoyama
- 4P-AM-38 Simultaneous Quantification of Antiepileptic Drugs in Serum and Dried Blood Spots using Liquid Chromatography-Tandem Mass Spectrometry (^KRISS, <sup>2</sup>NRC) Mariam Abady<sup>12</sup>, Ji-Seon Jeong<sup>1</sup>, ^Ha-Jeong Kwon<sup>1</sup>

- 4P-AM-39 ☆ Development and Application of Cysteine-specific modification for LC-MS analysis (^Sch. Sci., Kitasato Univ., <sup>2</sup>Sch. Allied Health Sci., Kitasato Univ., <sup>3</sup>Cent. Disease Proteomics, Sch. Sci., Kitasato Univ.) ^Arisa Suto<sup>1</sup>, Yoshihiro Ishikawa<sup>1</sup>, Toshihide Matsumoto<sup>2</sup>, Yoshio Kodera<sup>13</sup>, Takashi Matsui<sup>13</sup>
- 4P-AM-40 ☆ Characterization of Toxin-like Peptides in the *Badumna insignis* Spider Venom (Kyoto Univ.) ^Tomoya Shidawara, Rei Yamamoto, Yoshiaki Nakagawa, Masahiro Miyashita
- 4P-AM-41 ☆ Elucidation of Degradation State of Glass Fiber Reinforced Polypropylene Using TG-TOFMS Coupled with Principal Component Analysis and Kendrick Mass Defect Analysis (AIST) ^Taiki Ozawa, Sayaka Nakamura, Hiroaki Sato, Hideyuki Shinzawa, Hideaki Hagihara, Ryota Watanabe
- 4P-AM-42 ☆ Peptidomic analysis of mouse tissues (^Sch. Sci., Kitasato Univ., <sup>2</sup>Sch. Med., Kitasato Univ., <sup>3</sup>Cent. Disease Proteomics, Sch. Sci., Kitasato Univ., <sup>4</sup>Kazusa DNA Research Institute) ^Yusei Okuda<sup>1</sup>, Makoto Itakura<sup>23</sup>, Ryo Konno<sup>4</sup>, Tomomi Taguchi<sup>2</sup>, Takeshi Miyatsuka<sup>2</sup>, Takashi Matsui<sup>13</sup>, Yusuke Kawashima<sup>4</sup>, Yoshio Kodera<sup>13</sup>
- 4P-AM-43 ☆ Protein Terminomics-centric Analyses of Human Noncanonical Proteomes Reveal the Diversity of Human Proteoforms (^Kyoto Univ., <sup>2</sup>Institute of Science Tokyo, <sup>3</sup>NIBIOHN) ^Riko Egawa<sup>1</sup>, Hiroshi Nishida<sup>1</sup>, Yuta Kochi<sup>2</sup>, Kosuke Ogata<sup>1</sup>, Yasushi Ishihama<sup>13</sup>
- 4P-AM-44 ☆ Simultaneous Imaging of Proteins and Metals : Nanoparticle-Based Immunoassay Combined with LA-ICP-MS (^UTokyo, <sup>2</sup>Juntendo Univ., <sup>3</sup>Dow Chemical Japan) ^Hiroki Nawa<sup>13</sup>, Takehisa Matsukawa<sup>2</sup>, Ayano Kubota<sup>2</sup>, Takafumi Hirata<sup>1</sup>
- 4P-AM-45 ☆ Method development for untargeted metabolomics investigating biomarkers for Functional Neurological Disorder in children and adolescents. (^CFS, UTS, <sup>2</sup>C3, UTS, <sup>3</sup>Centre for Chemistry, UTS, <sup>4</sup>The Children's Hospital at Westmead, Australia) ^Rinika Barua<sup>1</sup>, Shanlin Fu<sup>1</sup>, Jingyi Yan<sup>3</sup>, Unnikrishnan Kuzhumparambil<sup>2</sup>, Kasia Kozlowska<sup>4</sup>
- 4P-AM-46 ☆ Development of Isoform-Specific Substrate Peptides for Monitoring PKC Activity (^Kyoto Univ., <sup>2</sup>NCVC, <sup>3</sup>NIBIOHN) ^Saki Toi<sup>1</sup>, Junqi Liang<sup>1</sup>, Junna Nakazono<sup>1</sup>, Dai Sakamoto<sup>1</sup>, Naoyuki Sugiyama<sup>12</sup>, Yasushi Ishihama<sup>13</sup>

Day 4, June 25 (Wed.)

- 4P-AM-47 (2C-03-1640) ☆ Proteome-Wide Profiling of Protein Structural Dynamics by Phospho-Probing with Multiple Kinases (<sup>1</sup>Kyoto Univ., <sup>2</sup>NCVC, <sup>3</sup>NIBIOHN) <sup>o</sup>Asato Maeda<sup>1</sup>, Kōsuke Ogata<sup>1</sup>, Naoyuki Sugiyama<sup>1,2</sup>, Yasushi Ishihama<sup>1,3</sup>
- 4P-AM-48 ☆ Investigation of a Chiral Selective SALDI Substrate for Amino Acids Using MHD Effect (NIT) <sup>o</sup>Hiroki Tanaka, Yoshinori Iiguni, Shinya Kitagawa
- 4P-AM-49 ☆ Metabolomic analysis of extracellular vesicles released by cellular senescence (<sup>1</sup>Keio Univ., <sup>2</sup>NCC) <sup>o</sup>Ryosuke Hayasaka<sup>1</sup>, Sho Tabata<sup>1,2</sup>, Tomoyoshi Soga<sup>1</sup>, Akiyoshi Hirayama<sup>1</sup>
- 4P-AM-50 ☆ Mass spectrometry reveals the stoichiometric regulation and phosphorylation for early stage activation of NLRP3 inflammasome (<sup>1</sup>IBC, Academia Sinica, <sup>2</sup>IBS, NTU) <sup>o</sup>Ning-En Chang<sup>1</sup>, Yen-Ling Chen<sup>1,2</sup>, Hsin-Yung Yen<sup>1,2</sup>
- 4P-AM-51 ☆ Single-Molecule-Mediated Proton Transfer in Protonated Aminocinnamic Acid: Studied by Ion Mobility-CID-Mass Spectrometry (Tohoku Univ.) <sup>o</sup>Kengo Tsunoda, Daiki Fuse, Keijiro Ohshima, Fuminori Misaizu
- 4P-AM-52 ☆ The effect of orthokeratology lens wear on the proteins of tear fluid (<sup>1</sup>Menicon, <sup>2</sup>Nagoya Univ.) <sup>o</sup>Madoka Yoshimitsu<sup>1</sup>, Yuri Shimizu<sup>1</sup>, Hikaru Hirata<sup>1</sup>, Keiko Kano<sup>2</sup>, Emi Mishiro-Sato<sup>2</sup>, Taizo Sumide<sup>1</sup>
- [4P-PM] Poster Session 4P-PM
- Poster Display : 8:15 ~ 17:15
- Core time (Odd numbers) : 15:15 ~ 16:15
- Core time (Even numbers) : 16:15 ~ 17:15
- 4P-PM-01 (Withdrawn) Achieving High-Order Time Focusing with Single-Stage Reflectron TOFMS - A Theoretical Study (GRC, Academia Sinica) Yi-Hong Cai, <sup>o</sup>Yi-Sheng Wang
- 4P-PM-02 Dielectric Breakdown-based Ambient Ionization Mass Spectrometry (NYCU) Min-Li Wu, Te-Yu Chen, De-Yi Huang, Jia-Jen Tsai, Karuppuchamy Selvaprakash, Chin-Pao Chiu, Yi-Ying Wu, <sup>o</sup>Yu-Chie Chen
- 4P-PM-03 Mass Spectrometry Imaging of Crude Drugs Using Transfer Plates (<sup>1</sup>Kyushu Univ. Med. Sci., <sup>2</sup>Hamamatsu Univ. Sch. Med., <sup>3</sup>Preppers, <sup>4</sup>Hamamatsu Photonics) <sup>o</sup>Hisahiro Kai<sup>1</sup>, Takumi Sakamoto<sup>2,3</sup>, Takamasa Ikeda<sup>4</sup>, Yutaka Takahashi<sup>2,3</sup>, Mitsutoshi Setou<sup>2,3</sup>
- 4P-PM-04 ExD vs. EthCD: A Comparative Study for Top-Down Sequencing of Amphibian Disulfide Peptides (<sup>1</sup>MSU-BIT, <sup>2</sup>Agilent, <sup>3</sup>Univ. Hong Kong) <sup>o</sup>Dmitrii Mazur<sup>1</sup>, Tatiana Samgina<sup>1</sup>, Yinan Li<sup>3</sup>, Michael Hare<sup>2</sup>, Yuriy Vasil'ev<sup>2</sup>, Albert Lebedev<sup>1</sup>
- 4P-PM-05 A Comprehensive Strategy for Systematically Evaluating the Clinical Significance of Multiple Protein Biomarker Candidates in Bladder Cancer (<sup>1</sup>Chang Gung University, <sup>2</sup>Chang Gung Memorial Hospital) <sup>o</sup>Yi-Ting Chen<sup>1</sup>, Chien-Lun Chen<sup>2</sup>
- 4P-PM-06 AIST apps for analyzing various types of mass spectral/chromatogram data by data informatics techniques (AIST) <sup>o</sup>Hideyuki Shinzawa, Shogo Yamane, Ryota Watanabe, Taiki Ozawa, Sayaka Nakamura, Hideaki Hagihara
- 4P-PM-07 Quantitative analysis of tridecylcyclohexane in mice using SPME-GC/MS (<sup>1</sup>GSS Univ. Osaka, <sup>2</sup>NIBIOHN, <sup>3</sup>IPR Univ. Osaka) <sup>o</sup>Junichi Osuga<sup>1</sup>, Fuminori Iijima<sup>2</sup>, Yoshiatsu Aomine<sup>3</sup>, Toyomasa Katagiri<sup>2</sup>, Michisato Toyoda<sup>1</sup>
- 4P-PM-08 Study of Negative Differential Resistance and Ion Emission Characteristics from a Taylor Cone of Undiluted Ionic Liquid Using High-Pressure ESI (Univ. Yamanashi) <sup>o</sup>Lee Chuin Chen, Takeshi Matsuda
- 4P-PM-09 Investigation of correlation between glucoamylase and *haze-komi* in rice *koji* (<sup>1</sup>Osaka Univ., <sup>2</sup>Institute for Open and Transdisciplinary Research Initiatives) <sup>o</sup>Hiroko Shinoda<sup>1</sup>, Eiichiro Fukusaki<sup>1,2</sup>, Shuichi Shimma<sup>2</sup>
- 4P-PM-10 MALDI Mass Spectrometry Using 2D Nanomaterial MXene for Rapid Screening of Illicit Drugs (KRISS) Jiyeong Song, Ji-In Baek, Sohee Yoon
- 4P-PM-11 Structure Analysis of Alkaloids in Pt-coated Porous Plate MALDI Mass Spectrometry using a Spiral TOF Instrument. (<sup>1</sup>NAIST, <sup>2</sup>SUNBOR) <sup>o</sup>Yoshiko Nishikawa<sup>1</sup>, Tohru Yamagaki<sup>2</sup>
- 4P-PM-12 Exploration of Biomarkers Related to Metabolic Syndrome Induced by Atypical Antipsychotics (<sup>1</sup>Grad.Sch.Pharm.Sci, Tohoku Univ., <sup>2</sup>Grad.Sch.Pharm.Sci, Tohoku Univ./Dept.Pharm.Sci, Tohoku Univ.Hosp) <sup>o</sup>Haozhu Wang<sup>1</sup>, Masamitsu Makawa<sup>2</sup>, Nariyasu Mano<sup>2</sup>
- 4P-PM-13 High multiplexity imaging proteomics via tissue expansion (HKBU) <sup>o</sup>Xin Diao, Jianing Wang, Zongwei Cai

Day 4, June 25 (Wed.)

- 4P-PM-14** Ambient Ionization Mass Spectrometry for Rapid Characterization of Biomarkers on Inflamed Skin (NSYSU, Taiwan) <sup>o</sup>Shu-Yao Lin, Jentiae Shiea
- 4P-PM-15** Quantitative Analysis of Endogenous Neuropeptide Y in Developing Brains of Mice and Appetite formation (<sup>1</sup>SUNBOR, <sup>2</sup>Kanazawa Univ., <sup>3</sup>Hamamatsu Univ. of Medicine) <sup>o</sup>Tohru Yamagaki<sup>1</sup>, Tomohiro Osugi<sup>1</sup>, Yohei Shinmyo<sup>2,3</sup>, Hiroshi Kawasaki<sup>2</sup>, Honoo Satake<sup>1</sup>
- 4P-PM-16** Mass Spectrometry Analytical Tools in the Dating of the Chinese Ancient Scrolls (<sup>1</sup>MSU-BIT University, <sup>2</sup>LECO, USA) <sup>o</sup>Olga Poliakova<sup>1</sup>, Maria Kondratyeva<sup>1</sup>, Zhuangzhi Li<sup>1</sup>, Viatcheslav Artaev<sup>2</sup>, Jonell Shiel<sup>2</sup>, Scott Pugh<sup>2</sup>, Albert Lebedev<sup>1</sup>
- 4P-PM-17** Characterization of Flavor Components in Rice *Koji* during the *Koji* Molding Process (Osaka Univ) <sup>o</sup>Kansuke Fujikawa
- 4P-PM-18** Biologically Informative NA Deconvolution (BIND) promotes excavation of unique proteins and protein-protein interactions from proteomics datasets (CityUHK) <sup>o</sup>Weiheng Guo, Liang Zhang
- 4P-PM-19** Development of mass spectrometry-based single-cell multi-omics analysis (<sup>1</sup>Kyushu Univ., <sup>2</sup>RIKEN CBS, <sup>3</sup>YODAKA, <sup>4</sup>Niigata Univ., <sup>5</sup>RAP) <sup>o</sup>Kosuke Hata<sup>1</sup>, Asako Sakaue-Sawano<sup>2</sup>, Masatomo Takahashi<sup>1</sup>, Mamoru Hirafuji<sup>3</sup>, Kohta Nakatani<sup>1</sup>, Masaki Matsumoto<sup>4</sup>, Takeshi Bamba<sup>1</sup>, Atsushi Miyawaki<sup>2,5</sup>, Yoshihiro Izumi<sup>1</sup>
- 4P-PM-20** Comparison of protease activity in different malting methods using mass spectrometry imaging (<sup>1</sup>Osaka Univ., <sup>2</sup>OTRI) <sup>o</sup>Tomoka Takeno<sup>1</sup>, Eiichiro Fukusaki<sup>1,2</sup>, Shuichi Shimma<sup>1,2</sup>
- 4P-PM-21** UPLC-MS/MS Analysis of PFAS for Evaluation of its Removal from Drinking Water with Granular Activated Carbon (NTU EOHS) <sup>o</sup>Siao-Tong Chen, Gen Shuh Wang
- 4P-PM-22** Branched-Chain Amino Acid Metabolism as a Crucial Modulator of Cellular Senescence (Gunma Univ) <sup>o</sup>Hideru Obinata, Kazuki Irie, Yuma Aramaki, Junki Hoshino, Yoji Minamishima, Akimitsu Konishi
- 4P-PM-23** Repurposing Statins Induces Metabolic Reprogramming and Triggers Ferroptotic Regression in KRAS-Mutant Colorectal Cancer (HKBU) <sup>o</sup>Jieqing Feng, Hong Yan, Zongwei Cai
- 4P-PM-24** Development of Phosphoproteomics Prediction Model for Next-line Therapy in TKI-Resistant Non-Small Cell Lung Cancer (<sup>1</sup>NTU Chem, <sup>2</sup>IoC, <sup>3</sup>NTNU, <sup>4</sup>NTU CliLab) <sup>o</sup>Irene-Ya Tai<sup>1,2</sup>, Chiao-Chun Chang<sup>2</sup>, Shen-Shian Chan<sup>1,2</sup>, Yu-Hsuan Lin<sup>2,3</sup>, Yi-Ju Chen<sup>2</sup>, Sung-Liang Yu<sup>4</sup>, Yu-Ju Chen<sup>1,2</sup>
- 4P-PM-25** Structural Analysis of Anion Exchange Membranes for Alkaline Water Electrolysis via Thermal and Chemical Depolymerization Methods (Toray Research) <sup>o</sup>Tsuyoshi Akiyama, Akihiro Masuda, Naru Higeta, Keiko Matsuda
- 4P-PM-26** Developing OrthoCell Matrix to Enhance Absolute Protein Quantification Performance in LC-MS/MS: Demonstration of EGFR Mutation in Lung Cancer (<sup>1</sup>NTU, <sup>2</sup>IOC) <sup>o</sup>Chia-Yen Wang<sup>1,2</sup>, Huan-Chi Chiu<sup>2</sup>, Li-Yu Chen<sup>2</sup>, Ching-Yi Wan<sup>2</sup>, Yu-Ju Chen<sup>1,2</sup>
- 4P-PM-27** Single-cell native mass spectrometry of cultured human cells for characterization of protein non-covalent interactions (Yokohama City Univ.) <sup>o</sup>Noa Suzuki, Yuko Inatomi, <sup>o</sup>Michiko Taji, Tsuyoshi Konuma, Satoko Akashi
- 4P-PM-28** Proteomic Analysis of Sebocytes Co-Cultured with Mesenchymal Stem Cells (CNU) <sup>o</sup>Maryam Adelipour, Jeongkwon Kim
- 4P-PM-29** High-Throughput Synthesis of Stable Isotope-Labeled Peptides Using Synthetic ssDNA Oligo Pools. (RIKEN BDR) <sup>o</sup>Reiko Nakagawa, Keiko Masuda, Aya Sato, Yoshihiro Shimizu
- 4P-PM-30** Determination of Antifouling Booster Biocides in Seawater using Semi-automatic Solid-Phase Extraction (SPE) System and High-performance Liquid Chromatography-Tandem Mass Spectrometry (NPUST) <sup>o</sup>Tzu Wang, Te Kung
- 4P-PM-31** Exploration of Endogenous Metabolites Associated with Immune Responses in Bovine Serum (Osaka Univ.) <sup>o</sup>Hiroko Kato, Sicheng Tian
- 4P-PM-32** Targeted Metabolomics Reveals the Essential Role of Nicotinamide Mononucleotide Adenylyltransferase (NMNAT) in Nicotinamide Adenine Dinucleotide (NAD<sup>+</sup>) Homeostasis in the Cyanobacterium *Synechococcus elongatus* (<sup>1</sup>HKBU/Chem, <sup>2</sup>HKBU/Bio, <sup>3</sup>EIT) <sup>o</sup>Feng Zhang<sup>1</sup>, Hai Lei Zhang<sup>2</sup>, Peng Xi Wang<sup>2</sup>, Yiji Xia<sup>2</sup>, Zong Wei Cai<sup>1,3</sup>

Day 4, June 25 (Wed.)

