

JAIMASHOW2009

JAIMA Conference at Makuhari, Chiba

2009 China-Japan-Korea Symposium on Analytical Chemistry

August 31 to September 2, 2009
Makuhari, Chiba, Japan

Abstracts

Organized by

Environmental Analysis, FIA, GC, IC and LC Discussion group,
The Japan Society for Analytical Chemistry, Japan
China-Japan Korea Analytical Science Discussion group

Supported by

The Japan Society for Analytical Chemistry (JSAC)
Japan Analytical Instrument Manufacture Association (JAIMA)



Symposium Schedule

August 31, Welcome

(Welcome reception sponsored by SHIMADZU)

September 1st, (10:00 to 17:40)

Registration and Symposium, International Conference Center, Convention Hall B, Makuhari Messe, Chiba.

Oral presentation (10:05 to 12:05, 14:00 to 17:40) and Poster session (13:00 to 14:00)

Theme of the Oral and Poster session,

“Frontier of the Analytical Chemistry in China, Japan and Korea”

Luncheon Seminar (12:10 to 12:50)

“Analytical Chemistry on the leading laboratory in China and Korea.”

(Luncheon Seminar, sponsored by Otsuka Pharmaceutical group)

Banquet at Chiba brewery

(Transport bus comes front gate of Makuhari messe at 18:00, Banquet start at 18:30)

September 2nd,

Special Seminar (9:00 to 11:00)

Lunch,

14:00, start JAIMA Show tour, Makuhari messe

meeting place : International Exhibition hall No.6

International Organization Corner

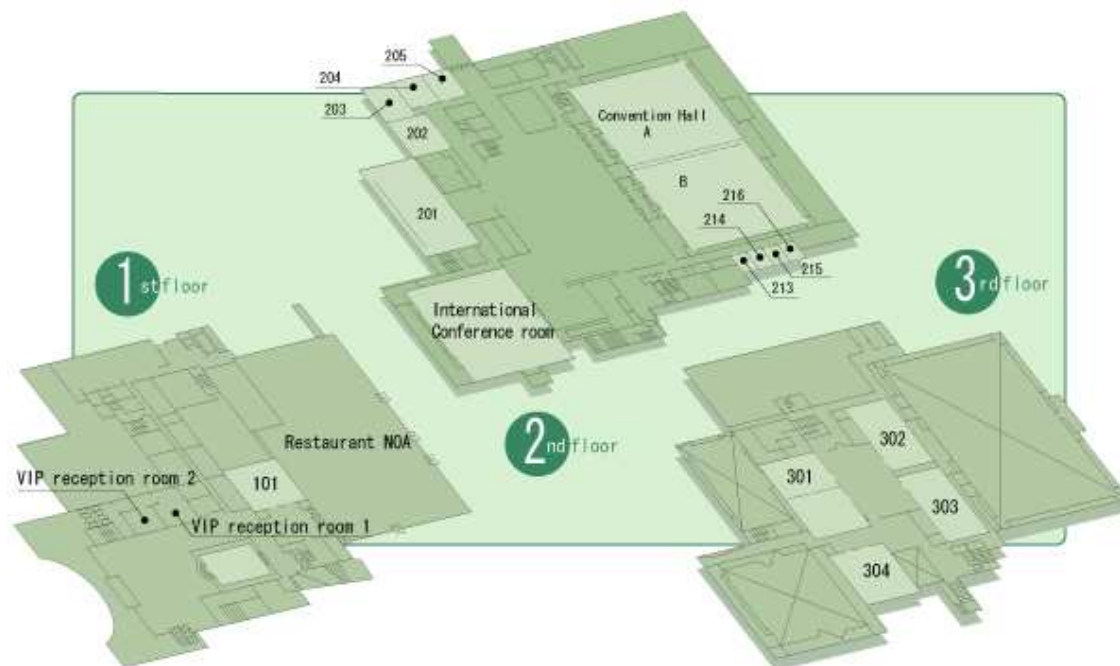
(International Banquet by JAIMA : Invitation card required)

(18:00 to 19:30, International banquet for Invited member by JAIMA, sponsored by JAIMA to celebrate the JAIMA SHOW 2009.)

