

## **TIMETABLE**

**The 15<sup>th</sup> International Conference on Flow Injection Analysis including related techniques  
(ICFIA 2008) &**

**The 25<sup>th</sup> Anniversary Meeting of Japanese Association for Flow Injection Analysis**

### **9/28 (Sunday)**

16:00 – 17:30 **On-site registration at Motoyama Campus of Aichi Institute of Technology**

18:00 – 20:30 **Welcome Reception**

### **9/29 (Monday)**

08:30 – 17:00 **Registration at Nagoya Garden Palace**

09:00 – 09:20 **Opening Ceremony**

09:20 – 12:25 **I-1, O-1 ~ O-7**

12:25 – 14:00 **Lunch Time**

14:00 – 15:00 **O-8 ~ O-10**

15:00 – 17:00 **P-1 ~ P-40 (Student Posters) Core time: odd, 15:00–16:00; even, 16:00–17:00**

### **9/30 (Tuesday)**

08:30 – 17:00 **Registration at Nagoya Garden Palace**

08:45 – 12:40 **I-2, I-3, O-11 ~ O-19**

12:40 – 14:00 **Lunch Time (Steering Committee Meeting)**

14:00 – 15:00 **O-20 ~ O-22**

15:00 – 15:30 **Award Ceremony for Winners of FIA Awards**

15:30 – 17:30 **P-41 ~ P-80 (some for students)**

Core time: odd, 15:30 – 16:30; even, 16:30 – 17:30

### **10/1 (Wednesday) One Day Excursion to Takayama & Shirakawa-go**

### **10/2 (Thursday)**

09:00 – 12:25 **I-4, O-23 ~ O-30**

12:25 – 14:00 **Lunch Time**

14:00 – 15:00 **O-31 ~ O-33**

15:00 – 17:00 **P-81 ~ P-121 Core time: odd, 15:00 – 16:00; even, 16:00 – 17:00**

18:00 – 21:00 **Banquet & Award Ceremony for Winners of FIA Honor Awards**

**Welcome speech by the organizer of 16<sup>th</sup> ICFIA**

### **10/3 (Friday)**

09:00 – 11:25 **O-34 ~ O-39, I-5**

11:25 – **Closing Ceremony**

**Poster Awards for Students**

## ICFIA 2008 PROGRAM

### 9/28 (Sunday)

- 16:00 – 17:30 On-site registration at Motoyama Campus of Aichi Institute of Technology  
18:00 – 20:30 Welcome Reception  
(Presided by H. Ukeda and H. Itabashi)

### 9/29 (Monday)

- 08:30 – 17:00 Registration at Nagoya Garden Palace  
09:00 – 09:20 **Opening Ceremony**  
(Presided by T. Imato)

#### Lectures

##### Chair persons: S. Motomizu, O. Chailapakul

- 09:20 – 09:45 **I-1** “*Memories: A brief history of the International Conference on Flow Injection Analysis*”, Opening Lecture by Prof. Gary D. Christian (University of Washington, USA)  
09:45 – 10:05 **O-1** “*Recent trends in automation of leaching tests for determination of trace elements in environmental solids and solid wastes exploiting the different generations of flow analysis*”, Manuel Miro (University of the Balearic Islands, Spain)

##### Chair persons: M. Polasek, T. Yao

- 10:05 – 10:25 **O-2** “*An electrospray mass spectrometer as a new detector for inorganic ions in flow analysis*”, Kin-ichi Tsunoda, Hiroki Hotta, Yuta Kogure, Akira Takahashi, Takayuki Mori, Tomonari Umemura (Gunma University, Japan; Nagoya University, Japan)  
10:25 – 10:45 **O-3** “*Separation and determination of small amounts of metal ions with capillary electrophoresis equipped with chemiluminescence detection system using a reaction of 1,10-phenanthroline and hydrogen peroxide*”, Takahiro Nogami, Masahiko Hashimoto, Kazuhiko Tsukagoshi (Doshisha University, Japan)  
10:45 – 11:05 **O-4** “*Flow injection spectrophotometric determination of trace copper (II) with in-line preconcentration/separation by chitosan microcolumn*”, Saisunee Liawruangrath, Wasan Sirisungworawong (Chiang Mai University, Thailand)

- 11:05 – 11:25 **Coffee Break**

##### Chair persons: K. Tsunoda, D. Nacapricha

- 11:25 – 11:45 **O-5** “*Flow injection chemiluminescent methods for the environmental water*