- 4P-PM-33 MS Spectrometry based Proteomic Analysis of Bovine Serum for Development of Cell Culture Media (<sup>1</sup>KBSI, <sup>2</sup>KBSI\_2, <sup>3</sup>KRIBB, <sup>4</sup>UST) <sup>◦</sup>Soojin Park<sup>1</sup>, Hae Min Ju<sup>2</sup>, Jin Young Kim<sup>2,3</sup>, Heeyoun Hwang<sup>2,4</sup>
- 4P-PM-34 Comprehensive Analysis and Detailed Data Comparison of Skin Gas and Its Changes Using High-Sensitivity GCxGC-TOFMS (LECO) <sup>◦</sup>Masafumi Sakurai, Fumie Kabashima
- 4P-PM-35 Comparative Metabolic Profiling of Honey Bees (*Apis Mellifera*) in Response to Regional Differences and Climate Change in South Korea. (KIT) <sup>◦</sup>Sung-Gil Choi, Yoon-Jeong Jeon, Jin-Woo Park, Won Noh, Jong-Su Seo, Jong-Hwan Kim
- 4P-PM-36 The Development of the Cryogenic Ion Trap-TOF Mass Spectrometry for Infrared Photodissociation Spectroscopy (<sup>1</sup>Ningbo University, <sup>2</sup>Fudan University) <sup>◦</sup>Chuan-Fan Ding<sup>1</sup>, Fuxing Xu<sup>1</sup>, Guanjun Wang<sup>2</sup>, Chaoxian Chi<sup>1</sup>, Yinghua Yan<sup>1</sup>, Mingfei Zhou<sup>2</sup>
- 4P-PM-37 Metabolomic Analysis of Honey Bees (*Apis Mellifera*) Response to Coumaphos Exposure Using UPLC-Q-TOF/MS (KIT) <sup>◦</sup>Jin-Woo Park, Yoon-Jeong Jeon, Sung-Gil Choi, Won Noh, Jong-Su Seo, Jong-Hwan Kim
- 4P-PM-38 Spectra-Sum Method for Protein Quantification from LC-MS/MS and TMT labeling Data (<sup>1</sup>KBSI, <sup>2</sup>UST-KBSI, <sup>3</sup>CDDC Research Center) <sup>◦</sup>Heeyoun Hwang<sup>1,2</sup>, Hahyun Lee<sup>1,3</sup>, Geul Bang<sup>1</sup>, Jin Young Kim<sup>1,3</sup>
- 4P-PM-39 Optimization and Performance Evaluation of a Portable GC for the Detection of Volatile Organic Compounds and Its Compatibility with APCI-MS (<sup>1</sup>CNU, <sup>2</sup>BIONEER, <sup>3</sup>Chungnam National Univ.) <sup>◦</sup>Jiwon Park<sup>1</sup>, Sunjong Baek<sup>2</sup>, Jeongkwon Kim<sup>3</sup>
- 4P-PM-40 Dependence of Decoy Database on Peptide Identification Numbers in Bottom-Up Proteomics (<sup>1</sup>Kyoto Univ., <sup>2</sup>NIBN) <sup>◦</sup>Yuichiro Fujita<sup>1</sup>, Yasushi Ishihama<sup>1,2</sup>
- 4P-PM-41 Comparison of PEG Precipitation and Ultrafiltration for Serum Exosome Enrichment: Proteomic Analysis Using Mass Spectrometry (<sup>1</sup>CNU, <sup>2</sup>Chungnam National Univ.) <sup>◦</sup>Hyeongyu Yu<sup>1</sup>, Jeongkwon Kim<sup>2</sup>
- 4P-PM-42 Structures of (Li<sup>+</sup>)<sub>n</sub>Li<sup>+</sup> Cluster Ions Solvated by Ethylenediamine (POSTECH) <sup>◦</sup>Yunseop Choi, Jongcheol Seo

- 4P-PM-43 Charge-Induced Unzipping Pathways Compared with DNA/RNA Hairpins Melting Using IMS-MS (POSTECH) <sup>◦</sup>Dahye Im, Jongcheol Seo
- 4P-PM-44 Phosphotyrosine Spectral Library-enhanced DIA-PRM Mass Spectrometry Enables Machine Learning-powered Companion Biomarker Discovery in Lung Cancer (<sup>1</sup>Dept. of Chemistry, NTU, Taiwan, <sup>2</sup>IoC, AS, Taiwan, <sup>3</sup>Dept. of Chemistry, NTNU, Taiwan, <sup>4</sup>Dept. of BST, NTU, Taiwan) <sup>◦</sup>Shen-Shian Chan<sup>1,2</sup>, Chiao-Chun Chang<sup>1,2</sup>, Irene-Ya Tai<sup>1,2</sup>, Yu-Hsuan Lin<sup>2,3</sup>, Yi-Ju Chen<sup>2</sup>, Sung-Liang Yu<sup>4</sup>, Yu-Ju Chen<sup>1,2</sup>
- 4P-PM-45 SALDI-MS using Particle Aggregation-Type Substrates with Two-Dimensional Lattice-like Patterning of Magnetic Nanoparticles on Soft Magnetic Microgrids (Nagoya Inst. Tech.) <sup>◦</sup>Yoshinori Iiguni, Mai Sakamoto, Shuta Sawatari, Shinya Kitagawa
- 4P-PM-46 High resolution multi-turn TOF-MS for native mass analyses of large biomolecules (<sup>1</sup>Shimadzu Corporation, <sup>2</sup>Osaka Metropolitan Univ., <sup>3</sup>Yokohama City Univ.) Yusuke Tateishi<sup>1</sup>, Hiroko Morinaga<sup>1</sup>, Hiroyuki Miura<sup>1</sup>, Yoshinori Arita<sup>1</sup>, <sup>◦</sup>Masaru Nishiguchi<sup>1</sup>, Daisuke Okumura<sup>1</sup>, Hitomi Sawai<sup>2</sup>, Michiko Tajiri<sup>3</sup>, Terukazu Nogi<sup>3</sup>, Satoko Akashi<sup>3</sup>
- 4P-PM-47 Comprehensive Mapping of Nucleosome-Nuclear Protein Interactions Using Cross-linking Mass Spectrometry (IQB, UTokyo) <sup>◦</sup>Lumi Negishi, Tomoko Ito, Junko Kato, Tomoya Kujirai, Hitoshi Kurumizaka
- 4P-PM-48 Evaluation of contamination sources of metal elements by monitoring for airborne materials in the cleanroom at extraterrestrial sample curation facility (<sup>1</sup>JAXA, <sup>2</sup>Marine Works Japan) <sup>◦</sup>Arisa Nakano<sup>1</sup>, Ryota Fukai<sup>1</sup>, Yuya Hitomi<sup>2</sup>, Masahiro Nishimura<sup>1</sup>
- 4P-PM-49 Ensuring Depth and Completeness in m/z Selection: A Methodological Approach to Mass Spectrometry Imaging Data Summarization Using UMAP (<sup>1</sup>Shimadzu Corp., <sup>2</sup>Doshisha Univ.) <sup>◦</sup>Shinichi Yamaguchi<sup>1</sup>, Masaya Ikegawa<sup>2</sup>
- 4P-PM-50 Sensitive methods for characterization of the HLA-DR immunopeptidome of extracellular vesicles from immune cells from bronchoalveolar lavage in respiratory disease (<sup>1</sup>Karolinska inst, <sup>2</sup>Karolinska Inst) Benedikt Zohrer<sup>1</sup>, Iryna Kolosenko<sup>1</sup>, Nicole Wagner<sup>1</sup>, Magnus Skold<sup>1</sup>, Akos Vegvari<sup>2</sup>, <sup>◦</sup>Asa Wheelock<sup>1</sup>

Day 4, June 25 (Wed.)

⟨Corporate Posters⟩

[4P-CP] Corporate Posters 4P-CP

Poster Display and Presentation : 8:15 ~ 17:15

4P-CP-01 COMPLETE CHARACTERIZATION

OF KADCYLA USING A MODIFIED HYBRID QUADRUPOLE-ORBITRAP MASS SPECTROMETRY WITH ELECTRON-TRANSFER/HIGHER-ENERGY COLLISION DISSOCIATION (ETHCD) FRAGMENTATION (<sup>1</sup>Thermo Fisher Scientific Shanghai, <sup>2</sup>Thermo Fisher Scientific Singapore) Xiaoxi Zhang<sup>1</sup>, <sup>o</sup>Nicole Zhang<sup>2</sup>

4P-CP-02 C O M P R E H E N S I V E A N D

HIGH-THROUGHPUT PLASMA PROTEOME PROFILING FOR BIOMARKER DISCOVERY USING A MODIFIED THERMO SCIENTIFIC™ ORBITRAP™ ASTRAL™ MASS SPECTROMETER (<sup>1</sup>Thermo Fisher Scientific San Jose, <sup>2</sup>Thermo Fisher Scientific Singapore) Jared Deyarmin<sup>1</sup>, <sup>o</sup>Nicole Zhang<sup>2</sup>

4P-CP-03 HIGH-THROUGHPUT PLASMA PRO-

TEOMICS PIPELINE ENHANCED BIOMARKER DISCOVERY IN EARLY DETECTION OF NON-SMOKING LUNG CANCER (<sup>1</sup>National Taiwan University, <sup>2</sup>Academia Sinica Taipei, <sup>3</sup>Academia Sinica, <sup>4</sup>Thermo Fisher Scientific San Jose, <sup>5</sup>Thermo Fisher Scientific Singapore, <sup>6</sup>National Taiwan University Hospital, <sup>7</sup>Chung Shan Medical University Hospital, <sup>8</sup>National Taiwan University Hospital and National Taiwan University College of Medicine, <sup>9</sup>National Taiwan University Hospital, Taipei, <sup>10</sup>Thermo Fisher Scientific Poland) Sung-Liang Yu<sup>1</sup>, Yi-Ju Chen<sup>2</sup>, Kun-Hao Chang<sup>2,3</sup>, Yi-Shuang Chuang<sup>2</sup>, Yi-Jing Hsiao<sup>2</sup>, Chong-Jen Yu<sup>6</sup>, Daniel Hermanson<sup>4</sup>, Gee-Chen Chang<sup>7</sup>, Jin-Shing Chen<sup>8</sup>, Pan-Chyr Yang<sup>9</sup>, Yu-Ju Chen<sup>2</sup>, Maciej Bromirski<sup>10</sup>, <sup>o</sup>Nicole Zhang<sup>5</sup>

# Author Index

## 【A】

Abady, Mariam 4P-AM-38  
Abe, Yoshio 2P-AM-26  
Abe, Yuichi 4C-O1-1155  
Adachi, Jun 2P-AM-03, ○4C-O1-1155  
Adachi, Tomoko 2P-AM-01  
Adelipour, Maryam ○4P-PM-28  
Agena, Akihisa 3P-PM-42  
Ahmad, Shabir ○2P-AM-13  
Ahn, Hui-Yeon 2P-AM-39, 2P-PM-34, 3P-PM-27,  
    4P-AM-28  
Akabane, Takafumi 4P-AM-33  
Akamatsu, Koshin ○4B-O1-1210 (3P-PM-48)  
Akashi, Satoko ○1-AW-1350, 4P-PM-27, 4P-PM-46  
Akiyama, Hisako ○3B-O1-1155  
Akiyama, Tomoyuki 3P-AM-05  
Akiyama, Tsuyoshi ○4P-PM-25  
Ali, Ahmed 1P-LB-07  
Alonzo, Morgan 2P-AM-46  
Andersen, Michael 4C-L-1245  
Ando, Mami 2P-AM-06  
Ando, Masahiro 3C-O2-1455  
Anegawa, Aya ○4B-L-1245, ○4B-O2-1425  
Ano, Takashi 2P-PM-44  
Aoki, Masahiko 4C-O1-1155  
Aoki, Mikio 3P-PM-36  
Aoki, Miwa 3A-O1-1225  
Aoki, Wataru 2P-PM-12  
Aoki-Kinoshita, Kiyoko 3B-O2-1455  
Aomine, Yoshiatsu 4P-PM-07  
Arafah, Azhar ○2P-AM-30  
Arakawa, Akihiro 3P-PM-30  
Araki, Norie 3P-PM-34  
Aramaki, Yuma 4P-PM-22  
Arita, Makoto ○2A-O3-1540, 2B-O1-1210 (3P-AM-51)  
Arita, Yoshinori 4P-PM-46  
Aritaki, Shintaro 2P-PM-12  
Arrey, Tabiwang 3P-PM-47  
Arsene, Cristian ○3C-O1-1140  
Artaev, Viatcheslav 4P-PM-16  
Asakura, Kozue ○1P-PM-01  
Asano, Masahiko 2A-O1-1240  
Asano, Natsuyo 1P-PM-16  
Asperger, Arndt 1P-PM-17  
Aung, Tin 3A-O1-1125  
Aze, Takahiro 4P-AM-37  
Azuma, Yusuke ○2P-PM-29

## 【B】

Bae, Myung Ae 3A-O2-1425  
Baek, Ji-In 4P-PM-10  
Baek, Sunjong 4P-PM-39  
Bai, Yu 2P-PM-40, ○3C-O2-1355  
Bailey, Melanie 4A-L-1245  
Bajo, Ken-ichi 3P-AM-30  
Ballantyne, Joanne 3P-PM-18  
Bamba, Takeshi 2A-O2-1510, 2P-AM-10, 2P-AM-11,  
    2P-PM-24, 3C-O2-1455, 3C-O3-1630, 3P-PM-43,  
    4P-PM-19  
Bandoh, Karin 3P-AM-28  
Bang, Geul 4P-PM-38  
Barua, Rinika ○4P-AM-45  
Batista Junior, Almir 2P-AM-40  
Batruch, Ihor 3P-AM-13  
Benefield, Aurelie 4C-O2-1410  
Benzenberg, Lukas 2P-PM-06  
Bernardo, Ricardo 2P-AM-40  
Bi, Xuezhi 3A-O1-1125  
Bieske, Evan 4A-O1-1225 (3P-PM-51)  
Bills, Brandon 3P-CP-01  
Bishop, David 2P-PM-36, 3A-O3-1630 (4P-AM-20)  
Blanksby, Stephen ○3A-L-1245-2, 4A-O1-1140,  
    4A-O1-1225 (3P-PM-51), ○4C-O2-1410  
Boku, Narikazu 4C-O1-1155  
Bomme Gowda, Siddabasave Gowda 3P-AM-33  
Bowen, Chris 2P-AM-32  
Boyarkine, Oleg ○4A-O2-1440  
Briones, Shazneil 3P-PM-18, 4P-AM-08  
Bromirska, Maciej 2A-L-1300, 4P-CP-03  
Brydon, Samuel ○4A-O1-1225 (3P-PM-51)  
Busse, Linus 2P-PM-06

## 【C】

Cai, Yi-Hong ○2P-PM-09, 4P-PM-01  
Cai, Zhijun 4A-O2-1355  
Cai, Zong Wei 4P-PM-32  
Cai, Zongwei 2P-PM-15, 3B-O1-1140 (4P-AM-02),  
    3P-AM-06, 4P-PM-13, 4P-PM-23  
Cao, Wenjin 1P-PM-43  
Carneiro, Willian 2P-AM-40  
Carroll, Anthony 2A-O3-1640 (3P-AM-52), 3P-PM-49  
Cawley, Adam 2P-AM-44  
Cexus, Olivier 3P-PM-18, 4P-AM-08  
Chamarthi, Maheswar 2P-PM-49  
Chan, Bun 2P-AM-32  
Chan, Shen-Shian 4P-PM-24, ○4P-PM-44  
Chang, Chen Yu ○1P-PM-33