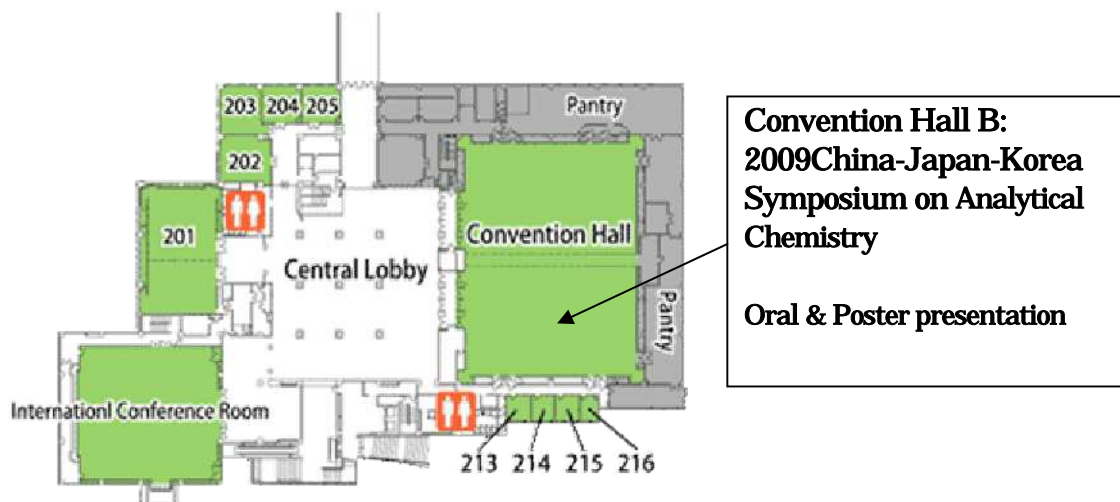
(Place "Lapis room" of the Hotel New Otani Makuhari, 2F.)

Symposium and Poster session room

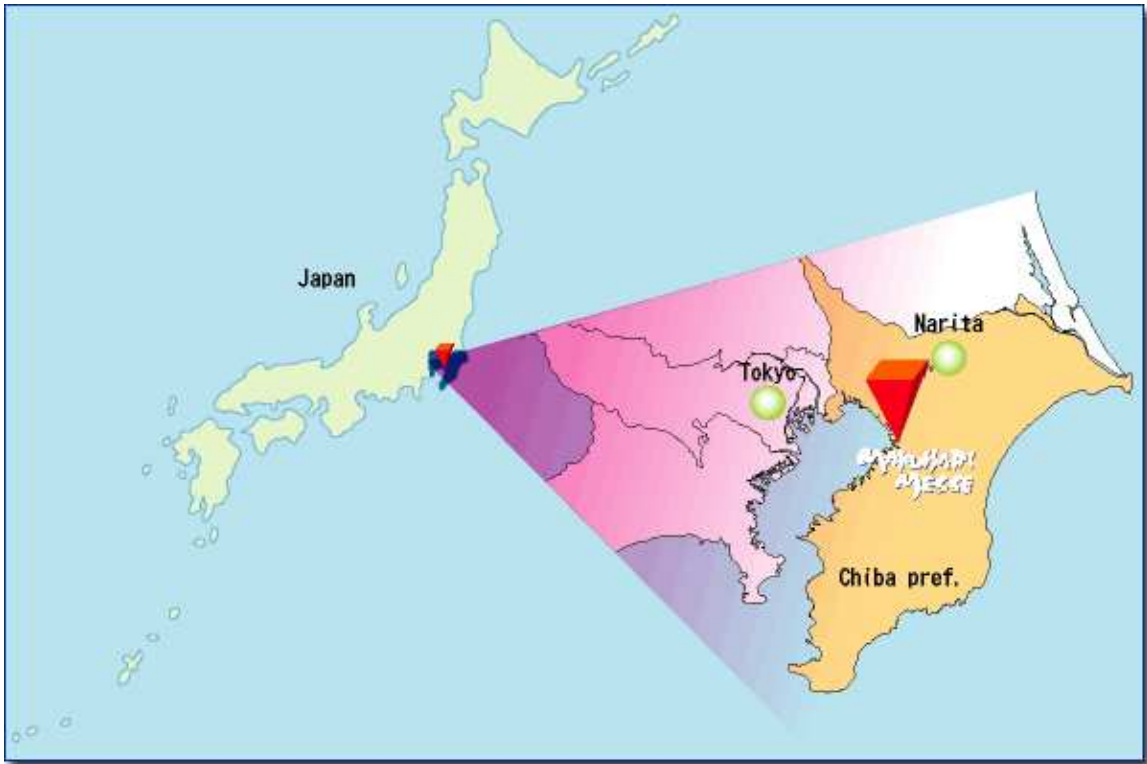
International Conference Hall B (2nd Floor)