- analysis*”, Jin-Ming Lin (*Tsinghua University, China*)
- 11:45 – 12:05 **O-6** “*Postcolumn concentration in ion chromatography*”, Masaki Takeuchi, Jason V. Dyke, Purnendu K. Dasgupta, Hideji Tanaka, Kannan Srinivasan (*Tokushima University, Japan; Texas Tech University, USA; University of Texas at Arlington, USA; Dionex Corporation, USA*)
- 12:05 – 12:25 **O-7** “*Flow injection based microfluidic device with carbon nanotube electrode for rapid salbutamol sensing*”, Chanpen Karuwan, Thitima Maturros, Assawapong Sappat, Kata Jaruwongrungrsee, Isara Pimtara, Tanom Lomas, Anurat Wisitsoraat, Adisorn Tuantranont (*National Electronics and Computer Technology Center, Thailand*)
- 12:25 – 14:00 **Lunch Time**
- Chair persons: M. Trojanowicz, T. Fujiwara**
- 14:00 – 14:20 **O-8** “*Fast cholesterol detection by flow injection system based on microfluidic glass chip with integrated modified carbon nanotube electrode*”, Anurat Wisitsoraat, C. Karuwan, I. Pimtara, T. Maturros, A. Sappat, K. Jaruwongrungrsee, K. Wong-ek, A. Tuantranont (*National Electronics and Computer Technology Center, Thailand*)
- 14:20 – 14:40 **O-9** “*Can flow based micro gas analyzer measure exhaled nitric oxide of human breath?*”, Kei Toda, Takahiro Koga, Junichi Kosuge, Mieko Kashiwagi, Hiroshi Oguchi, Takemi Arimoto (*Kumamoto University, Japan; Sekisui Medical Co., Japan; GASTEC Co., Japan*)
- 14:40 – 15:00 **O-10** “*The quest for the ideal photometric detection system for use in flow analysis*”, Ian D. McKelvie, Brady Gentle, Peter Ellis, Michael Grace (*Monash University, Australia*)

## Posters

- 15:00 – 17:00 **P-1 ~ P-40** Poster Presentation for Students (40 posters) with Coffee  
**(Presided by S. Nakano and W. Laiwattanapaisal)**  
 Core time 15:00 – 16:00 Odd numbers  
 16:00 – 17:00 Even numbers

## 9/30 (Tuesday)

08:30 – 17:00 Registration at Nagoya Garden Palace

## Lectures

- Chair persons: K. Oguma, S.D. Kolev**
- 08:45 – 09:00 **I-2** “*Activities of Japanese Association for Flow Injection Analysis: 25<sup>th</sup> Anniversary*”, by Prof. Tadao Sakai (*Aichi Institute of Technology, Japan*)
- 09:00 – 09:25 **I-3** “*Ionics. An Ionic Diode Behaves as an Electrolyte Generator and a*

*Charge Detector*”, Invited Lecture by Prof. Purnendu K. Dasgupta, Bingcheng Yang, Yongjin Chen, Masanobu Mori, Shin-Ichi Ohira (*University of Texas at Arlington, USA*)

**Chair persons: J.-M. Lin, H. Tanaka**

09:25 – 09:45 **O-11** “*Calibration by the integrated method with the use of a monosegmented sequential injection system*”, Joanna Kozak, Marcin Wieczorek, Paweł Kościelniak (*Jagiellonian University, Poland*)

09:45 – 10:05 **O-12** “*Flow injection sample introduction coupled to microcolumn separation techniques*”, Petr Kubáň, Pavlína Pelcová, Vlastimil Kubáň (*Mendel University of Agriculture and Forestry, Czech Republic*)

10:05 – 10:25 **O-13** “*Analysis of angiotensin I-converting enzyme-inhibiting activity based on the detection of 3-hydroxybutyric acid*”, Hiroyuki Ukeda, Le Hoang Lam, Tomoko Shimamura, Munetaka Ishiyama (*Kochi University, Japan; Dojindo Laboratories, Japan*)

10:25 – 10:45 **O-14** “*CIA: Cross Injection Analysis*”, Duangjai Nacapricha, Patidta Sastranurak, Natchanon Amornthammarong, Chatchalida Boonpanaid, Chatpong Chuyprasartwattana, Thitirat Mantim, Nathawut Choengchan, Kanchana Uraisin, Prapin Wilairat (*Flow Innovation-Research for Science and Technology Laboratories,, Thailand; Mahidol University, Thailand; National Oceanic & Atmospheric Administration, USA; King Mongkut's University of Technology North Bangkok, Thailand; King Mongkut's Institute of Technology Ladkrabang, Thailand*)