Chang, Chiao-Chun 4P-PM-24, 4P-PM-44  
 Chang, Chih-Jui 3P-PM-15  
 Chang, Chung-Fa 3P-PM-05  
 Chang, Fang-Hsuan ○1P-LB-09  
 Chang, Gee-Chen 3P-PM-47, 4P-CP-03  
 Chang, Hsin-Yi 1P-PM-30, 1P-PM-36, 1P-PM-38,  
     ○2A-O2-1440, 4P-AM-35  
 Chang, Huan-Chen 3P-PM-21  
 Chang, Kun-Hao ○3P-PM-47, 4P-CP-03  
 Chang, Ning-En 2P-PM-51, ○4P-AM-50  
 Chang, Ruey-Yi 3P-PM-21  
 Chang, Shu-Ping ○3P-AM-08  
 Chang, Yuan-Jhe 2P-PM-23, 4B-O2-1455 (2P-PM-16),  
     4P-AM-09  
 Chao, Mu-Rong 2P-PM-23, 4B-O2-1455 (2P-PM-16),  
     4P-AM-09  
 Chao, Szu-Yi ○4B-O2-1455 (2P-PM-16)  
 Chaves, Andrea ○2P-AM-40  
 Chen, Angeline 2P-CP-01  
 Chen, Baiyu 1P-LB-10  
 Chen, Chao-Jung ○2B-O1-1140, 3P-AM-08  
 Chen, Chen 4P-AM-13  
 Chen, Chien-Lun 4P-PM-05  
 Chen, Guan-Fu 3C-O2-1440 (4P-AM-32)  
 Chen, Guan-Yuan 3C-O3-1615  
 Chen, Huan ○3P-PM-07  
 Chen, Jin-Shing 3P-PM-47, 4P-CP-03  
 Chen, Lee Chuin 1P-PM-14, 3P-AM-07, 3P-AM-22,  
     3P-PM-22, 4P-AM-18, ○4P-PM-08  
 Chen, Leijian ○2P-AM-07  
 Chen, Li-Yu 4P-PM-26  
 Chen, Mei Huei 2P-AM-38  
 Chen, Mei-Lien 2P-AM-33, 3P-AM-20  
 Chen, Pai-Shan ○4B-O1-1125  
 Chen, Pau Chung 2P-AM-38  
 Chen, Ping ○2B-O1-1225 (3P-AM-15)  
 Chen, Po-Tsang ○4P-AM-17  
 Chen, Shao-Kuan 2P-PM-01  
 Chen, Shuwen 3A-O1-1125  
 Chen, Siao-Tong ○4P-PM-21  
 Chen, Sih Yu ○2P-AM-38  
 Chen, Sung-Fang 4P-AM-23, 4P-AM-29  
 Chen, Te-Yu 4P-PM-02  
 Chen, Ting-An 2C-O3-1555  
 Chen, Weiwei 2A-O1-1225 (3P-AM-43)  
 Chen, Wen-Ling ○2P-PM-02  
 Chen, Xiangting ○3P-PM-22  
 Chen, Yen-Erh ○3P-AM-24  
 Chen, Yen-Ling 4P-AM-50  
 Chen, Yet-Ran 2P-PM-13, ○3C-O3-1545, 3P-AM-14  
 Chen, Yi-An 2P-PM-51  
 Chen, Yi-Ju 3P-PM-47, 4P-CP-03, 4P-PM-24, 4P-PM-44  
 Chen, Yi-Ting ○4P-PM-05  
 Chen, Ying-An ○2P-AM-20  
 Chen, Ying-Lan 2P-AM-20, 2P-AM-21  
 Chen, Yu-Chie ○4P-PM-02  
 Chen, Yu-Chung 3P-PM-21  
 Chen, Yu-Ju ○2A-L-1300, 2C-O1-1225, ○2C-O2-1410,  
     2P-AM-22, 3C-O2-1440 (4P-AM-32), 3P-PM-47,  
     4B-O1-1225, 4P-CP-03, 4P-PM-24, 4P-PM-26,  
     4P-PM-44  
 Chen, Zhiwei 2P-PM-15  
 Cheng, Chia-Liang 3P-PM-21  
 Cheng, Chih-Ning 4C-O2-1425  
 Cheng, Chung-Yi 3P-AM-23  
 Cheng, Hsiang-Chun ○4B-O1-1225  
 Cheng, Yi-Feng 2P-PM-10  
 Cheng, Yu-Xing ○2P-AM-33  
 Cheok, Chit Fang 3A-O1-1125  
 Cheong, Jaechul 1P-LB-02  
 Chi, Chaoxian 4P-PM-36  
 Chi, Tsun-Hao 3P-AM-09  
 Chiang, Ting-Yi ○3P-PM-33  
 Chiba, Hitoshi 3P-AM-33  
 Chien, Han-Ju 1P-PM-02, 1P-PM-11, 2P-PM-10, 2P-PM-11,  
     ○3P-AM-02  
 Chiou, Ying-Ting 2P-PM-37  
 Chisaka, Risa ○1P-PM-25  
 Chiu, Chin-Pao 4P-PM-02  
 Chiu, Huai-Hsuan ○3P-AM-09  
 Chiu, Huan-Chi ○3C-O2-1440 (4P-AM-32), 4P-PM-26  
 Chiu, Yi-Pang 2P-PM-26  
 Cho, Sung-Hee 3A-O2-1425  
 Choi, Eun-Song 2P-AM-23, 2P-AM-24, 2P-AM-39,  
     ○2P-PM-34, 3P-PM-24, 3P-PM-27, 4P-AM-28  
 Choi, Sung-Gil ○4P-PM-35, 4P-PM-37  
 Choi, Yunseop ○4P-PM-42  
 Chong, Jun Yi ○1P-PM-30  
 Choo, Andre 3A-O1-1125  
 Choong, Laura ○2P-AM-34  
 Chou, Po-Yu ○4P-AM-26  
 Chou, Tsai-Fang 3C-O2-1440 (4P-AM-32)  
 Chow, Wing Sze 4P-AM-25  
 Chu, Fengjian 2A-O1-1225 (3P-AM-43)  
 Chu, Hongjian 4A-O1-1155  
 Chu, Ivan ○4A-O1-1210  
 Chuang, Yi-Shuang 3P-PM-47, 4P-CP-03  
 Chung, Ming-Chi 3P-PM-21  
 Chung, Yi-Lun ○3P-PM-17  
 Cien, Po-Jung 3P-PM-33  
 Cummins, Scott 1P-PM-27  
 Czech, Henryk 3P-PM-46

## 【D】

D'Esposito, Rebecca 3P-AM-12

Dale, Russell 2P-PM-38  
Date, Motoki ○2P-PM-27  
de Faria, Emiret 2P-PM-46  
de Oliveira, Cecilia 2P-PM-46  
Deguchi, Yuya 3P-AM-21  
dela Rosa, Mira 2C-O1-1225  
Deng, Fanghui 3C-O3-1645 (2P-PM-05)  
Descanzo, Mhikee 3P-AM-16, ○3P-PM-21  
Deyarmin, Jared 3P-PM-47, 4P-CP-02  
Dhisale, Vaishnavi ○3P-AM-16  
Diao, Xin ○4P-PM-13  
Dikler, Sergei 1P-PM-17  
Ding, Chuan-Fan ○4P-PM-36  
Ding, Li ○1P-LB-10  
Dohmae, Naoshi ○4P-AM-12  
Donald, William 2C-O2-1440 (3P-PM-41)  
Doneanu, Catalin 3A-O2-1440  
Dong, Xueming 3P-PM-40  
Dragutinovic, Iliya 2P-AM-34  
Du, Jiong-Heng ○3P-PM-25  
Duke, Mary 1P-PM-27

## 【E】

Easterling, Michael 3B-T-1510  
Egawa, Masafumi 3P-AM-21  
Egawa, Riko ○4P-AM-43  
Eguchi, Miki 3P-AM-33  
Eguchi, Nao ○2P-AM-47  
Ehlert, Sven 3P-PM-46  
Ekroos, Kim ○4C-O2-1455  
Elbourne, Madysen ○2P-AM-44  
Elfar, Gamal Ahmed 3A-O1-1125  
Ellis, Shane 2P-PM-36  
Elpa, Decibel 1P-PM-24, 3P-AM-48  
Emrah, Chimnaz 4B-O1-1155 (3P-PM-28)  
Eshghi, Azad 4P-AM-34  
Ezaki, Tatsuya 1P-PM-22

## 【F】

Fan, Kai-Ting ○2P-PM-13, 3P-AM-14  
Farhan, Ali ○3P-PM-09  
Feleke, Dereje ○1P-LB-06, ○4P-AM-11  
Feng, Hongru 2A-O1-1225 (3P-AM-43),  
4B-O1-1140 (2P-PM-33)  
Feng, Jieqing 4P-AM-13, ○4P-PM-23  
Feng, Xiaoxia 2B-O2-1440  
Ferrando Plo, Lucas 4B-O1-1155 (3P-PM-28)  
Ferrinho, Scarlet 3P-PM-18, 4P-AM-08  
Fifield, Keith 3B-O3-1600  
Firsova, Alexandra 3B-O1-1225  
Fogarty, Conor 1P-PM-27

Fox, Jonathan 2P-PM-08  
Friedrich, Jochen 3B-T-1510  
Froehlich, Michaela ○3B-O3-1545, 3B-O3-1600  
Fu, Beiyao 3P-PM-31  
Fu, Shanlin 2P-AM-44, 2P-AM-46, 4P-AM-45  
Fu, Yen-Pei 3P-AM-16  
Fujii, Yusuke ○2P-PM-50  
Fujikawa, Kansuke ○4P-PM-17  
Fujiki, Takumi ○1P-PM-44  
Fujimoto, Rika ○3P-AM-03  
Fujimura, Yoshinori 4P-AM-07  
Fujisawa, Ayano 2P-PM-44  
Fujita, Yuichiro ○4P-PM-40  
Fujitani, Masaya 3A-O1-1225  
Fukai, Ryota ○4A-O2-1455 (2P-PM-45), 4P-PM-48  
Fukasawa, Keiko 3B-O1-1155  
Fukasawa, Maki 3P-PM-42  
Fukaya, Masashi 2P-PM-12  
Fuke, Ayumu 2P-PM-42  
Fuke, Chiaki 3P-PM-42  
Fukuda, Ayano ○2P-PM-28  
Fukuda, Kohei ○2P-AM-35, 3P-PM-37  
Fukuhara, Mitsuko 1P-PM-10, 1P-PM-23,  
3A-O2-1455 (4P-AM-27), 3P-AM-28  
Fukumoto, Ryota ○3P-AM-36  
Fukumoto, Takeshi 3B-O1-1210  
Fukunaga, Yosuke 2P-AM-03  
Fukusaki, Eiichiro 4P-PM-09, 4P-PM-20  
Fukushi, Kohki ○2P-PM-17  
Fukushima, Nanae 3P-AM-47  
Fukuuchi, Tomoko 3P-AM-05  
Fukuyama, Daisuke ○3P-PM-32  
Fulloon, Therese 4A-O1-1140  
Funakoshi, Goro ○2A-O1-1210  
Furukawa, Jun-ichi 2P-PM-18, ○4P-AM-14  
Furusho, Aogu 3C-O2-1410, ○3P-PM-30  
Furuta, Yuma ○1P-PM-23  
Furutani, Hiroshi 2P-PM-50  
Fuse, Daiki 4P-AM-51  
Futamata, Ryota 3A-O1-1225

## 【G】

Gab-Allah, Mohamed ○3A-O3-1645  
Gao, Xufeng ○2P-AM-02  
Gao, Youhe ○4P-AM-10  
Gebreyesus, Sofani 3C-O2-1440 (4P-AM-32)  
Geronca, Jherico ○2P-AM-49  
Gethings, Lee 2P-AM-19, 3P-PM-18, 3P-PM-38, 4P-AM-08  
Giles, Kevin 3P-AM-12  
Gillies, Mark 2P-AM-30  
Gioves, Rafail 2C-L-1300  
Gizaw, Solomon 1P-LB-06, 4P-AM-11

Goda, Nobuhito 2P-PM-22  
Gondo, Keisuke 2P-AM-01  
Goto, Chigusa 1P-LB-12  
Goto, Maiko 3P-PM-43  
Gould, David 3P-PM-10  
Govil, Pawan 2P-AM-50  
Greig, Mike ○2C-L-1300, ○3B-T-1510  
Greimel, Peter 3B-O1-1155  
Greis, Kim ○2P-PM-06  
Grigoriadis, Anastasios 2C-L-1300  
Grim, Cynthia 3P-CP-03  
Guducu, Isa ○2A-O1-1155  
Gunji, Daigo 4C-O1-1155  
Guo, Weiheng ○4P-PM-18  
Günther, Detlef 3B-O3-1630

## 【H】

Ha, Seungho ○1P-LB-03  
Hagihara, Hideaki 3P-AM-40, 4P-AM-41, 4P-PM-06  
Hakim, Hassib 2B-O2-1510  
Hamamoto, Yuta ○1P-PM-40  
Hamase, Kenji 2P-AM-09  
Hamilton, Brett 2A-O3-1640 (3P-AM-52)  
Han, Chia Li 1P-PM-13  
Han, Velda 2P-PM-38  
Hanamatsu, Hisatoshi 2P-PM-18, 4P-AM-14  
Hancock, Peter 3P-PM-10  
Hancock, Sarah 2P-AM-34  
Hankemeier, Thomas 1P-LB-07  
Harada, Kotaro ○3P-PM-43  
Hare, Michael 4P-PM-04  
Haris, Anisha 3P-AM-12  
Harland, Gary 3P-PM-18  
Hase, Yuta ○1P-PM-14  
Hasenaka, Toshiaki 3P-AM-47  
Hashimoto, Junichi 2P-PM-19  
Hashimoto, Masahiro ○3P-PM-20  
Hashimoto, Shunji 3P-AM-21  
Hata, Kosuke 2P-PM-24, 3C-O2-1455, ○4P-PM-19  
Hata, Tsuyoshi 2P-AM-14  
Hatano, Atsushi 3C-O2-1455  
Hattendorf, Bodo 3B-O3-1630  
Hattori, Nobutaka 3B-O1-1155  
Hattori, Takanari 2P-AM-25  
Hayakawa, Eisuke ○3B-O2-1355  
Hayakawa, Yoshihiro 3P-PM-43  
Hayasaka, Ryosuke 3P-AM-31, ○4P-AM-49  
Hayton, Joshua 2A-O3-1640 (3P-AM-52), 3P-PM-49  
He, Jia-Jun 2A-O2-1440  
Heide, Jan 3P-PM-46  
Helser, Thomas 2P-AM-35  
Henriques, Sonia 4C-O2-1410

Heravizadeh, Omidreza ○2P-AM-10, 2P-AM-11  
Hermanson, Daniel 3P-PM-47, 4P-CP-03  
Heywood, David 4P-AM-08  
Hibiya, Yuki 2P-AM-35  
Higeta, Naru 4P-PM-25  
Higo, Daisuke 2P-AM-51  
Hinou, Hiroshi 1P-LB-06, 2P-PM-17,  
3C-O1-1155 (4P-AM-01), 4P-AM-11, 4P-AM-24  
Hirafuji, Mamoru 4P-PM-19  
Hirahara, Yoshichika 2P-AM-06  
Hirai, Masami 2P-AM-37  
Hirai, Shinichiro 4P-AM-24  
Hiramoto, Masashi ○2P-AM-15  
Hirano, Hidekazu 4C-O1-1155  
Hirano, Masayo 2P-AM-03  
Hiranuma, Yuna ○2B-O1-1155 (3P-AM-49)  
Hiraoka, Kenzo 1P-PM-14  
Hirata, Hikaru 4P-AM-52  
Hirata, Takafumi 2A-O3-1625, 4P-AM-44  
Hiratsuka, Masahiro 4P-AM-19  
Hirayama, Akiyoshi ○1P-LB-11, 2A-O2-1510, 3P-AM-31,  
4P-AM-49  
Hirohata, Kiichi 3A-O2-1455 (4P-AM-27)  
Hirose, Kenji 1P-PM-22, 2P-PM-08, ○3P-AM-12  
Hirose, Takehiro 2C-O3-1625  
Hiroshi, Hinou 1P-LB-05, 3P-PM-12  
Hishikawa, Michiyo 2A-O2-1510  
Hishinuma, Eiji ○1P-PM-20, 4P-AM-19  
Hitomi, Yuya 4A-O2-1455 (2P-PM-45), 4P-PM-48  
Hiyama, Akari 3P-PM-23  
Ho, Hsin-Jung 3P-AM-33  
Ho, Yin Ying 3A-O1-1125  
Ho, Ying Swan ○3A-O1-1125  
Hoffmann, Peter ○2C-O2-1425  
Holland, Darren 2A-O3-1640 (3P-AM-52), 3P-PM-49  
Honda, Fumiya 2P-PM-43  
Honda, Kazufumi 4C-O1-1155  
Honda, Kohsuke 2P-AM-25  
Hondo, Toshinobu 3P-PM-37, ○4A-O2-1425  
Hong, Jason 4A-O1-1140  
Hong, Seungwoo ○2P-PM-20  
Hongo, Yayoi ○2P-AM-09  
Horiuchi, Ei ○1P-PM-09  
Horiyama, Shizuyo ○1P-PM-12  
Horng, Yu-Tze 3P-AM-16  
Hoshina, Shunsuke 3P-AM-37, ○4P-AM-22  
Hoshino, Junki 4P-PM-22  
Hoshino, Masato 1P-PM-32  
Hosojima, Daiki 3P-PM-30  
Hosokawa, Masahito 3C-O2-1455  
Hotta, Koichiro 2A-O3-1610  
Hsia, Shih-Min 1P-PM-30  
Hsiao, Yi-Jing 3P-PM-47, 4P-CP-03