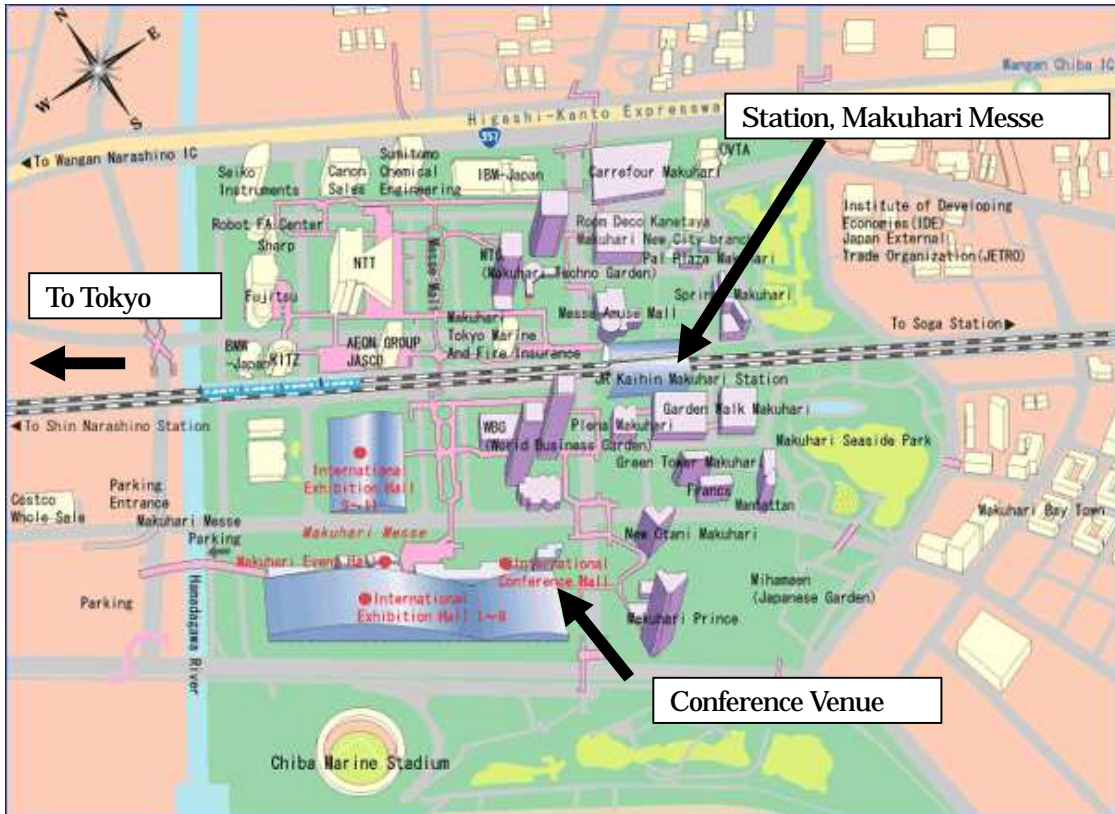
International Conference Hall, 2nd Floor



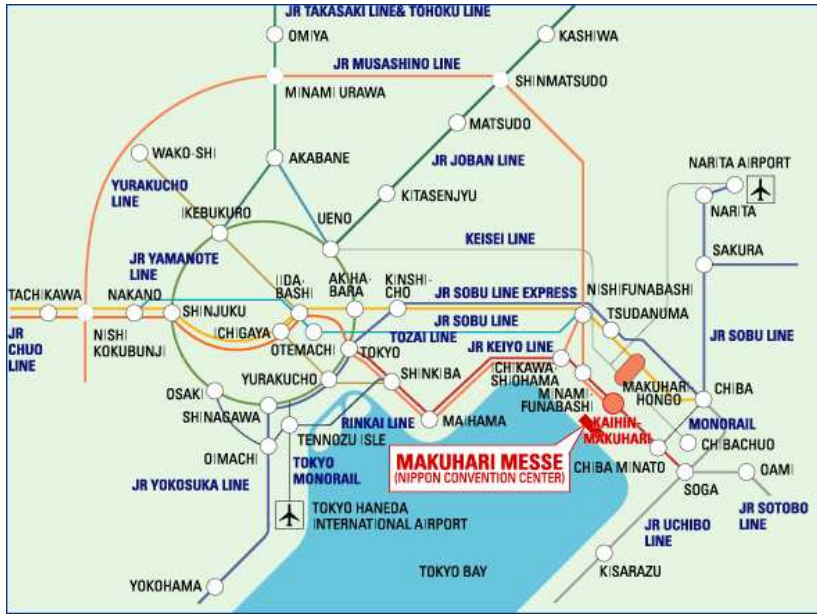
Location of the Makuhari Messe



Makuhari Messe is conveniently located halfway between central Tokyo and the New Tokyo International Airport (Narita Airport). The airport can be reached by bus or car in 30 minutes. Tokyo Station is also only 30 minutes away by train (the JR Keiyo Line).