Hsu, Chuan-Chih 2P-AM-21  
Hsu, Chun-Hua ○4P-AM-04  
Hsu, Jia-Wei 3P-AM-14  
Hsu, Pang-Hung ○3P-PM-05  
Hsu, Shang-Te 2P-PM-51  
Hsu, Yi-Chiung 4P-AM-17  
Hsu, YuanZhang ○2P-AM-08  
Hu, Chiung-Wen 2P-PM-23, 4B-O2-1455 (2P-PM-16),  
    4P-AM-09  
Hu, Danna ○2P-PM-32  
Hu, Hsiao-Chi 2P-PM-02  
Huang, Chi-Jung 2P-PM-01  
Huang, Chun-Jen 4P-AM-17  
Huang, De-Yi 4P-PM-02  
Huang, Fu-Lien 2P-AM-22  
Huang, Hsuan-Han 2P-PM-10  
Huang, Jun ○4P-AM-06  
Huang, Kuan-Hao 2P-AM-21  
Huang, Li-Wen ○2P-AM-28  
Huang, Min 3P-AM-45  
Huang, San-Yuan 3P-AM-08  
Huang, Tsui-Chin 1P-PM-30, 1P-PM-36, 1P-PM-38,  
    2A-O2-1440, ○4P-AM-35  
Huang, Xiaoyue ○1P-LB-07  
Huang, Yi-Lan 4P-AM-07  
Huang, Yu-Fang 2P-AM-13, 2P-AM-33, 2P-PM-21,  
    3P-AM-18, 3P-AM-20, 3P-PM-17, 3P-PM-25  
Huckstep, Hannah 2C-O3-1540  
Hui, Shu-Ping 3P-AM-33  
Humphrey, Sean ○2C-O3-1540  
Hung, Sheng-Chi ○3P-AM-14  
Hwang, Heeyoun 1P-PM-26, 3P-AM-10, 4P-PM-33,  
    ○4P-PM-38  
Hwang, Ying-Rong ○1P-PM-24

## 【I】

Iberri, David 2C-O1-1210  
Ichinose, Tomomi ○4P-AM-07  
Igarashi, Kouhei 4C-O2-1440  
Ihalainen, Mika 2B-O2-1510  
Iharada, Masafumi 3C-O2-1410, 4A-L-1245, 4P-AM-16  
Iiguni, Yoshinori 4P-AM-48, ○4P-PM-45  
Iiguni, Yosinori 2C-O3-1625  
Iijima, Fuminori 4P-PM-07  
Iijima, Mariko 1P-PM-06  
Iizuka, Tsuyoshi 2P-AM-35  
Ikeda, Akari 2A-O2-1510, 2P-AM-18  
Ikeda, Kazuki 2P-AM-11, 3C-O2-1455, 3P-PM-43  
Ikeda, Kazutaka ○4C-O2-1440  
Ikeda, Satsuki 2A-O2-1510  
Ikeda, Takamasa ○1P-PM-07, 3P-PM-29, 4P-PM-03  
Ikeda, Tomohiko ○1P-PM-10

Ikegawa, Masaya 1P-PM-32, 1P-PM-42, 4P-PM-49  
Ikematsu, Natsuki 3P-PM-42  
Ikuno, Masashi 3B-O1-1155  
Im, Dahye ○4P-PM-43  
Imado, Yuri 2A-O2-1510  
Imamura, Hinata 3P-AM-29  
Imanishi, Susumu 3C-O2-1410, 4P-AM-16  
Inagaki, Eri 2P-PM-31  
Inatomi, Yuko 4P-PM-27  
Inoue, Haruki ○3P-AM-32  
Inoue, Nao ○3P-AM-33  
Inuki, Shinsuke 3C-O2-1455  
Irie, Kaho 1P-LB-12  
Irie, Kazuhiro 1P-PM-32  
Irie, Kazuki 4P-PM-22  
Irsig, Robert 2B-O2-1510  
Ishibashi, Misaki ○2P-PM-48  
Ishibashi-Ueda, Hatsue 1P-PM-42  
Ishida, Takato 3P-AM-40  
Ishida, Tomomi ○2A-O3-1610, 3P-PM-06  
Ishihama, Yasushi 1P-PM-25, 1P-PM-37,  
    2B-O1-1155 (3P-AM-49),  
    2C-O2-1510 (3P-PM-16), 2C-O3-1555,  
    2C-O3-1640 (4P-AM-47), 2P-AM-49,  
    3B-O2-1455, 4B-O1-1210 (3P-PM-48),  
    4C-O1-1225 (3P-PM-50), 4P-AM-43, 4P-AM-46,  
    4P-PM-40  
Ishihara, Ren ○3P-AM-34  
Ishihara, Takeshi 3A-O1-1225  
Ishii, Arisa ○3P-AM-05  
Ishii, Chiharu 2P-AM-09  
Ishii, Kentaro 3P-AM-28  
Ishikawa, Masaki 2C-O1-1240  
Ishikawa, Ryo 3P-AM-32  
Ishikawa, Yoshihiro 4P-AM-39  
Ishioka, Kota ○1P-PM-21  
Ishitani, Shinji 3P-AM-29  
Itakura, Makoto 4P-AM-42  
Ito, Akari 3A-O2-1440  
Ito, Koichi 4C-O2-1440  
Ito, Tetsuro ○2P-PM-12  
Ito, Tomoko 3P-AM-21, 4P-PM-47  
Iwabuchi, Haruo 2P-AM-26  
Iwakura, Takafumi 2P-PM-41  
Iwase, Hirotaro 4P-AM-21  
Izumi, Shunsuke 3P-PM-11  
Izumi, Yoshihiro ○1-AW-1410, 2A-O2-1510, 2P-AM-10,  
    2P-AM-11, 2P-PM-24, ○3C-O2-1455,  
    3C-O3-1630, 3P-AM-31, 3P-PM-43, 4P-PM-19

## 【J】

Jackson, Rachel ○2A-O3-1640 (3P-AM-52)

Jair, Yung-Cheng 4B-O1-1125  
James, David 2C-O3-1540  
Jang, Hwa-Yong ○2P-AM-17  
Jang, Kwonho 1P-LB-08  
Jang, Seongjae 2A-O2-1425  
Jeon, Yoon-Jeong 4P-PM-35, 4P-PM-37  
Jeong, Ji-Seon 4P-AM-38  
Jheng, Yu Teng ○1P-PM-13  
Ji, Pengfei 3P-PM-31  
Ji, Xiaomeng 2B-O2-1440  
Jian, Jyun Cih ○2P-PM-11  
Jinnouchi, So 3P-PM-37  
Jo, Yongju ○1P-PM-35  
Johnson, Caroline 4P-AM-13  
Ju, Hae Min ○1P-PM-26, 4P-PM-33

## 【K】

Kabashima, Fumie 4P-PM-34  
Kai, Hisahiro ○4P-PM-03  
Kaji, Hiroyuki 3P-AM-28  
Kajiyama, Shin'ichiro 2P-PM-44, 3P-AM-42  
Kakazu, Kazumichi ○3P-PM-42  
Kakiuchi, Hiroto ○1P-PM-37  
Kalaitsidou, Elisavet 4C-O1-1140  
Kamei, Yushi 1P-LB-11  
Kami, Kenjiro 1P-PM-29  
Kamiguchi, Hiroyuki 3B-O1-1155  
Kanao, Eisuke 1P-PM-37, 4B-O1-1210 (3P-PM-48)  
Kaneko, Ryosuke 2P-PM-43, 3P-AM-29  
Kang, Dukjin ○3A-O2-1425  
Kang, Le 2P-AM-20  
Kang, Yu Hui 3A-O1-1125  
Kano, Keiko ○3P-PM-35, 4P-AM-52  
Kano, Mika 2P-PM-19  
Kao, Yin-Ting 4P-AM-09  
Karakawa, Sachise 3P-PM-30  
Karasawa, Kaoru ○1P-PM-03  
Karashima, Shigehiro 1P-PM-09, 3P-AM-27, 3P-PM-29  
Kasahara, Satomi ○2P-AM-51  
Kasamatsu, Satoshi 4A-O1-1125  
Kashiwakura, Yuji 3P-AM-28  
Kastelle, Craig 2P-AM-35  
Kasuga, Ikuro 2P-AM-42  
Katagihara, Risa 2P-PM-43  
Katagiri, Toyomasa 4P-PM-07  
Kato, Chikage ○3P-PM-45  
Kato, Hiroko ○4P-PM-31  
Kato, Junko 4P-PM-47  
Kato, Ken 4C-O1-1155  
Kato, Lucilia ○2P-PM-46  
Kato, Masaki 1P-PM-04  
Kato, Midori ○4P-AM-19  
Kato, Naoki 1P-PM-15  
Kato, Yuki 1P-PM-05  
Katsuno, Eri 3P-AM-37, 4P-AM-22  
Kawabe, Asahi ○2P-PM-44  
Kawaguchi, Masataka 3P-AM-47  
Kawai, Tsuyoshi 1P-LB-12  
Kawai, Yosuke 3P-PM-37  
Kawamura, Kazuhiro ○4P-AM-05  
Kawano, Shin 1P-PM-04, 3B-O2-1355, 3P-AM-36, 3P-PM-34  
Kawano, Yasuhiro 1P-PM-18  
Kawano, Yukio 2P-PM-30  
Kawasaki, Hiroshi 4P-PM-15  
Kawasaki, Nana 1P-PM-19, 3A-O1-1155, 3P-AM-35, 3P-AM-37, 4P-AM-22  
Kawase, Naoki ○3A-O1-1210  
Kawase, Taiji ○1P-PM-22  
Kawashima, Yusuke 2C-O1-1240, 4P-AM-42  
Kee, Kyunghwa ○1P-LB-02  
Keledjian, John 2P-AM-44  
Kerr, Christina 2C-O1-1210  
Keum, Young-Soo 2P-AM-24, 2P-PM-34, 3P-PM-27  
Khan, Sajid 4P-AM-13  
Khoo, Kay-Hooi 2P-PM-51  
Khor, Chiea Chuen 3A-O1-1125  
Kim, Bokyung 2P-PM-03  
Kim, Changyun ○1P-LB-08  
Kim, Jeongkwon 1P-PM-31, 3A-O3-1645, 4P-PM-28, 4P-PM-39, 4P-PM-41  
Kim, Jihyeon 2P-PM-03  
Kim, Jin Young 1P-PM-26, 3P-AM-10, 4P-PM-33, 4P-PM-38  
Kim, Jinyoung 1P-LB-02  
Kim, Jong-Hwan 2P-AM-24, 4P-PM-35, 4P-PM-37  
Kim, Ki Young 3A-O2-1425  
Kim, Kyung Hee 1P-PM-26  
Kim, Kyung Kon ○2P-PM-03  
Kim, Minjoong 2P-PM-03  
Kim, Minsu 2A-O2-1425  
Kim, Sunghwan ○2B-O2-1410, 3P-AM-46  
Kim, Tae-Young 3A-O2-1425  
Kim, Young Eun 3A-O2-1425  
King, Adam 2P-AM-19  
Kini, Manjunatha ○3-PL-0815  
Kinoshita, Kengo 1P-PM-20  
Kinoshita, Mitsuhiro 3A-O1-1155  
Kinumi, Tomoya ○3A-O1-1155  
Kirk, Jayne ○2P-AM-19, ○3C-L-1245, ○3P-PM-38  
Kita, Noriko 2P-AM-35  
Kita, Yukiumi 4P-AM-30  
Kitagawa, Shinya 2A-O1-1155, ○2C-O3-1625, 4P-AM-48, 4P-PM-45  
Kitagawa, Wataru 4C-O2-1440

Kitajima, Ken 2P-PM-18  
Kitamura, Tomoki ○2P-PM-41  
Kiuchi, Takato 3P-AM-31  
Kiuchi, Yuuto 4P-AM-30  
Kiyama, M. 1P-PM-44  
Kizu, Ryoma ○1P-PM-34  
Klingler-Hoffmann, Manuela 2C-O2-1425  
Kobayashi, Manami 1P-PM-44, 2P-PM-31, 3B-O1-1210,  
    4A-O1-1125  
Kochi, Yuta 4P-AM-43  
Kodera, Yoshio 3P-AM-25, 3P-AM-36, 4P-AM-39,  
    4P-AM-42  
Koga, Yuzuki 2P-PM-30  
Koh, Byunmseok 3A-O2-1425  
Koh, Hiromi 3C-O2-1425  
Koike, Masami 2P-PM-29  
Koizumi, Sachiko 3P-AM-28  
Kojima, Kenji 3P-PM-30  
Kojima, Kentaro 3A-O3-1615  
Kojitani, Eiji 3P-AM-25  
Kolosenko, Iryna 4P-PM-50  
Komemoto, Risa ○3P-AM-42  
Komori, Yumi ○3P-PM-36  
Kondratyeva, Maria 4P-PM-16  
Konishi, Akimitsu 4P-PM-22  
Konno, Ryo 2C-O1-1240, 4P-AM-42  
Konno, Takayuki 4P-AM-24  
Konuma, Tsuyoshi 4P-PM-27  
Kopysov, Vladimir 4A-O2-1440  
Koshiba, Seizo 1P-PM-20  
Kosmopoulou, Mariangela 2C-L-1300  
Koziorowski, Thomas 3P-PM-46  
Kozlovskii, Vyacheslav 4A-O2-1440  
Kozlowska, Kasia 4P-AM-45  
Krokhine, Oleg ○2C-O3-1610  
Kruve, Anneli 4B-O1-1155 (3P-PM-28)  
Ku, Wei-Chi ○2P-PM-01  
Kuba, Yuzuka ○3P-AM-35  
Kubo, Akiharu 3B-O1-1210  
Kubo, Akiko ○3B-O1-1210  
Kubo, Ayumi 1P-PM-06, ○3B-O2-1440  
Kubota, Ayano 4P-AM-44  
Kubota, Azusa ○1P-PM-06, 2A-O1-1240, 2P-AM-26,  
    3B-O2-1440  
Kubota, Kaoru ○2P-AM-50  
Kubota, Tetsuo ○1P-LB-01  
Kujirai, Tomoya 4P-PM-47  
Kumano, Shun 2P-PM-27  
Kumar, Sanath 3P-AM-16  
Kumazoe, Motofumi 4P-AM-07  
Kundu, Priyanka 2C-O2-1440 (3P-PM-41)  
Kung, Te 4P-PM-30  
Kuno, Atsushi 3P-AM-28

Kuo, Cheng-Yu 2P-PM-10, ○3P-PM-15  
Kuo, Chih-Chun 2P-PM-10  
Kuo, Ching-Hua 3P-AM-09, 3P-AM-38, ○4C-O2-1425  
Kuo, Tze-Ting 2A-O2-1440, 4P-AM-35  
Kuo, Ya-Chu ○3P-AM-38  
Kurihashi, Chouma ○3P-PM-29  
Kurimoto, Ayako ○2P-PM-07  
Kurisu, Futoshi 2P-AM-42, 3P-PM-08  
Kurita, Hirofumi 2P-PM-14  
Kuroguchi, Masaki ○2P-PM-18, 4P-AM-14  
Kurumizaka, Hitoshi 4P-PM-47  
Kusano, Maiko 1P-PM-04  
Kuwabara, Ryou 3P-AM-29  
Kuwahara, Hiroshi 3P-PM-36  
Kuzhiumparambil, Unnikrishnan 2P-AM-46, 4P-AM-45  
Kwon, Ha-Jeong ○4P-AM-38  
Kwon, Namhee 1P-LB-02  
Kwon, Suhyeon 2C-O2-1440 (3P-PM-41)

## [L]

Lai, Chien-Chen 2P-AM-27, 2P-AM-43, 2P-PM-10,  
    2P-PM-11, 3P-PM-02, 3P-PM-15  
Lai, Szu-Hsueh 2P-PM-37, 3P-PM-33, 4P-AM-26  
Lại, Thị Khanh Ly ○2P-PM-26  
Lakshmanan, Meiyappan 3A-O1-1125  
Lam, Maxine 3C-O2-1425  
Lam, Thomas Ka Yam ○3B-O1-1140 (4P-AM-02)  
Le Devedec, Sylvia 1P-LB-07  
Leandersson, Magnus 2C-O3-1540  
Lebedev, Albert ○3A-O3-1545, 4P-PM-04, 4P-PM-16  
Lee, Amanda 2C-O2-1455  
Lee, Chi 3P-AM-45  
Lee, Chih-Hsin 3A-O2-1410, 3P-AM-23  
Lee, Ching-Chieh 2P-PM-26  
Lee, Ching-Hua 3P-AM-38, 4C-O2-1425  
Lee, Hahyun 4P-PM-38  
Lee, Ji-Ho 2P-AM-23, 2P-AM-24, 2P-AM-39, 2P-PM-34,  
    3P-PM-24, 3P-PM-27, ○4B-O2-1410, 4P-AM-28  
Lee, Ji-Yeon 2P-AM-23, 2P-AM-39, 2P-PM-34,  
    ○4P-AM-28  
Lee, June Chelyn ○1P-LB-05, ○3P-PM-12  
Lee, Jung-Hoon ○2P-AM-23, 2P-AM-24, 2P-AM-39,  
    2P-PM-34, 3P-PM-24, 3P-PM-27, 4P-AM-28  
Lee, Ni-Chung 4B-O1-1125  
Lee, Patrick 2B-O2-1455  
Lee, Pui-Kei 3P-PM-04  
Lee, Seong-Uk 4P-AM-07  
Lee, So Yeon 3B-O2-1410  
Lee, Tsung-Han 2B-O1-1225 (3P-AM-15)  
Lee, Yelin 2P-PM-03  
Lekkas, Alexandros 2C-L-1300  
Li, Dan 4A-O2-1355

- Li, Huilin ○2A-O2-1455  
 Li, Jack ○2P-AM-32  
 Li, Jia-Rong ○2C-O1-1225  
 Li, Lei ○3P-AM-22  
 Li, Ping-Song 2C-O1-1225  
 Li, Qing ○2A-O1-1225 (3P-AM-43)  
 Li, Qingling 2P-CP-03  
 Li, Weipeng 3C-O3-1645 (2P-PM-05), 3P-PM-04  
 Li, Xiaoxu ○2P-PM-04  
 Li, Yinan 4P-PM-04  
 Li, Zhuangzhi 4P-PM-16  
 Lian, Guan-Ting 2P-PM-51  
 Liang, Junqi ○4C-O1-1225 (3P-PM-50), 4P-AM-46  
 Liao, Hsiao-Wei ○3C-O3-1615  
 Liao, Hsiaochia ○3P-PM-03  
 Liao, Hsin-Yi 3P-AM-08  
 Lim, Chee Kent 2B-O2-1455  
 Lim, Dong Young 1P-LB-03  
 Lim, Sai Kiang 3A-O1-1125  
 Lim, Xin Shan 4B-O2-1440  
 Lin, Che-Jen 2P-PM-26  
 Lin, Chih-Bin 3P-AM-16  
 Lin, Ching Chun 2P-AM-38  
 Lin, Chung-Hsien 3P-PM-05  
 Lin, Li-Chun 4P-AM-35  
 Lin, Miao-Hsia 1P-LB-04, ○2C-O3-1555  
 Lin, Pei Chen ○4P-AM-29  
 Lin, Qifeng ○4B-O2-1440  
 Lin, Qingsong 4B-O2-1440  
 Lin, Shin-Yi 3P-AM-09  
 Lin, Shu-Yao ○4P-PM-14  
 Lin, Xuewei ○2P-AM-29  
 Lin, Yan-Jhen ○2P-PM-23  
 Lin, Yen-Ching 2P-PM-10  
 Lin, Yen-Chu 3C-O3-1615  
 Lin, Yu-Hsuan 4P-PM-24, 4P-PM-44  
 Lindholm, Pauline ○3P-PM-49  
 Liu, Bai-Chia 2A-O2-1440  
 Liu, Chengyuan 2P-AM-12, 3P-PM-13, ○3P-PM-14,  
     4P-AM-06  
 Liu, Hsin-Yu 1P-LB-04  
 Liu, Jianing ○3C-O3-1645 (2P-PM-05)  
 Liu, Runzeng ○2B-O2-1440  
 Liu, Si-Yu ○3P-AM-18  
 Liu, Tzu-Ming 2P-AM-22  
 Liu, Weijing 2P-PM-37  
 Liu, Yajing 2C-O1-1210  
 Liu, Yi-Hsin 4B-O1-1125  
 Liu, Yushuo 2B-O2-1455  
 Liu, Zhe-Xuan 2P-PM-26  
 Liu, Zheyi 2P-PM-39  
 Liu, Zhuofei ○2P-PM-30  
 Lo, Chiao 3P-AM-09  
 Lo, Wen Zheng 3P-PM-40  
 Lo, Yii-Jwu ○1P-PM-38  
 Looi, Wen Dong ○1P-PM-17, 2C-L-1300, ○4P-AM-34  
 Low, Justin 2C-O2-1455  
 Lu, Chia-Jung 2B-O1-1225 (3P-AM-15)  
 Lu, Zi-Lin ○4P-AM-09  
 Luan, Hui 2P-PM-43  
 Luo, Jing 2A-O1-1225 (3P-AM-43)  
 Luo, Ruben ○2C-O1-1210  
 Luo, Yuxiang 2A-O2-1455  
 Luu, Gordon 4P-AM-34  
 Lv, Chunchun ○3P-PM-13  
 Lyu, Yi ○2P-AM-14
- [M]**
- Ma, Cheng-Yi ○1P-PM-36  
 Ma, Howard ○1P-PM-43  
 Ma, Xiaoxiao ○2P-PM-52, 4A-O2-1355  
 Ma, Ziliang 4C-O1-1140  
 Maciel, Lanaia Ítala 2P-AM-40  
 Maeda, Asato ○2C-O3-1640 (4P-AM-47)  
 Maekawa, Masamitsu 3P-AM-17, 3P-AM-39, 3P-PM-19,  
     4P-AM-19  
 Maeshima, Nozomi ○2P-PM-31  
 Mak, Shi Ya 3A-O1-1125  
 Makawa, Masamitsu 4P-PM-12  
 Mano, Nariyasu 3P-AM-17, 3P-AM-39, 3P-PM-19,  
     4P-AM-19, 4P-PM-12  
 Mano, Yuji 2A-O3-1610  
 Manolis, Nikolaos 2C-L-1300  
 Mao, Yanchiao 3P-PM-03  
 Marshall, David ○4A-O1-1140  
 Martins, Moises 2P-AM-40  
 Maruno, Takahiro 3P-AM-28  
 Maruoka, Teruyuki ○2P-AM-05  
 Masaki, Noritaka ○2P-AM-18  
 Masuda, Akihiro 4P-PM-25  
 Masuda, Junichi 1P-PM-21  
 Masuda, Keiko 4P-PM-29  
 Matsubara, Masaaki 1P-PM-04  
 Matsubara, Yuki ○3A-O2-1440  
 Matsuda, Fumio 2P-AM-25, 2P-PM-41, 2P-PM-42,  
     3B-O2-1455, ○3P-AM-31, 3P-AM-32  
 Matsuda, Keiko 4P-PM-25  
 Matsuda, Takayoshi 2A-O2-1510  
 Matsuda, Takeshi 4P-PM-08  
 Matsui, Takashi ○3P-AM-25, 4P-AM-39, 4P-AM-42  
 Matsui, Toshiro 2P-PM-30, 2P-PM-43, 3P-AM-29  
 Matsukami, Hidenori 3P-AM-21  
 Matsukawa, Naomi 1P-PM-20  
 Matsukawa, Takehisa 4P-AM-44  
 Matsukawa, Tetsuya 2P-PM-44, 3P-AM-42

- Matsumoto, Haruka ○3P-PM-26  
 Matsumoto, Masaki 3C-O2-1455, 4P-PM-19  
 Matsumoto, Masako 4C-O2-1440  
 Matsumoto, Takashi 2P-AM-15  
 Matsumoto, Toshihide 4P-AM-39  
 Matsuo, Yasutaka 2P-PM-50  
 Matsuoka, Yuta ○3C-O1-1210  
 Matsushima, Hiroyuki 3P-PM-26  
 Matsushita, Aoba 1P-PM-10, 3P-AM-28  
 Matsuta, Rira 3B-O2-1355  
 Matsuzawa, Yuki 3P-AM-31, 3P-PM-35  
 Maxey, Charles 3P-CP-02  
 Mazur, Dmitrii ○4P-PM-04  
 Mckinnon, Jayden 2P-PM-36  
 McManus, Donald 1P-PM-27  
 McMurtrie, John 4A-O1-1140  
 Medley, Peter 3B-O3-1600  
 Mernie, Elias 2P-AM-22  
 Miao, Daiyu ○2P-PM-40  
 Michellod, Dolma ○2B-O1-1210 (3P-AM-51)  
 Michikura, Kokone ○2P-PM-14  
 Mikami, Mei ○3P-AM-37  
 Mills, Clare 4P-AM-08  
 Minamishima, Yoji 4P-PM-22  
 Minatoya, Kenji 1P-PM-42  
 Misaizu, Fuminori 4P-AM-51  
 Mishina, Naoto 4A-O1-1125  
 Mishiro-Sato, Emi 3P-PM-35, 4P-AM-52  
 Mittal, Parul 2C-O2-1425  
 Miura, Daisuke 4P-AM-07  
 Miura, Hiroyuki 4P-PM-46  
 Miyairi, Yosuke ○4P-AM-37  
 Miyake, Rika 3P-AM-50  
 Miyake, Yumi 4A-O2-1425  
 Miyashita, Masahiro ○3A-O3-1615, 4P-AM-40  
 Miyatsuka, Takeshi 4P-AM-42  
 Miyawaki, Atsushi 4P-PM-19  
 Miyazaki, Etsuko 3P-AM-21  
 Miyazaki, Naoko 4C-O2-1440  
 Miyazaki, Takashi ○1P-PM-16  
 Miyoshi, Keitaro ○3P-AM-17  
 Mizuguchi, Kenji 3P-PM-39, 4C-O1-1155  
 Mizukado, Saho 3P-AM-28  
 Mizuno, Hajime ○3C-O2-1410, 3P-PM-30, ○4A-L-1245,  
     4P-AM-16  
 Mizusawa, Nanami 1P-PM-06  
 Mochida, Keiichi 1-PL-1510  
 Montalban, Bryan 1P-LB-06, 4P-AM-11  
 Morinaga, Hiroko 4P-PM-46  
 Morita, Momomi ○4P-AM-36  
 Morris, Jonathan 2P-AM-34  
 Motoike, Ikuko 1P-PM-20  
 Motokawa, Masanori 2P-PM-19  
 Mourya, Preeti 3P-PM-18, 4P-AM-08  
 Mullen, Kathleen 4A-O1-1140  
 Munjoma, Nyasha 4P-AM-08  
 Murai, Akiho 3P-PM-30  
 Murakami, Koichi 4P-AM-24  
 Murakami, Makoto 3A-O2-1455 (4P-AM-27)  
 Muraoka, Satoshi 2P-AM-03, 4C-O1-1155  
 Murase, Masaki 1P-PM-04  
 Murata-Kishimoto, Chie 3P-AM-28  
 Murayama, Nozomi ○2P-PM-19  
 Murayama, Shigeo 1P-PM-32  
 Murgas, Luis David 2P-AM-40  
 Muto, Taichi ○1P-LB-12
- [N]**
- Nagai, Hirotaka 2P-AM-41  
 Nagai, Hiroyuki 2P-PM-12  
 Nagai, Masashi 2P-AM-31  
 Nagao, Chikako 4C-O1-1155  
 Nagao, Hirofumi 1P-PM-01  
 Nagao, Nobuyoshi 1P-PM-18  
 Nagao, Yu 4P-AM-05  
 Nagasawa, Sayaka 2P-PM-28, 4P-AM-21  
 Nagata, Haruki ○4P-AM-30  
 Nagata, Masanori 4P-AM-33  
 Nagata, Mayumi 3P-PM-26  
 Nagato, Kenkichi 2P-PM-14  
 Nagatomo, Kenji 3B-O2-1440  
 Nagaya, Yoko ○3P-PM-06  
 Nagayama, Satoshi 2P-AM-03  
 Nah, Theodora ○2B-O2-1455  
 Nakabayashi, Yuji 1P-PM-05  
 Nakagawa, Kaoru 1P-PM-44, 3B-O1-1210, 4A-O1-1125  
 Nakagawa, Reiko ○4P-PM-29  
 Nakagawa, Yoshiaki 3A-O3-1615, 4P-AM-40  
 Nakajima, Daisuke ○2C-O1-1240  
 Nakajima, Kazuki 2P-PM-22  
 Nakamura, Sadao 4B-O2-1425  
 Nakamura, Sayaka ○3P-AM-40, 4P-AM-41, 4P-PM-06  
 Nakanishi, Hiroki 2P-AM-18  
 Nakanishi, Shuji 3P-AM-50  
 Nakano, Arisa 4A-O2-1455 (2P-PM-45), ○4P-PM-48  
 Nakasha, Kotoe 3P-PM-30  
 Nakata, Keisuke ○2P-PM-24, 3P-PM-43  
 Nakatani, Kohta 2P-AM-10, 2P-AM-11, ○3C-O3-1630,  
     ○4C-L-1245, 4P-PM-19  
 Nakatsuka, Ryoji ○3A-O2-1455 (4P-AM-27)  
 Nakayama, Chikako 2A-O1-1240  
 Nakazono, Junna 4C-O1-1225 (3P-PM-50), 4P-AM-46  
 Nan, Fan-Hua 2P-PM-02  
 Naoi, Yasuto 3P-PM-45  
 Narumi, Ryohei 4C-O1-1155

Nawa, Hiroki ○4P-AM-44  
Needham, Elise 2C-O3-1540  
Negishi, Lumi ○4P-PM-47  
Ng, Say Kong 3A-O1-1125  
Ngoc, Nguyen Nghiem Bich 3P-PM-21  
Nguyen, Amy 2P-AM-34  
Nie, Minhan 2A-O2-1455  
Ninomiya, Kenji 3P-PM-42  
Ninomiya, Satoshi 1P-PM-14, 3P-AM-22, 3P-PM-22  
Nirasawa, Takashi 1P-PM-32  
Nishida, Hiroshi 1P-PM-25, 4P-AM-43  
Nishida, Kozo 3B-O2-1355, 3P-AM-31  
Nishiguchi, Masaru ○4P-PM-46  
Nishijima, Hiroaki ○3P-AM-50  
Nishikawa, Yoshiko 1P-LB-12, ○4P-PM-11  
Nishikaze, Takashi 4P-AM-14  
Nishimura, Masahiro 4A-O2-1455 (2P-PM-45), 4P-PM-48  
Nishino, Ichizo 1P-PM-42  
Nishino, Setsu 3C-O1-1225 (4P-AM-15)  
Nishioka, Yasuhiko 3P-AM-41  
Nishizaki, Manaka ○3P-PM-34  
Nitta, Tomoaki ○1P-PM-29  
Niwa, Yuki 2A-O3-1610  
Nogi, Terukazu 4P-PM-46  
Noh, Hyun Ho 3P-PM-27  
Noh, Won 4P-PM-35, 4P-PM-37  
Nojima, Yosui 4C-O1-1155  
Nozaki, Yoshitane 3P-PM-06  
Numao, Eriko ○2P-PM-35  
Numata, Shogo ○3P-PM-44

## 【O】

O'Hair, Richard 1P-PM-43, 2P-AM-32  
Obama, Kazutaka 2P-AM-03, 4C-O1-1155  
Obase, Tomoya 3P-AM-30  
Obena, Rofeamor 2P-AM-22  
Obika, Satoshi 1P-PM-16  
Obinata, Hideru ○4P-PM-22  
Oehler, Martin 2C-O2-1425  
Oeki, Masataka 3P-AM-29  
Ogata, Kosuke 1P-PM-37, 2B-O1-1155 (3P-AM-49),  
  2C-O2-1510 (3P-PM-16),  
  2C-O3-1640 (4P-AM-47), 4P-AM-43  
Ogawa, Akiko 3C-O1-1125  
Ogawa, Reina 2C-O3-1625  
Ogawa, Tadayuki ○2A-O3-1625,  
  3C-O1-1225 (4P-AM-15), 3P-PM-26  
Ogawa, Takenobu 2P-PM-30  
Ogra, Yasumitsu 2P-PM-28, 4P-AM-21  
Oh, Han Bin 1P-LB-03, 2P-AM-17, 2P-PM-20,  
  ○3B-O2-1410  
Oh, Seungjun ○3P-AM-46