Access to Makuhari Messe by public transportation



JR Kaihin Makuhari Station-Makuhari Messe 5 min. by walk



* Durations above do not include the time required for transfer.

Narita Airport Service Route(Limousine bus)

Hotels in Makuhari Area (Makuhari Messe) & Chiba ⇄ Narita Airport

- One Way (Half fare for children): ¥1,100~1,200
- Time Required(Makuhari Messe⇄Narita Airport): Approx 30~45min.

● INFORMATION

When you arrive at Narita Airport, having gone through the Customs area, just look for our friendly staff at our counters in the arrival lobby of Terminal 1 and 2. Buses from Narita Airport leave from the arrival lobby on the 1st floor. Tickets can be purchased at our counters for Hotels in Makuhari Area (Makuhari Messe) & Chiba. Our Airport Limousine keisei counters are located in the arrival lobbies (in front of the exit) of both Terminal 1 and 2. Passengers planning to take the bus should obtain their tickets at the ticket counters before proceeding to the bus stops in New Tokyo International Airport.

The limousine bus for New Tokyo International Airport (Narita) are being operated. You can buy the tickets at the bell captain desk. Buses to Narita Airport set down in front of the departure lobbies of both passenger terminals.

Please allow plenty of time for travel to or from the airport as delays can occur due to traffic and weather conditions. Reservation: As the limousine bus is a part of public transportation system, the seat capacity is limited and the reservation is not received.

● Bus departure timetable From Narita Airport Terminal 2 (Terminal Bus Stop Numbers:12)

For Hotel Springs Makuhari Kaihinmakuhari Sta. Hotel New Otani Makuhari Hotel Francis The Manhattan Hotel Green Tower Makuhari APA Hotel & Resort<Tokyo-bay-makuhari> (Makuhari Messe) Makuhari Bay Town Kemigawashama Sta. Inage Kaigan Sta. Saiwaicho Daisan Chiba Chuo Sta.
7:15 8:30 9:10 10:25 12:30 13:30 14:30 15:30 16:30 17:30 18:20 19:20 20:30 21:40

● Bus departure timetable From Narita Airport Terminal 1 (Terminal Bus Stop Numbers:5)

For Hotel Springs Makuhari Kaihinmakuhari Sta. Hotel New Otani Makuhari Hotel Francis The Manhattan Hotel Green Tower Makuhari APA Hotel & Resort<Tokyo-bay-makuhari> (Makuhari Messe) Makuhari Bay Town Kemigawashama Sta. Inage Kaigan Sta. Saiwaicho Daisan Chiba Chuo Sta.
7:20 8:35 9:15 10:30 12:35 13:35 14:35 15:35 16:35 17:35 18:25 19:25 20:35 21:45

● Bus departure timetable To Narita Airport

Dep. Chiba Chuo Sta.

5:23 6:10 6:57 7:40 8:55 10:00 11:00 12:00 12:50 13:50 14:50 15:40 16:30 17:15

Dep. Keisei Hotel Miramare

6:15 7:02 7:45 9:00 10:05 11:05 12:05 12:55 13:55 14:55 15:45 16:35 17:20

Dep. Saiwaicho Daisan

5:27 6:20 7:07 7:52 9:07 10:12 11:12 12:12 13:02 14:02 15:02 15:52 16:42 17:27

Dep. Inage Kaigan Sta.

5:38 6:30 7:00※ 7:15※ 7:17 8:05 9:20 10:25 11:25 12:25 13:15 14:15 15:15 16:05 16:55 17:40
※operates only on the weekday

Dep. Kemigawashama Sta.

5:42 6:34 7:04※ 7:19※ 7:21 8:09 9:24 10:29 11:29 12:29 13:19 14:19 15:19 16:09 16:59 17:44
※operates only on the weekday

Dep. Makuhari Bay Town

5:45 6:37 7:07※ 7:22※ 7:24 8:12 9:27 10:32 11:32 12:32 13:22 14:22 15:22 16:12 17:02 17:47
※operates only on the weekday

Dep. Hotel Springs Makuhari

6:41 7:28 8:16 9:31 10:36 11:36 12:36 13:26 14:26 15:26 16:16 17:06 17:51

Dep. Kaihinmakuhari Sta.

5:53 6:45 7:15※ 7:30※ 7:32 8:20 9:35 10:40 11:40 12:40 13:30 14:30 15:30 16:20 17:10 17:55
※operates only on the weekday

Dep. Hotel New Otani Makuhari

6:48 7:35 8:23 9:38 10:43 11:43 12:43 13:33 14:33 15:33 16:23 17:13 17:58

Dep. Hotel Francis

6:49 7:36 8:24 9:39 10:44 11:44 12:44 13:34 14:34 15:34 16:24 17:14 17:59

Dep. The Manhattan

6:50 7:37 8:25 9:40 10:45 11:45 12:45 13:35 14:35 15:35 16:25 17:15 18:00

Dep. Hotel Green Tower Makuhari

6:51 7:38 8:26 9:41 10:46 11:46 12:46 13:36 14:36 15:36 16:26 17:16 18:01

Dep. APA Hotel & Resort<Tokyo-bay-makuhari> (Makuhari Messe)

5:56 6:55 7:42 8:30 9:45 10:50 11:50 12:50 13:40 14:40 15:40 16:30 17:20 18:05

Title: 2009 China-Japan-Korea Symposium on Analytical Chemistry

Organizer: Japan Society for Analytical Chemistry, discussion group of EA, FIA, GC, IC, LC.

Date: September 1 (Tue.) 10:00~17:40

Place: Convention Hall B, 2nd Floor of International Conference Hall

Admission fee: ¥5000, Banquet fee: ¥5000

Advance registration system: E-mail: maeda-t@aist.go.jp, Fax: 029-861-4125

Time	Title	Lecturer (Affiliation) Country
10:00	Opening address	Symposium Chair, Prof. Hiroshi NAKAMURA (Tokyo University of Science)
10:05-11:05	Plenary lecture Frontier of the Analytical Chemistry in China and Korea	Prof. Jin-Ming LIN (Tsinghua Univ.) China Prof. Jianhua WANG (Northeastern Univ.) China Prof. Dong-Sun LEE (Seoul Women's Univ.) Korea
11:05-12:05	Invited lecture Frontier of the Analytical Chemistry in China, Japan and Korea	Prof. Toshio TAKAYANAGI (Okayama Univ.) Prof. Yu-Qi FENG (Wuhan Univ.) China Prof. Xi CHEN (Xiamen Univ.) China Prof. Norio TESHIMA (Aichi Institute of Technology)
12:10-12:50	Luncheon seminar : Analytical Chemistry on the leading laboratory in China and Korea. New approach of simple pretreatment for GC/MS analysis by using monolithic sorption extraction for determination of 16PAHs Analytical method of trans fats by comprehensive GCxGC and NMR	Dr. Yuki HASHI (Shimadzu International Trading Co. Limited, Shanghai) Dr. Jaeho HA (Korea Food Research Institute)
13:00-14:00	Poster presentation and discussion Analytical Chemistry perspective	
14:00-15:00	Plenary lecture Frontier of the Analytical Chemistry in China and Korea	Prof. Gon OK (Pukyung Natl. Univ.) Korea Prof. Masami SHIBUKAWA (Saitama Univ.) Prof. Yan ZHU (Zhejiang Univ.) China
15:00-16:00	Invited lecture Frontier of the Analytical Chemistry in China, Japan and Korea	Prof. Masanobu MORI (Gunma Univ.) Prof. Zilin CHEN (Wuhan Univ.) China Prof. Lan ZHANG (Zhejiang Univ.) China Prof. Tatsuro NAKAGAMA (Nihon Univ.)
16:00-16:10	Break	
16:10-17:40	Invited lecture Frontier of the Analytical Chemistry in China, Japan and Korea.	Prof. Bifeng LIU (Huanzhong ST Univ.) China Prof. Qun FANG (Zhejiang University) China Prof. Chengzhi HUANG (Southwest Univ.) China Prof. Xin-Xiang ZHANG (Peking Univ.) China Dr. Ryozo GOTO (TOA-DKK Corporation) Mr. Atsushi SATO (GL Sciences)

Banquet at Chiba brewery 18:30, 2, Takasecho, Funabashi-shi, Chiba. Tel: 047-436-4388

千葉県船橋市高瀬町2 サッポロビール千葉工場内

セミナータイトル:2009 China-Japan-Korea Symposium on Analytical Chemistry
日中韓分析化学の最前線(英語)

主催:(社)日本分析化学会ガスクロマトグラフィー・液体クロマトグラフィー・イオンクロマトグラフィー・フローインジェクション分析、環境分析各研究懇談会(日中韓分析研究交流会)

後援:(社)日本分析機器工業会、(社)日本分析化学会

日時: 9月1日(火) 10:00~17:40

場所:国際会議場 2階 コンベンションホールB

研究交流会参加費(10時から17時40分):5000円、意見交換会参加費(18時30分から20時):5000円

事前登録:要

問合せ先:前田恒昭(独)産業技術総合研究所計測標準研究部門計量標準システム科)

E-mail: maeda-t@aist.go.jp, Fax:029-861-4125

URL: <http://www.jsac.or.jp/~gc/> (最新情報はホームページで確認ください)