Ohara, Osamu 2C-O1-1240  
Ohashi, Hyuma ○1P-PM-15  
Ohike, Tatsuya 2P-PM-44  
Ohmori, Tsukasa 3P-AM-28  
Ohno, Yoshikazu 1P-PM-06  
Ohshima, Keijiro 4P-AM-51  
Ohto, Takayo 2P-AM-18  
Ohtsuki, Sumio ○3A-L-1245-1  
Ohyama, Yukihito 3P-PM-23  
Oikawa, Akira 2P-PM-48  
Oishi, Manato ○1P-PM-19  
Ojima, Noriyuki 4A-O1-1125  
Oka, Takaki 3B-O2-1355, 3P-AM-31, 3P-PM-35  
Okabe, Yumi 4P-AM-24  
Okahashi, Nobuyuki ○2P-AM-25, 2P-PM-41, 2P-PM-42,  
  3P-AM-32  
Okamura, Maiko 1P-PM-32, ○1P-PM-42  
Okamura, Yasunobu 1P-PM-20  
Okawa, Kokoro ○3P-AM-27  
Okuda, Koji 1P-PM-42, 1P-PM-44  
Okuda, Shujiro 1P-PM-04, 1P-PM-25, 2P-PM-29,  
  3B-O2-1455, 3P-AM-31  
Okuda, Yusei ○4P-AM-42  
Okumura, Daisuke 4P-PM-46  
Omoto, Shinya 3A-O1-1225  
Onami, Shuichi 2P-PM-29  
Ong, Alicia 4C-O1-1210  
Ono, Junko 3P-AM-21  
Ono, Sawaka 3A-O1-1225  
Ooka, Tadasuke 4P-AM-24  
Orfanopoulos, Ioannis 2C-L-1300  
Organtini, Kari 3P-PM-10  
Osaka, Issey ○1-AW-1430, 1P-PM-05, 1P-PM-09,  
  3P-AM-27, 3P-PM-29  
Oshikata, Motoji ○3P-PM-18  
Osuga, Junichi 2P-PM-50, ○4P-PM-07  
Osugi, Tomohiro 4P-PM-15  
Ota, Atsuko 4C-O2-1440  
Ota, Takeshi ○3A-O1-1225  
Otsuka, Takeshi 4B-O2-1425  
Otsuka, Yoichi ○3P-AM-19, 4P-AM-18  
Otsuki, Yuta ○3P-AM-30  
Ouyang, Zheng 3C-L-1245, ○4A-O2-1355  
Ow, Ilisia ○2C-O2-1455  
Ozaki, Mineo 3A-O1-1125  
Ozawa, Naoya 3P-PM-36  
Ozawa, Taiki ○4P-AM-41, 4P-PM-06

## 【P】

Palee, Ittikorn ○3P-PM-08  
Pan, Ya-Ting ○2P-AM-27, 3P-AM-02

Pan, Yang 2P-AM-12, ○3B-O1-1125, 3P-PM-13,  
3P-PM-14, 4P-AM-06  
Pan, Yuanjiang 2A-O1-1225 (3P-AM-43), 3P-PM-31,  
○4A-O1-1155, 4B-O1-1140 (2P-PM-33)  
Panagiotopoulos, Ilias 2C-L-1300  
Pandey, Akhilesh ○2-PL-0830  
Pang, Li Ching 3P-PM-40  
Pang, Zach 3A-O1-1125  
Papanastasiou, Dimitris 2C-L-1300  
Park, Geon-Woo 2P-AM-39, 2P-PM-34, 4P-AM-28  
Park, Jin-Woo 4P-PM-35, ○4P-PM-37  
Park, Jiwon ○4P-PM-39  
Park, KangHyun 1P-LB-08  
Park, Mina ○3P-AM-10  
Park, Soojin 1P-PM-26, ○4P-PM-33  
Park, Sung Bum 3A-O2-1425  
Park, Sungkyun 1P-LB-08  
Passig, Johannes 2B-O2-1510  
Patil, Avinash 2P-PM-26, 3P-AM-16  
Pavetich, Stefan 3B-O3-1600  
Paxton, Thanai 3P-PM-18, ○4P-AM-08  
Peets, Pilleriin 4B-O1-1155 (3P-PM-28)  
Peh, Esther 3A-O1-1125  
Peng, Lin ○3P-AM-06  
Peng, Shu-Hui 3P-AM-08  
Peng, Wen-Ping 2P-PM-26, 3P-AM-16, 3P-PM-21  
Perera, Rangika 4C-O2-1410  
Peterman, Scott 2P-CP-03, 3P-CP-01, 3P-CP-02  
Petersen, Janni 2C-O3-1540  
Pfrunder, Michael 4A-O1-1140  
Phan, Phong 1P-PM-27  
Phillips, Connor 2C-O2-1440 (3P-PM-41),  
○3A-O3-1630 (4P-AM-20)  
Phungsai, Phanwatt 3P-PM-08  
Plumb, Robert 4P-AM-08  
Poad, Berwyck 4C-O2-1410  
Poh, Boon Min 3A-O1-1125  
Poliakova, Olga ○4P-PM-16  
Pribil, Patrick 3P-AM-13  
Pugh, Scott 4P-PM-16

## 【Q】

Qian, Rui ○1P-PM-08  
Qian, Yao 2P-PM-52, 4A-O2-1355  
Quackenbush, John 4P-AM-13

## 【R】

Ramachandran, Sumankalai 4P-AM-34  
Richter, Jana 3P-PM-47  
Rikitake, Tomotsugu 3P-AM-29  
Rocafort, Mark Allen 3A-O2-1455 (4P-AM-27)

Rodgers, Kenneth 3A-O3-1630 (4P-AM-20)  
Rokushima, Masatomo 3A-O1-1225  
Roque, Jussara 2P-AM-40  
Rosewig, Iva 2B-O2-1510  
Ruan, Ashley 2C-O1-1210  
Ryu, Kaori 2P-PM-12  
Römmert, Anne-Katrin 3C-O1-1140

## 【S】

Sagawa, Tatsuya 1P-PM-25  
Saigusa, Daisuke 3P-AM-05  
Saito, Hiromi 2P-AM-09  
Saito, Yuko 1P-PM-32  
Sakamoto, Dai 4C-O1-1225 (3P-PM-50), 4P-AM-46  
Sakamoto, Mai 4P-PM-45  
Sakamoto, Takumi 4P-PM-03  
Sakamoto, Yuki 2P-AM-36  
Sakane, Iwao 3C-O2-1410, 4P-AM-16  
Sakashita, Nanami 2P-AM-36  
Sakaue, Hiroaki 3P-AM-28  
Sakaue-Sawano, Asako 4P-PM-19  
Sakuda, Yusuke 2A-O1-1240  
Sakuma, Masashi 3C-O1-1225 (4P-AM-15)  
Sakurai, Masafumi ○4P-PM-34  
Salvato, Fernanda 2P-CP-01  
Samakovlis, Christos 3B-O1-1225  
Samgina, Tatiana 3A-O3-1545, 4P-PM-04  
Samra, Stephanie 3P-PM-47  
Sanchez, Laura 4P-AM-34  
Sanig, Rachel 3P-PM-38  
Sarretto, Tassiani 2P-PM-36  
Sasai, Hideo 2C-O1-1240  
Sasaki, Kazunori 1P-PM-29  
Satake, Honoo 4P-PM-15  
Sato, Aya 4P-PM-29  
Sato, Chihiro 2P-PM-18  
Sato, Hiroaki 3P-AM-40, 4P-AM-41  
Sato, Imari 2P-PM-30  
Sato, Kei 2P-AM-47  
Sato, Masaaki 3A-O1-1225  
Sato, Seidai 3P-AM-41  
Sato, Shinya 3P-PM-35  
Sato, Sota ○2P-AM-01  
Sato, Tasuhiro 3P-PM-35  
Satoh, Takaya ○2A-O1-1240  
Sawai, Hitomi 4P-PM-46  
Sawatari, Shuta 4P-PM-45  
Seike, Taisuke 2P-PM-41, 2P-PM-42  
Sekarjati, Agnes ○3P-AM-29  
Sekimoto, Kanako 1P-PM-40, 3P-AM-34, 3P-AM-44,  
3P-PM-32, 4P-AM-30, 4P-AM-36  
Sekiya, Masatoshi 2P-AM-14

- Selvaprakash, Karuppuchamy 4P-PM-02  
 Semba, Taro 2A-O3-1610  
 Sen, Kadir 2P-PM-07  
 Seo, Jeong In ○2P-PM-47  
 Seo, Jong-Su 4P-PM-35, 4P-PM-37  
 Seo, Jongcheol ○2A-O2-1425, 4P-PM-42, 4P-PM-43  
 Seo, Mitsunori 2P-AM-37  
 Ser, Zheng ○4C-O1-1210  
 Serino, Takeshi 2P-AM-06, 2P-PM-48, 4B-L-1245  
 Setou, Mitsutoshi ○3B-O2-1425, 4P-PM-03  
 Shen, Chuan-Chou 3B-O3-1630  
 Shen, Xinyi 4P-AM-13  
 Shen, Zhiyong 2B-O2-1455  
 Sheng, Yiqi 2B-O1-1240 (3P-AM-04)  
 Shepard, Robert 4P-AM-34  
 Shi, Run-Zheng 2C-O1-1210  
 Shibata, Takeshi ○3P-AM-13  
 Shibuya, Risa 3P-AM-28  
 Shidawara, Tomoya ○4P-AM-40  
 Shiea, Jentiae 1P-LB-02, ○2B-O3-1625, 3P-AM-45,  
     4P-PM-14  
 Shiel, Jonell 4P-PM-16  
 Shigenobu, Shuji 2B-O1-1210 (3P-AM-51)  
 Shigeta, Shogo 1P-PM-20  
 Shimada, Muneaki 1P-PM-20  
 Shimase, Ryo 3A-O3-1615  
 Shimizu, Kosuke 3P-AM-42  
 Shimizu, Yoshihiro 4P-PM-29  
 Shimizu, Yuri 4P-AM-52  
 Shimma, Shuichi 2P-AM-09, ○2P-AM-41, 3P-AM-19,  
     4P-PM-09, 4P-PM-20  
 Shimojo, Saki 3A-O2-1455 (4P-AM-27)  
 Shin, Ji-Won 2P-AM-39, 2P-PM-34, 4P-AM-28  
 Shinadama, Shoji 3P-PM-43  
 Shinkura, Akina ○2P-AM-03, 4C-O1-1155  
 Shinmyo, Yohei 4P-PM-15  
 Shinoda, Hiroko ○4P-PM-09  
 Shinozaki, Hiromu 3P-PM-37  
 Shinzawa, Hideyuki 2A-O1-1140, 3P-AM-40, 4P-AM-41,  
     ○4P-PM-06  
 Shirai, Kotaro 2P-AM-50  
 Shiratake, Katsuhiro 2P-PM-12  
 Shizuma, Motohiro 1P-PM-12  
 Shoji, Hirokazu 4C-O1-1155  
 Sippula, Olli 2B-O2-1510  
 Sirikantaramas, Supaart ○4B-O2-1355  
 Siu, Chi-Kit 2B-O1-1240 (3P-AM-04), ○2B-O3-1640  
 Skold, Magnus 4P-PM-50  
 Smith, Matthew 3B-O1-1225  
 Smyrnakis, Athanasios 2C-L-1300  
 Sobota, Radoslaw ○3C-O2-1425, 4C-O1-1210  
 Soga, Tomoyoshi ○4-PL-0830, 4P-AM-49  
 Soh, Annie 3A-O1-1125  
 Soh, Boon Seng 3A-O1-1125  
 Soma, Yuki 2A-O2-1510, 2P-AM-11, 3C-O2-1455  
 Son, Ha-Jin 2P-AM-23, ○2P-AM-39, 2P-PM-34, 4P-AM-28  
 Song, Jiyeong 4P-PM-10  
 Song, Min-Ho 2P-AM-23, 2P-AM-24, 2P-AM-39,  
     2P-PM-34, ○3P-PM-24, 3P-PM-27, 4P-AM-28  
 Sonoda, Hideto 3P-AM-29  
 Soo, Po-Chi 3P-AM-16, 3P-PM-21  
 Sorimachi, Atsuyuki 3P-PM-20  
 Souihi, Amina 4B-O1-1155 (3P-PM-28)  
 Sparkes, Eric 2P-AM-46  
 Speir, Paul 3B-T-1510  
 Spick, Matt 4P-AM-08  
 Stevens, Tim 3P-PM-49  
 Stewart, Davina ○2P-AM-48  
 Su, Tsung-Chen 2P-PM-10  
 Suga, Shunichi 2P-AM-14  
 Sugawara, Tohru 3P-AM-35, 4P-AM-22  
 Sugiura, Yuki 1P-LB-01, 1P-PM-34, 3C-O1-1210,  
     ○3C-O3-1600  
 Sugiyama, Eiji 3C-O2-1410, 3P-PM-30, 4P-AM-16  
 Sugiyama, Naoyuki 2C-O3-1640 (4P-AM-47),  
     4C-O1-1225 (3P-PM-50), 4P-AM-46  
 Sullivan, Robert 2A-O3-1640 (3P-AM-52)  
 Sumide, Taizo 4P-AM-52  
 Sumino, Hirochika 2P-AM-31, ○3B-O3-1645, 3P-AM-47,  
     3P-PM-44  
 Sun, Mengze 3P-AM-19, ○4P-AM-18  
 Suto, Arisa 3P-AM-25, ○4P-AM-39  
 Suwansa-ard, Saowaros 1P-PM-27  
 Suzuki, Akio 3A-O1-1225  
 Suzuki, Hiromi 2P-AM-37  
 Suzuki, Kai 2P-PM-18  
 Suzuki, Katsuhiko 2P-AM-35  
 Suzuki, Kengo ○1-PL-1510  
 Suzuki, Mikiko 3P-AM-17  
 Suzuki, Noa 4P-PM-27  
 Suzuki, Ryotaro 3P-PM-20  
 Suzuki, Takashi 1P-PM-44  
 Suzuki, Takuma 2P-AM-25  
 Suzuki, Yasumasa 2A-O1-1140  
 Suzumura, Rio 2C-O3-1625  
 Säfholm, Jesper 3B-O1-1225

## 【T】

- Tabata, Hiro 3P-AM-50  
 Tabata, Sho 4P-AM-49  
 Tabata, Tsuyoshi 1P-PM-04  
 Tachibana, Hirofumi 4P-AM-07  
 Taguchi, Tomomi 4P-AM-42  
 Taguchi, Tomoyuki 3B-O1-1155  
 Tahara, Yusuke 3P-AM-29

- Tai, Irene-Ya ○4P-PM-24, 4P-PM-44  
 Taira, Shu 2P-PM-12  
 Tajima, Yasuhisa 3P-AM-47  
 Tajiri, Michiko ○4P-PM-27, 4P-PM-46  
 Takaai, Narimi 2P-AM-03  
 Takada, Yoko 2P-AM-03  
 Takahashi, Hidenori 2P-AM-25, 2P-AM-32, ○4A-O1-1125  
 Takahashi, Kodai ○2P-PM-22  
 Takahashi, Kouji 2A-O1-1240  
 Takahashi, Masatomo ○2A-O2-1510, 2P-AM-10,  
     2P-AM-11, 2P-PM-24, 3C-O2-1455, 3C-O3-1630,  
     3P-AM-31, 3P-PM-43, 4P-PM-19  
 Takahashi, Mikiko 3B-O2-1355  
 Takahashi, Ryosuke 3B-O1-1155  
 Takahashi, Yu 2P-AM-03  
 Takahashi, Yushi 1P-PM-04, 2P-PM-29, ○3B-O2-1455,  
     3P-AM-31  
 Takahashi, Yutaka 4P-PM-03  
 Takai, Hironori 3C-O2-1410, 4P-AM-16  
 Takaishi, Kazutomo ○3P-PM-23  
 Takakura, Daisuke 1P-PM-19, 3A-O1-1155, 3P-AM-37,  
     4P-AM-22  
 Takamuro, Kaho 1P-PM-25  
 Takanashi, Hirokazu 2P-AM-42  
 Takao, Toshifumi 3P-PM-39  
 Takasawa, Taichi 3P-AM-25  
 Takashita, Kansei 3P-AM-37  
 Takata, Riko ○1P-PM-05, 3P-AM-27  
 Takatsu, Mai ○3P-PM-11  
 Takayama, Masahiro 3A-O1-1225  
 Takayama, Mio 3P-PM-42  
 Takebayashi, Yumiko ○2P-AM-37  
 Takeda, Shigenori ○1P-PM-18  
 Takeda, Shino 2A-O3-1625  
 Takeda, Ushio 3P-AM-13  
 Takeno, Tomoka ○4P-PM-20  
 Takeshita, Kengo 4A-O1-1125  
 Takeuchi, Minato 3P-AM-33  
 Takeuchi, Tsukasa 3B-L-1245  
 Takeyama, Haruko 3C-O2-1455  
 Takigawa, Kenta 4A-O1-1125  
 Takita, Chie 4C-O2-1440  
 Tan, Andy 3A-O1-1125  
 Tan, Kathrine 2B-O1-1210 (3P-AM-51)  
 Tanabe, A. 1P-PM-44  
 Tanabe, Kana 1P-PM-18  
 Tanabe, Mei 2P-AM-18  
 Tanaka, Hiroki ○4P-AM-48  
 Tanaka, Ken 2P-AM-14  
 Tanaka, Kentaro 2P-AM-50  
 Tanaka, Mitsuru 2P-PM-30, ○2P-PM-43, 3P-AM-29  
 Tanaka, Satoshi ○1P-PM-04  
 Tanaka, Toshiyuki 2P-AM-49  
 Tang, Kuo-Tung 3P-PM-15  
 Tang, Pin-Chi 3P-AM-08  
 Taniguchi, Takeo 2P-AM-25  
 Taniguchi, Yuto 1P-PM-25  
 Tateishi, Yusuke 4P-PM-46  
 Taylor, Elysha 2P-AM-34  
 Teo, Norman Zhi Wei 4B-O2-1440  
 Terada, Kentaro 2P-AM-47, 3P-PM-37  
 Terasaki, Maki ○3P-PM-10  
 Terauchi, Tsutomu 2A-O2-1510  
 Terui, Yuta 3C-O2-1410, 4A-L-1245, 4P-AM-16  
 Tian, Ruijun ○4C-O1-1125  
 Tian, Sicheng 4P-PM-31  
 Tims, Stephen ○3B-O3-1600  
 Toda, Yuki 4P-AM-21  
 Todoroki, Kenichiro 3C-O2-1410, 3P-PM-30, 4P-AM-16  
 Toi, Saki 4C-O1-1225 (3P-PM-50), ○4P-AM-46  
 Tokami, Kasumi 2P-PM-31  
 Tokito, Kanako 2A-O2-1510  
 Tomatsu, Hajime 1P-PM-29  
 Tomioka, Ayana 1P-PM-25, 1P-PM-37,  
     2C-O2-1510 (3P-PM-16),  
     4B-O1-1210 (3P-PM-48)  
 Tomioka, Azusa 3P-AM-28  
 Tomioka, Ryota ○2C-O2-1510 (3P-PM-16)  
 Tomiyasu, Noriyuki 2P-AM-10, 2P-PM-24  
 Tomonaga, Takeshi 4C-O1-1155  
 Torigoe, Taihei 2P-AM-10, ○2P-AM-11, 2P-PM-24,  
     3C-O2-1455, 3P-AM-31  
 Torisu, Tetsuo 1P-PM-10, 1P-PM-23, 2P-AM-51,  
     3A-O2-1455 (4P-AM-27), 3P-AM-28  
 Torta, Federico ○2C-O1-1140  
 Towers, Lisa 3P-PM-18  
 Towers, Mark 3P-PM-18  
 Townsend, Paul 3P-PM-18, 4P-AM-08  
 Toyama, Yumiko 1P-PM-32  
 Toyoda, Michisato 2B-O1-1225 (3P-AM-15), 2P-PM-50,  
     3P-AM-19, 3P-PM-37, 4A-O2-1425, 4P-AM-18,  
     4P-PM-07  
 Toyoda, Sigeru 3C-O1-1225 (4P-AM-15)  
 Trevitt, Adam 4A-O1-1225 (3P-PM-51)  
 Tsai, Hsien-Tsung 2P-PM-10  
 Tsai, I-Lan 1P-LB-04  
 Tsai, I-Lin ○3A-O2-1410, 3P-AM-23, 4P-AM-17  
 Tsai, Jia-Jen 4P-PM-02  
 Tsai, Tzu-Ching ○2P-PM-49  
 Tsai, Yu-Xi 2P-PM-51  
 Tseng, Mei-Chun ○2P-AM-22  
 Tsou, Han-Hsing 3P-AM-24  
 Tsuchida, Daisuke 2P-PM-35, 3P-PM-23  
 Tsugawa, Hiroshi 3B-O2-1355, 3P-AM-31, 3P-PM-35  
 Tsuji, Mimori 2P-PM-12  
 Tsujihata, Hitomi 2P-AM-36