ランチョンセミナー:先着50名にランチ提供

時間	タイトル	講演者(所属)
10:00~10:05	開会挨拶	大会委員長 中村 洋教授(東京理科大学)
10:05~11:05	主題講演(1) 中国・韓国の分析化学最前線	Prof. Jin-Ming LIN (Tsinghua Univ.) China Prof. Jianhua WANG (Northeastern Univ.) China Prof. Dong-Sun LEE (Seoul Women's Univ.) Korea
11:05-12:05	招待講演(1) 日中韓分析化学の最前線	Prof. Toshio TAKAYANAGI (Okayama Univ.) Prof. Yu-Qi FENG (Wuhan Univ.) China Prof. Xi CHEN (Xiamen Univ.) China Prof. Norio TESHIMA (Aichi Institute of Technology)
12:10~12:50	ランチョンセミナー 中国・韓国分析化学の現場から New approach of simple pretreatment for GC/MS analysis by using monolithic sorption extraction for determination of 16PAHs Analytical method of trans fats by comprehensive GCxGC and NMR	Dr.Yuki HASHI (Shimadzu International Trading Co. Limited, Shanghai) Dr. Jaeho HA (Korea Food Research Institute)
13:00~14:00	ポスター発表と意見交換	
14:00~15:00	主題講演(2) 日本・中国・韓国の分析化学最前線	Prof. Gon OK (Pukyung Natl. Univ.) Korea Prof. Masami SHIBUKAWA (Saitama Univ.) Prof. Yan ZHU (Zhejiang Univ.) China
15:00~16:00	招待講演(2) 日中韓分析化学の最前線	Prof. Masanobu MORI (Gunma Univ.) Prof. Zilin CHEN (Wuhan Univ.) China Prof. Lan ZHANG (Fuzhou Univ.) China Prof. Tatsuro NAKAGAMA (Nihon Univ.)
16:10~17:40	招待講演(3) 日中韓分析化学の最前線	Prof. Bifeng LIU (Huanzhong ST Univ.) China Prof. Qun FANG (Zhejiang University) China Prof. Chengzhi HUANG (Southwest Univ.) China Prof. Xin-Xiang ZHANG (Peking Univ.) China Dr. Ryoza GOTO (DKK-TOA Corporation) Mr. Atsushi .SATO (GL Sciences)

Title: 2009 China-Japan-Korea Symposium on Analytical Chemistry

Organizer: Japan Society for Analytical Chemistry, discussion group of EA, FIA, GC, IC, LC.

Date: September 2(Wed.) 9:00~11:00

Place: Convention Hall B, 2nd Floor of International Conference Hall

Admission fee: Free

Advance registration system: e-mail to maeda-t@aist.go.jp

Time	Title	Lecturer (Affiliation) Country
9:00-9:30	The recent trend of analysis method for food safty in Chaina	Dr. Yuki HASHI (Shimadzu International Trading Co.Limited, Shanghai) China
9:30-10:00	Food regulation and analytical method for the food safety in KOREA	Dr. Jaeho HA (Korea Food Research Instite) Korea
10:00-10:30	Introduction and recent research in Korean Society for Environmental Analytical I Chemistry.	Prof. Gon OK (Dioxin Research Center, Pukyong Natl. Univ.) Korea
10:30-11:00	Analytical Chemistry division in Chines Chemical Society and Research topics	Prof. Jin-Ming LIN (Tsuinghua Univ.) China
11:00	Closing remark by Symposium Chair.	Prof. Hiroshi NAKAMURA (Tokyo University of Science.)

セミナータイトル: 2009 China-Japan-Korea Symposium on Analytical Chemistry

特別セミナー 日中韓分析化学の最前線

主催: (社)日本分析化学会ガスクロマトグラフィー・液体クロマトグラフィー・イオンクロマトグラフィー・フローインジエクション分析、環境分析各研究懇談会 (日中韓分析研究交流会)

後援: (社)日本分析機器工業会、(社)日本分析化学会

日時: 9月2日(水)09:00~11:00

場所: 国際会議場 2階 コンベンションホールB

参加費: 無料

事前登録: 不要

問合せ先: 前田恒昭 ((独)産業技術総合研究所計測標準研究部門計量標準システム科)

E-mail: maeda-t@aist.go.jp, Fax: 029-861-4125

URL: <http://www.jsac.or.jp/~gc/> (最新情報はホームページで確認ください)