Tsujimura, Naoki ○1P-PM-32  
Tsunaka, Yasuo 1P-PM-10, 1P-PM-23,  
3A-O2-1455 (4P-AM-27), 3P-AM-28  
Tsuneyama, Koichi 1P-LB-01  
Tsunoda, Kengo ○4P-AM-51  
Tsushima, Yoshito 1P-PM-15  
Tu, Chien-Wei 2P-PM-02  
Tu, Ching-Fu 3P-AM-08  
Tu, Hsiung-Lin 3C-O2-1440 (4P-AM-32)  
Tu, Wei-Hsuan ○3P-AM-20  
Tu, Yuan-Kai 2P-AM-20  
Turner, Nigel 2P-AM-34

## 【U】

Ubukata, Masaaki 1P-PM-06, 2P-AM-26, 3B-O2-1440,  
3P-PM-20  
Uchiyama, Susumu 1P-PM-10, 1P-PM-23, ○2B-L-1300,  
2P-AM-51, ○3A-O2-1355,  
3A-O2-1455 (4P-AM-27), 3P-AM-28  
Uda, Shinsuke 3C-O2-1455  
Ueda, Hiroshi 3A-O1-1225  
Ueda, Shuji 2P-AM-16  
Uehara, Miyu 2P-AM-16  
Uehara, Yutaro ○2P-AM-42  
Ueno, Chihiro 3P-PM-20  
Ueno, Hiroaki ○2P-PM-42  
Ujita, Shigeru ○3P-PM-37  
Umakoshi, Yutaka ○2P-AM-36  
Umemura, Tomonari 2A-O3-1625  
Urakami, Shogo 1P-LB-05, 2P-PM-17,  
○3C-O1-1155 (4P-AM-01), 3P-PM-12,  
○4P-AM-24  
Urban, Pawel 1P-PM-24, ○2B-O3-1540, 2P-PM-49,  
3P-AM-48

## 【V】

Vasil'ev, Yuriy 4P-PM-04  
Vegvari, Akos 4P-PM-50  
Viana, André 2P-AM-40  
Violi, Jake ○2C-O2-1440 (3P-PM-41),  
3A-O3-1630 (4P-AM-20)  
Virtanen, Annele 2B-O2-1510  
Vorwerk, Anna Mae ○4P-AM-25

## 【W】

Wada, Mayo ○3C-O1-1225 (4P-AM-15)  
Wagner, Nicole 4P-PM-50  
Wakabayashi, Renta ○3P-AM-44  
Walker, Eathan ○2P-AM-46  
Wan, Ching-Yi 4P-PM-26

Wang, Chia-Yen ○4P-PM-26  
Wang, Chun-Sheng 2P-AM-27  
Wang, Dun-Xuan ○1P-PM-11  
Wang, Fangjun 2P-PM-39  
Wang, Gen Shuh 4P-PM-21  
Wang, Guangqi ○3P-AM-11  
Wang, Guanjun 4P-PM-36  
Wang, Haozhu ○4P-PM-12  
Wang, Hsi-Wen ○2P-PM-37  
Wang, I-Fan 2P-AM-21  
Wang, Jianing 3B-O1-1140 (4P-AM-02), 4P-PM-13  
Wang, Ke ○3P-PM-04  
Wang, Peng Xi 4P-PM-32  
Wang, Qiuyi 3P-PM-39  
Wang, Tianfang ○1P-PM-27  
Wang, Tzu ○4P-PM-30  
Wang, Wei-Chen ○2P-PM-10, 3P-PM-15  
Wang, Wei-Chieh ○4B-O1-1155 (3P-PM-28)  
Wang, Wei-Chieh 4C-O2-1425  
Wang, Xiaosuo 2P-AM-30  
Wang, Xue-Bin 1P-PM-43  
Wang, Yen-Chieh 2P-PM-01  
Wang, Yi-Jhen 2P-PM-23  
Wang, Yi-Sheng 2P-PM-09, 3P-PM-09, ○4P-PM-01  
Wang, Yichun 4C-O2-1355  
Wang, Yu-Meng ○4P-AM-23  
Wang, Zhenxun 3A-O1-1125  
Wang, Zi ○3P-PM-39  
Wang, Zidang 4C-O2-1355  
Waniwan, Juanilita 4B-O1-1225  
Watanabe, Hiroshi 2P-AM-09  
Watanabe, Masahiro ○3P-AM-39  
Watanabe, Masaki 2P-PM-27  
Watanabe, Naomi ○2P-AM-26  
Watanabe, Ryota 3P-AM-40, 4P-AM-41, 4P-PM-06  
Watanabe, Shio 2P-AM-51  
Wei, Fan-Yan ○3C-O1-1125  
Wei, GuorJien 2P-AM-08  
Wen, Zhiwei ○2P-AM-12  
Westerhausen, Mika ○2P-PM-36  
Wheelock, Asa ○4P-PM-50  
Wheelock, Craig ○3B-O1-1225  
Wieler, Rainer 3P-AM-30  
Wilson, Ian 2P-AM-19  
Wojtaszewski, Jorgen 2C-O3-1540  
Won, Jonggil ○1P-PM-31  
Wong, Chi-Hong 3P-AM-08  
Wong, Juan-Kai 3P-PM-05  
Wong, Ka-Ying 3P-PM-04  
Wong, Man-Kin 3C-O3-1645 (2P-PM-05)  
Wong, Man-Sau 3P-PM-04  
Woottton, Christopher 3B-T-1510  
Wu, Chun ○3P-AM-45

Wu, Chung-Che ○3B-O3-1630  
Wu, Chyuan-Chuan 3P-PM-33  
Wu, Deng-Chyang 2C-O1-1225  
Wu, Di 2P-PM-18  
Wu, I-Ting ○3P-AM-48  
Wu, Kun-Pin 2C-O1-1225  
Wu, Min-Li 4P-PM-02  
Wu, Pei-Shan ○1P-LB-04, 2C-O3-1555  
Wu, Ri 2P-PM-06  
Wu, Tai-Wei ○1P-PM-02  
Wu, Wei 2C-O2-1455, ○4C-O1-1140  
Wu, Wenjie 3P-PM-04  
Wu, Yi-Ling 3P-PM-15  
Wu, Yi-Ying 4P-PM-02  
Wyethd, Russell 1P-PM-27

## [X]

Xia, Yiji 3B-O1-1140 (4P-AM-02), 4P-PM-32  
Xia, Yu ○4C-O2-1355  
Xiao, Mei 1P-LB-10  
Xiao, Yizhi 2P-PM-43  
Xie, Qiangqiang 3P-AM-22, 3P-PM-22  
Xie, Yufei 1P-PM-43  
Xing, Dong ○3P-AM-01  
Xu, Fuxing 4P-PM-36  
Xu, Minggao 2P-AM-12, 4P-AM-06

## [Y]

Yada, Etsuko ○2P-PM-08, 3P-AM-12  
Yagi, Yuki 2P-PM-35  
Yahata, Toshiko ○4P-AM-33  
Yamada, Akiyoshi 2P-PM-12  
Yamada, Koji 1-PL-1510  
Yamagaki, Tohru 4P-PM-11, ○4P-PM-15  
Yamagishi, Yoshikazu 2P-PM-28, ○4P-AM-21  
Yamaguchi, Ryo 1P-PM-21, 3B-L-1245  
Yamaguchi, Shinichi 1P-PM-42, ○4P-PM-49  
Yamaguchi, Takao 1P-PM-16  
Yamaguchi, Yuki 1P-PM-10, 1P-PM-23, 2P-AM-51,  
    3A-O2-1455 (4P-AM-27), ○3P-AM-28  
Yamaguchi, Yukino 3P-PM-30  
Yamakado, Hodaka 3B-O1-1155  
Yamakoshi, Daiki 2P-AM-14  
Yamamoto, Atsushi ○3P-AM-21  
Yamamoto, Hiroyuki 1P-PM-04, 1P-PM-29, 3B-O2-1355  
Yamamoto, Rei 4P-AM-40  
Yamamoto, Soho ○2P-AM-31  
Yamamoto, Takushi 1P-PM-42, ○3B-L-1245,  
    ○3P-AM-41, 3P-PM-45  
Yamanaka, Yumi 1P-PM-18  
Yamane, Shogo ○2A-O1-1140, 4P-PM-06

Yamaoka, Noriko 3P-AM-05  
Yamasaki, Sho 2P-PM-24  
Yamashita, Katsuyuki 2P-AM-35  
Yamashita, Rena ○4P-AM-31  
Yamashita, Shuji 1P-PM-32, 1P-PM-42  
Yamashita, Toshiyuki 2P-AM-10  
Yamauchi, Minami ○3P-PM-19  
Yamazaki, Katsuyoshi 2P-PM-35  
Yan, Hong ○4P-AM-13, 4P-PM-23  
Yan, Jingyi 4P-AM-45  
Yan, Jinni ○2P-PM-38  
Yan, Yinghua 4P-PM-36  
Yanagisawa, Kumi 2P-PM-35  
Yanagisawa, Takuma 3C-O2-1410, ○4P-AM-16  
Yang, Cheng Hung 1P-PM-33  
Yang, Fenglian 1P-PM-08, ○3P-AM-26  
Yang, Hung-Wei 2P-PM-37  
Yang, Jiuzhong 2P-AM-12, 4P-AM-06  
Yang, Kevin 2P-CP-02  
Yang, Pan-Chyr 3P-PM-47, 4P-CP-03  
Yang, Shirui ○2P-PM-39  
Yang, Xinjie 3P-PM-31  
Yang, Yun-Jung 3A-O2-1410  
Yang, Zhou 3P-AM-19  
Yang, Zhu ○2A-O2-1410  
Yao, Ikuko 1P-PM-34  
Yao, Yisha 4P-AM-13  
Yao, Zhong-Ping 2B-O1-1240 (3P-AM-04), 2P-AM-28,  
    2P-AM-29  
Yasuda, Kyoko ○2P-AM-06, 2P-PM-48, 4B-L-1245  
Yasuda, Takao 3P-AM-19  
Yasumoto, Jun 1P-PM-06  
Yasumoto, Ko 1P-PM-06  
Yen, Hsin-Yung ○2P-PM-51, 4P-AM-50  
Yeung, Priscilla 2C-O1-1210  
Yi, Qi ○2B-O1-1240 (3P-AM-04), 2P-AM-29  
Ying, Zhi Hua 3P-AM-07  
Yokoi, Yasuto 2P-AM-18, 3A-O2-1440  
Yokono, Mizuki ○1P-PM-28  
Yokoyama, Yusuke 2P-AM-50, ○3B-O3-1615, 4P-AM-37  
Yoneda, Mamoru 3P-PM-23  
Yoneda, Rai ○3P-AM-47  
Yoo, Hye Hyun 2P-PM-47  
Yoo, Hyehyun 1P-LB-02  
Yoo, Jung-Yoon 2P-PM-03  
Yoon, Sohee ○4P-PM-10  
Yoshida, Katsuhiro 3P-PM-20  
Yoshii, Kazuyoshi 2P-AM-49  
Yoshikawa, Takaki 4C-O1-1155  
Yoshimitsu, Madoka ○4P-AM-52  
Yoshimura, Rikuya 1P-PM-32  
Yoshino, Ken-ichi ○2P-AM-16  
Yoshino, Tomohiro 3P-AM-21

Yoshinori, Iiguni 2A-O1-1155  
Yoshizawa, Akiyasu 1P-PM-04, 2P-PM-29, 3B-O2-1455,  
3P-AM-31  
Young, Reuben 4C-O2-1410  
Yu, Chiao-Jou 4B-O2-1455 (2P-PM-16)  
Yu, Ching-Huang 2P-PM-13  
Yu, Chong-Jen 3P-PM-47, 4P-CP-03  
Yu, Hyeongyu ○ 4P-PM-41  
Yu, Ji-Woo 2P-AM-23, ○ 2P-AM-24, 2P-AM-39,  
2P-PM-34, 3P-PM-24, ○ 3P-PM-27, 4P-AM-28  
Yu, Jian Zhen 4P-AM-25  
Yu, Jiyoung 2P-PM-03  
Yu, Kai-Tang ○ 3P-AM-23  
Yu, Li-Hsuan ○ 2P-AM-21  
Yu, Sung-Liang 3P-PM-47, 4P-CP-03, 4P-PM-24, 4P-PM-44  
Yu, Sungryul 2P-PM-03  
Yu, Ying Qing 2P-PM-08  
Yuan, Xu ○ 3P-PM-01  
Yurimoto, Hisayoshi 3P-AM-30

## [Z]

Zenobi, Renato 2P-PM-06  
Zhan, Cheng-Bin ○ 2P-PM-21  
Zhang, Bingxu 3B-O1-1140 (4P-AM-02)  
Zhang, Feng ○ 4P-PM-32  
Zhang, Hai Lei 4P-PM-32  
Zhang, Liang 1P-PM-08, 3P-AM-26, 4P-PM-18  
Zhang, Nicole ○ 2P-CP-01, ○ 2P-CP-02, ○ 2P-CP-03,  
○ 3P-CP-01, ○ 3P-CP-02, ○ 3P-CP-03,  
○ 4P-CP-01, ○ 4P-CP-02, ○ 4P-CP-03  
Zhang, Sherry 3P-PM-10  
Zhang, Xiang ○ 3P-AM-07  
Zhang, Xiaoxi 4P-CP-01  
Zhang, Xinxing ○ 2B-O3-1610, 2P-AM-02, 2P-AM-04,  
2P-PM-04, 3P-AM-01, 3P-PM-01, 3P-PM-07  
Zhao, Danyue 3C-O3-1645 (2P-PM-05), 3P-PM-04  
Zhao, Tianyun 3C-O2-1425  
Zheng, Yi-Feng ○ 3P-PM-02, 3P-PM-15  
Zhong, Fangrui 3P-PM-31  
Zhong, Li ○ 2P-PM-15  
Zhou, Dongdong 1P-LB-10  
Zhou, Mingfei 4P-PM-36  
Zhou, Mowei ○ 3P-PM-31, 4B-O1-1140 (2P-PM-33)  
Zhou, Runhong 2P-PM-15  
Zhou, Shiwen 3P-PM-31, ○ 4B-O1-1140 (2P-PM-33)  
Zhou, Yanqiu ○ 1P-PM-41  
Zhu, Chenghui ○ 2P-AM-04  
Zhu, Lin 2P-PM-15  
Zhu, Ling 2P-AM-30  
Zhu, Shuangshuang ○ 3P-PM-40  
Zhuang, Ya-Ting ○ 2P-AM-43  
Zimmermann, Ralf ○ 2B-O2-1510, ○ 3P-PM-46

Zohrer, Benedikt 4P-PM-50  
Zviagin, Andrei 4A-O2-1440

“What if we could fly through the air?”  
“What if we could photograph the inside of the human body?”