時間	タイトル	講演者(所属)
09:00~09:20	中国における食品安全の為の最新分析手法	Dr. Yuki HASHI (Shimadzu International Trading Co.LTD, Shanghai) 中国
09:20~09:50	韓国食品安全規格と分析法	Dr. Jaeho HA (Korea Food Research Institute)韓国
09:50~10:20	韓国環境分析学会の活動と研究最前線	Prof. Gon OK (Dioxin Research Center, Pukyong Natl. Univ.) 韓国
10:20~11:00	中国化学会分析化学部門の活動と研究最前線	Prof. 林金明 (Jin-Ming Lin) (清華大学)中国
11:00	閉会の挨拶	大会委員長 中村 洋教授 (東京理科大学)

Reference and History of China-Japan-Korea Symposium on Environmental Analytical Chemistry to Analytical Chemistry

This China-Japan-Korea Symposium on Environmental Analytical Chemistry can be traced to the China-Japan Symposium on Environmental Analytical Chemistry held in 2002 in Beijing. The symposium was organized by the GC discussion group of Japan and the Research Center for Eco-Environmental Sciences (RCEES), Chinese Academy of Sciences (China).

Initially, it was proposed at the 40th jubilee of establishment of the GC discussion group of Japan to hold one of the regular bimonthly meetings outside of Japan. Since group members have well acquaintance with Prof. Jin-Ming Lin in RCEES, they expected to visit China and exchange information with Prof. Lin's group. From now on Dr. Tsuneaki MAEDA worked as a secretary in Japan side. This symposium was successfully held and it was very fruitful for both sides. Then, we did the next effort to expand the meeting to another country, i.e. Korea.

In 2003, Korea-Japan symposium on Gas Chromatography symposium was held at Seoul with Korean GC research group. The GC research group in Korea was established and organized by Prof. Dong-Sun Lee and Prof. Mangoo Kim. At this symposium, Prof. Lin was invited to Seoul. There, we discussed about the next meeting, and had decided to hold 2004 meeting as China-Japan-Korea Symposium on Environmental Analytical Chemistry

The symposium was held at Beijing in 2004 organized by Prof. Jin-Min LIN, symposium chair is Prof. Xiaoquan SHAN. It was also very successful and we exchanged friendship with many foreign researchers as well as Japanese ones. Both members of GC discussion group of Japan and Korean GC research group jointed together with Chinese researchers. Topics in this symposium were not limited to the ones related with GC, but it expanded to the separation sciences. This symposium was recorded as 1st China-Japan-Korea symposium on Environmental Analytical Chemistry (CJK Symposium).

2005, 2nd CJK Symposium opened at Makuhari during JAIMA show. This symposium was supported mainly by Japan Society for Analytical Chemistry (JSAC) and Japan Analytical Instruments Manufacturers Association (JAIMA), managed by GC discussion group of Japan. The four discussion groups in JSAC, namely LC, GC, IC, FIA discussion groups joined together and organized the committee in Japan side. At this moment, Prof. Hiroshi Nakamura is the chair of the organizing committee. GC research group in Korea organized committee and attended the meeting. China committee was also organized by Prof. Lin and jointed together.

3rd CJK Symposium, 2006 at Chongqing, China, organized by Prof. Cheng Zhi HUANG and Prof. Jin-Min LIN

4th CJK Symposium, 2007 at Jeju Island, Korea, organized by Prof, Dong-Sun Lee and Dr. Joeho HA.

5th CJK Symposium, 2008 at Xiamen, China, organized by Prof, Xi CHEN and Prof. Quiquan WAN.

Now, we organized 6th CJK symposium at Makuhari, Chiba again. Discussion group of Environmental Analysis (EA) jointed and expanded research area. Under the direction of the symposium chair, Prof. Hitoshi NAKAMURA of Tokyo University of Science (chair of JSAC), we decided to change symposium title from China-Japan-Korea Symposium on Environmental Analytical chemistry to China-Japan-Korea Symposium on Analytical Chemistry.

Many manufactures related with the analytical chemistry have been supporting these symposiums. The symposium is expected to be continued for coming years for exchanging

information with close relationships and friendships.

Lastly, I do like to welcome all delegates from abroad, and also heartily hope that every attendee will have satisfaction and enjoy this symposium.