If we can make people's dreams into a reality,  
we can change the world together.  
We can bring people new happiness.

Dreams have always been where tomorrow begins.

“If anyone can make it happen, Shimadzu can.”

Shimadzu has strived to meet this expectation,  
creating novel solutions in science and  
witnessing firsthand the birth of countless new innovations.

Shimadzu is here today, 150 years after its founding, because  
we've always been excited about your dreams.

Time for the next dream. For the next era.  
We will keep evolving.

## We're still only halfway to the future.

1877  
Genzo Shimadzu Sr.  
Launches Japan's  
first successful  
manned balloon flight



1897  
Develops  
storage  
batteries



1896  
Genzo Shimadzu Jr.  
Takes Japan's  
first successful  
X-ray photographs

1961  
Develops the world's first  
remote X-ray television system,  
reducing exposure for  
medical personnel



1956  
Releases  
Japan's first  
gas chromatograph



2002  
Koichi Tanaka is awarded  
the Nobel Prize in Chemistry for  
the development of the soft laser  
desorption ionization method



2025

Working in partnership with  
our partners worldwide  
to contribute to the development of  
cultivated meat  
and photoimmunotherapy that  
targets cancer cells



2020

A mass spectrometer to  
predict the onset of  
Alzheimer's disease  
is approved as  
a medical device in Japan

# 150 Years of Innovation

**150**  
YEARS  
ANNIVERSARY

The 150th anniversary  
website is now live



Shimadzu Corporation

AOMSC 2025

# Bringing light to discovery

Lunch Seminar: Jun 23

1-on-1 Consultations: Jun 23-25



## Revolutionize Discovery with Thermo Fisher Scientific at AOMSC 2025!

Experience the latest in mass spectrometry, driving advancements in omics, biopharma, and beyond. Connect with leading experts, explore game-changing technology, and be part of the movement shaping the future of scientific breakthroughs!

### Lunch Seminar

June 23 (Mon) | 1pm – 2pm | Maesato 1

Advancements in technology are revolutionizing scientific discovery, enabling unprecedented insights into disease mechanisms and clinical research. Leaders are leveraging next-generation mass spectrometry to transform proteomics, metabolomics, and biopharmaceutical research. These innovations empower researchers to unravel complex biological processes.

Join us to explore cutting-edge developments and hear from experts on the transformative impact of these tools.

### Exclusive Promotions\*

- Enjoy a **complimentary lunch** as you connect, learn, and innovate!
- Be among the first 100 attendees to check in at our seminar to receive a **limited-edition door gift!**

\*First-come-first-serve basis. Available exclusively for AOMSC 2025 attendees who register through the QR code below.



Scan to sign up for our lunch seminar, consultation, and mailing list

### One-on-one Consultations

June 23 (Mon) - 25 (Wed) | 10am – 4pm | Booth T2

Stop by our booth for a one-on-one consultation (15-min session) with our experts! Get personalized insights, explore cutting-edge solutions, and discover how our technology can advance your research.

Don't miss this exclusive opportunity—schedule your session today!

### Posters

See how researchers are advancing plasma proteomics, immunopeptidomics, and metabolomics with Thermo Scientific™ Orbitrap™ and Stellar™ mass spectrometers.

Explore posters highlighting innovative LC-MS workflows for biomarker discovery, cancer detection, and more in translational and clinical research.

### Stay in the Loop

Subscribe to our mailing list for the latest updates, insights, and exclusive content—delivered straight to your inbox.

Learn more at [thermofisher.com/aomsc](https://thermofisher.com/aomsc)

August 22nd - 28th 2026

**26th INTERNATIONAL  
MASS SPECTROMETRY  
CONFERENCE IMSC 2026**



**LYON** France

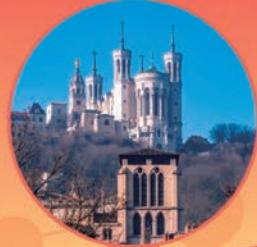
[www.imsc26.com](http://www.imsc26.com)



X (ex Twitter)  
@imsc2026



LinkedIn  
@imsc2026



11<sup>th</sup> AOMSC, Taipei, Taiwan   
Jun 28 -July 1, 2027



*Uncover the Diverse Spectrums of Nature, History, Culture, Cuisine, and Adventure in Taipei with Ease*





LCMS-8050RX

Liquid Chromatograph Mass Spectrometer

## LCMS-TQ RX Series

Ultrafast Track to  
Your Success



LCMS-8060RX



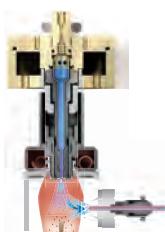
LCMS-8045RX

Innovative technology, exceptional design and new ways of thinking are part of our engineering DNA delivering solutions for the ever-changing needs of any laboratory. As our scientific and business needs change our engineering design evolves and adapts. The result is the RX Series of triple quadrupole LC-MS instruments designed with unmatched capability, redefined reliability and creating a new standard in actionable data.

**Reliable** × **Resilient** × **Responsible**

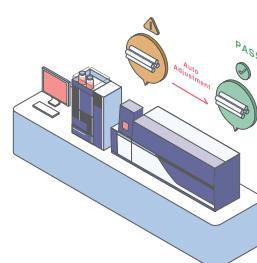
### CoreSpray Technology Enhanced Ionization Performance

CoreSpray, a newly developed gas delivery system, improves performance and uniformity of nebulization with higher flows and better heat transfer.



### PERFORMANCE CONCIERGE™

PERFORMANCE CONCIERGE makes tuning a mass spectrometer easier than ever before. A tuning standard is automatically introduced into the instrument to verify parameters, including mass accuracy, resolution, and signal strength. Based on these checks, tuning may be automatically initiated to ensure optimal performance. Should the criteria not be met, PERFORMANCE CONCIERGE will diagnose the issue and alert the operator of required maintenance and maximize uptime.



Mass spectrometry

# Rethink what is possible

## Orbitrap Astral mass spectrometer

Science isn't limited by ideas but by the ability to realize them. That is the inspiration behind the novel technology of the Thermo Scientific™ Orbitrap™ Astral™ mass spectrometer: to redefine what is possible for discovery and translational research. Faster throughput, deeper coverage, and higher sensitivity to empower you to accomplish your aspirations.

***Drop by our booth to speak with our specialists and learn more!***



Learn more at [thermofisher.com/orbitrapastral](https://thermofisher.com/orbitrapastral)

For Research Use Only. Not for use in diagnostic procedures. © 2025 Thermo Fisher Scientific Inc. All rights reserved.  
All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. AD001724-EN 0425



**thermo** scientific

# Delivering PERFORMANCE and SPEED without Compromise

Whether you're in academia or industry, achieve exceptional science 100% of the time with the Xevo MRT Mass Spectrometer.

This state-of-the-art QTof delivers 100K FWHM resolution at 100 Hz with sub-ppm mass accuracy for confident identification and greater productivity in your lab.



[www.waters.com/  
XevoMRT](http://www.waters.com/XevoMRT)



©2025 Waters Corporation. Waters and Xevo are trademarks of Waters Corporation.

Nihon Waters K.K. [www.waters.com](http://www.waters.com)

[ Tokyo ] No.5 Koike Bldg, 1-3-12, Kitashinagawa, Shinagawa-ku, Tokyo, 140-0001 TEL +81 (0) 3-3471-7191

[ Osaka ] Shin-Osaka Toyota Bldg. 11F, 5-14-10, Nishinakajima, Yodogawa-ku, Osaka-shi, 532-0011 TEL +81 (0) 6-6304-8888

# Waters™



The power of precision

ZenoTOF 7600+ system

## Taking biology beyond ID numbers

Explore now



株式会社エービー・サイエックス

[www.sciex.jp](http://www.sciex.jp)

Email : [jp\\_sales@sciex.com](mailto:jp_sales@sciex.com)

The SCIEX clinical diagnostic portfolio is For In Vitro Diagnostic Use. Rx Only. Product(s) not available in all countries. For information on availability, please contact your local sales representative or refer to [www.sciex.com/diagnostics](http://www.sciex.com/diagnostics). All other products are For Research Use Only. Not for use in Diagnostic Procedures.

Trademarks and/or registered trademarks mentioned herein, including associated logos, are the property of AB Sciex Pte. Ltd. or their respective owners in the United States and/or certain other countries [see [www.sciex.com/trademarks](http://www.sciex.com/trademarks)]. © 2025 DH Tech. Dev. Pte. Ltd. MKT07-1446-A



MASS SPECTROMETRY  
**timsTOF Series**



For more information please visit [www.bruker.com](http://www.bruker.com)

For Research Use Only. Not for use in clinical diagnostic procedures.

## Trapped Ion Mobility Spectrometry (TIMS)

Ion mobility spectrometry (IMS) is a powerful analytical technique that has been widely applied over the last five decades, primarily in chemical physics and analytical chemistry applications. Only relatively recently has the potential of IMS coupled to MS (IMS-MS) been explored for the separation, identification and quantification of peptides and proteins.

Innovation with Integrity

## Innovation That Drives Breakthroughs

Peptide and protein analysis  
with the new Agilent ExD cell



Reveal more comprehensive information  
about complex molecules

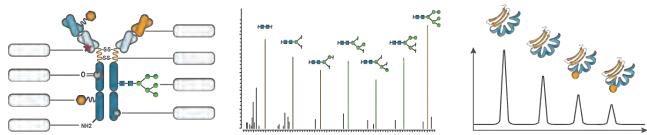
More in-depth data about sequence, structure, modifications, and purity  
can help you make better decisions about your candidate molecules.

The new Agilent ExD cell with Agilent ExDViewer software easily and  
cost-effectively adds electron capture dissociation to the capabilities  
of the Agilent 6545XT AdvanceBio LC/Q-TOF.



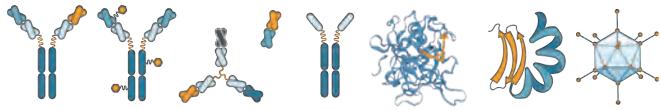
# MS Data Analysis Solution ( MSデータ解析ソリューション )

Genedata Expressionist® is a powerful enterprise software solution that streamlines biopharma mass spectrometry workflows across instruments and organizations. It automates and harmonizes all MS data processes to deliver high quality results with significant time and cost savings.



## ALL APPLICATIONS

Glycoanalysis, intact mass analysis, peptide mapping, HCP analysis, Multi-attribute method (MAM), sequence variant analysis (SVA)



## ALL MODALITIES

Antibodies, multi-specifics, fusion proteins, therapeutic oligonucleotides, CGTs, ADCs



## ALL INSTRUMENTS

SCIEX, Thermo, Waters, Shimadzu, Bruker, Agilent, and others



LEARN MORE

( 詳細はこちら )



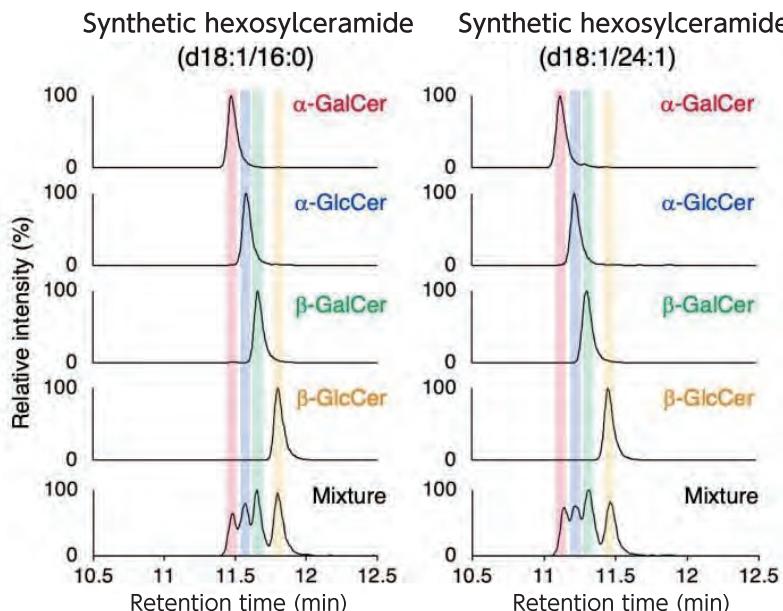
# DAICEL's Quartet Column

DAICEL

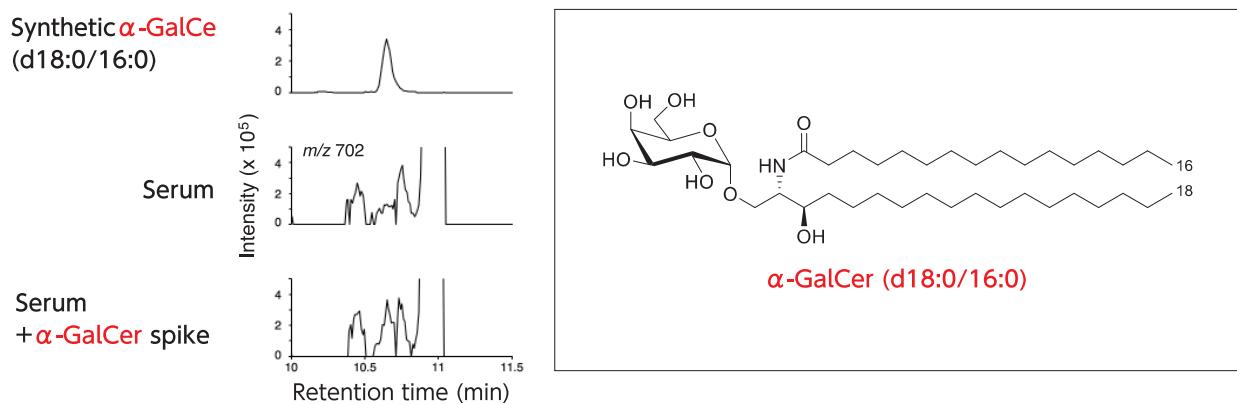
## Application Example:

Using the metal-free DCpak® P4VP column, hexosylceramides were successfully separated and analyzed, leading to the identification of self-antigens that activate NKT cells — immune cells known for their ability to eliminate cancer cells.

## 1) Separation of four isomers ( $\alpha$ -GalCer, $\beta$ -GalCer, $\alpha$ -GlcCer, $\beta$ -GlcCer) using SFC-MS.



## 2) Detection of $\alpha$ -GalCer (d18:0/16:0) in serum by SFC-MS



### SFC conditions

SFC Column	: Two metal-free P4VP column (2.1mm x 150mm, 3 $\mu$ m)
Column temp.	: 40°C
Flow rate	: 0.8mL/min
Make-up(MS)	: 0.1mL/min
Back pressure regulator	: 10MPa
Injection volume	: 5 $\mu$ L
Mobile phase	A : CO <sub>2</sub> B : ammonium acetate in MeOH/H <sub>2</sub> O (95/5, v/v)

### Gradient conditions

Time (min)	B (%)
0.0	1
1.0	1
15.0	45
35.0	45
35.1	1
45.0	1

Reference: "Identification of alpha-galactosylceramide as an endogenous mammalian antigen for iNKT cells" : Yuki Hosono, Noriyuki Tomiyasu, Hayato Kasai, Eri Ishikawa, Masatomo Takahashi, Akihiro Imamura, Hideharu Ishida, Federica Compostella, Hiroshi Kida, Atsushi Kumanogoh, Takeshi Bamba, Yoshihiro Izumi and Sho Yamasaki  
DOI: <https://doi.org/10.1084/jem.20240728>

As a global company, Daicel has local support organizations serving key regions worldwide.

### DAICEL CORPORATION

Email: chiral@jp.daicel.com  
Tel: +81-3-6711-8222  
Tel: +81-6-7639-7221

### For North and Latin America

CHIRAL TECHNOLOGIES, INC.  
Email: questions@cti.daicel.com  
Tel: 1 800 6CHIRAL

For Europe, the Middle East, and Africa  
CHIRAL TECHNOLOGIES EUROPE S.A.S.  
Email: support@cte.daicel.com  
Tel: +33 (0) 3 88 79 52 00

### China

DAICEL CHIRAL TECHNOLOGIES (CHINA) CO., LTD  
E-mail: chiral@dctc.daicel.com  
Tel: +86-021-5046-0086

### India

DAICEL CHIRAL TECHNOLOGIES (INDIA) PVT. LTD  
Email: chiral@chiral.daicel.com  
Tel: +91 84 1866 0700 & 703