2009 China-Japan-Korea Symposium on Analytical Chemistry
Period of JAIMA Show, Aug. 31, Sep.1 and 2, at Makuhari, Chiba, Japan



明日を担う新たな目

Chair: Prof. Hiroshi NAKAMURA

Supported by JAIMA and LC,GC,FIA,IC,EA discussion group, JSAC



地球を守り 未来を創る 分析技術

2009分析展

2009.9/2(金)▶9/4(土) AM10:00 会場: Makuhari Messe 5-6-7-8ホール 入場無料
主催: 日本分析化学会、日本分析化学会、日本分析化学会、日本分析化学会、日本分析化学会
協賛: 日本分析化学会、日本分析化学会、日本分析化学会、日本分析化学会、日本分析化学会
後援: 日本分析化学会、日本分析化学会、日本分析化学会、日本分析化学会、日本分析化学会

Organizing committee of
2009 China-Japan-Korea Symposium on Analytical Chemistry

Committees

Symposium Chairman

Prof. Dr. Hiroshi NAKAMURA (Faculty of Pharmaceutical Sciences, Tokyo University of Science. Chair of the LC discussion group, Chair of the JSAC)

Japan, Members:

Environment Analysis discussion group (EA)

Prof. Dr. Kinichi TSUNODA (Gunma University, Chair of the EA)

Prof. Dr. Masami SHIBUKAWA (Saitama University)

Flow Injection Analysis discussion group (FIA)

Prof. Dr. Tadao SAKAI (Aichi Institute of Technology, Chair of the FIA)

Prof. Dr. Shoji MOTOMIZU (Okayama University)

Prof. Dr. Koichi OGUMA (Emeritus Prof. of Chiba University)

Prof. Dr. Hideyuki ITABASHI (Gunma University)

Prof. Dr. Toshihiko IMATO (Kyushu University)

Associate Prof. Dr. Norio TESHIMA (Aichi Institute of Technology)

Gas Chromatography discussion group (GC)

Prof. Toshiyuki HOBO (Emeritus Prof of Tokyo Metropolitan University. Supreme Advisor)

Dr. Tsuneaki MAEDA (National Institute of Advanced Industrial Science and Technology (AIST), Chair of the GC)

Mr. Toyohito WADA (Simadzu, Vice Chair of the GC)

Dr. Shigeki DAISHIMA (Agilent Technologies, Vice Chair of the GC)

Associate Prof. Dr. Tatsurou NAKAGAMA (Japan University)

Associate Prof. Dr. Hiroshi SATO (Nagasaki University)

Dr. Chuichi WATANABE (Frontier Laboratories LTD.)

Mr. Masahiro FURUNO (GL Sciences)

Mr. Masamitsu NAKAZATO (GL Sciences)

Mr. Hiroyuki KANEKO (Tokyo Kasei Kogyo)

Mr. Hirooki KANDA (Gerstel)

Mr. Masaaki NOGUCHI (Techno International)

Mr. Ryoichi SASANO (Aisti Science)

Mr. Arata KANEMARU (Aisti Science)

Mr. Makoto OHASHI (SGE Japan Inc.)

Ion Chromatography Discussion group (IC)

Prof. Dr. Kazuhiko TANAKA (Hiroshima University, Chair of the IC))

Prof. Dr. Yasuyuki MIURA (Tokai University)

Associate Prof. Dr. Ikkou MIKAMI (Tokai University)

Dr. Ryozo GOTO (DKK-TOA Corporation)

Associate Prof. Masanobu MORI (Gunma University)

Associate Prof. Nobutake NAKATANI (Rakuno Gakuen University)

Liquid Chromatography discussion group (LC)

Prof. Dr. Hiroshi NAKAMURA (Tokyo University of Science. Chair of the LC)

Dr. Masaaki SENDA (LMS Co.LTD)

Mr. Takeshi INOUE (Tokyo Kasei Kogyo)

Dr. Toshiya HONDA (Hitachi)

Ms. Miyuki MATSUSHITA (Hitachi High-Technologies)

China, Group Chairman:

Prof. Dr. Jin-Ming LIN (Tsinghua University)

China, Members:

Prof. Dr. Zilin CHEN (Wuhan University)

Prof. Dr. Xi CHEN (Xiamen University)

Prof. Dr. Cheng-Zhi HUANG (Southwest University)

Prof. Dr. Yan ZHU (Zhejiang University)

Prof. Dr. Jianhua WANG (Northeastern University)

Prof. Dr. Lan ZHANG (Fuzhou University)

Prof. Dr. Yu-Qi FENG (Wuhan University)

Prof. Dr. Bifeng LIU (Huanzhong University of Science and Technology)

Dr. Yuki HASHI (Shimadzu International Trading Co.LTD)

Prof. Dr. Xin-Xiang ZHANG (Peking University)

Prof. Dr. Qun FANG (Zhejiang University)

Prof. Dr. Yunhua GAO (Technical Institute of Physics and Chemistry, CAS)

Korea, Group Chairman:

Prof. Dr. Dong-Sun LEE (Seoul Women's University)

Korea, members:

Dr. Jae-ho Ha (Korea Food Research Institute)

Prof. Dr. Gon OK (Pukyuong National University)

Symposium Chief Secretary

Dr. Tsuneaki MAEDA (National Institute of Advanced Industrial Science and Technology. (AIST), Chair of the GC)