10:45 – 11:00 **Coffee Break**

**Chair persons: I. D. McKelvie, M. Miro**

11:00 – 11:20 **O-15** “*In-line treatment of environmental samples for macronutrients monitoring using multi-syringe flow injection analysis*”, M. Inês G.S. Almeida, Marcela A. Segundo, José L.F.C. Lima, António O.S.S. Rangel (*Universidade Católica Portuguesa, Portugal; Universidade do Porto, Portugal*)

11:20 – 11:40 **O-16** “*From test tubes to process systems. The road ahead.*”, Jacobus F. (Koos) van Staden (*National Institute of Research and Development for Electrochemistry and Condensed Matter, Romania*)

11:40 – 12:00 **O-17** “*Time measurement-visual analysis of L-cysteine using autocatalytic reaction with sodium sulfite/hydrogen peroxide system and its application to the length detection-flow analysis*”, Jun Kato, Michihito Chiba, Shukuro Igarashi (*Tokyo University of Science, Japan; Ibaraki University, Japan*)

**Chair persons: P. Solich, K. Yoshimura**

12:00 – 12:20 **O-18** “Standard gas generator based on gravitational dispensing-vaporization for breath formaldehyde analysis system”, Norio Teshima, Miroru Ueda, Tadao Sakai (Aichi Institute of Technology, Japan)

12:20 – 12:40 **O-19** “Coupling between membraneless vaporization with capacitively coupled contactless conductivity detection for selective analysis of carbonate”, Kamonthip Sereenonchai, Phoonthawee Saetear, Natchanon Amornthammarong, Kanchana Uraisin, Prapin Wilairat, Shoji Motomizu, Duangjai Nacapricha (Flow Innovation-Research for Science and Technology Laboratories, Thailand; Mahidol University, Thailand; National Oceanic & Atmospheric Administration, USA; Okayama University, Japan)

12:40 – 14:00 **Lunch Time**  
**(Steering Committee Meeting)**

**Chair persons: K. Grudpan, M. Takeuchi**

14:00 – 14:20 **O-20** “A new capillary flow analysis with separation function using aqueous mixed solvents of ionic liquids”, Thiraporn Charoenraks, Masaaki Tabata, Kenta Fujii (Saga University, Japan)

14:20 – 14:40 **O-21** “Recent state in chromatographic separations in flow methods”, Petr Solich, Miroslav Polášek (Charles University, Czech Republic)

14:40 – 15:00 **O-22** “Flow-injection photometric determination of molybdenum(VI) using its catalytic effect on the oxidative coupling reaction”, Shigenori Nakano, Chie Kamaguchi, Naoki Hirakawa (Tottori University, Japan)

15:00 – 15:30 **Award Ceremony for Winners of FIA Awards**  
**(Presided by T. Takayanagi)**

**Posters**

15:30 – 17:30 **P-41 ~ P-80** Poster Presentation (40 posters, some for students) with Coffee  
**(Presided by I. Satoh and J. Jakmunee)**

Core time 15:30 – 16:30 Odd numbers

16:30 – 17:30 Even numbers

**10/1 (Wednesday)**

08:00 – 19:30 **One Day Excursion to Takayama & Shirakawa-go**

## 10/2 (Thursday)

### Lectures

**Chair persons: J.F.(Koos) Staden, K. Toda**

09:00 – 09:25 **I-4** “*Microfluidics for single biomolecular and single cellular analysis*”,  
Invited Lecture by Prof. Yoshinobu Baba (Nagoya University, Japan;  
National Institute of Advanced Industrial Science and Technology, Japan;  
National Institute for Natural Sciences, Japan)

09:25 – 09:45 **O-23** “*Evidences of turbulent mixing in flow analysis relying on pulsed flows*”,  
Elias A.G. Zagatto, Paula R. Fortes, Mario A. Feres, Evandro R. Alves,  
Joao A.V. Prior, Jose L.F.C. Lima (Universidade de São Paulo, Brazil;  
Universidade do Porto, Portugal)

**Chair persons : A. Ivaska, M. Zenki**

09:45 – 10:05 **O-24** “*Artificial nanostructures in flow analysis*”, Marek Trojanowicz  
(University of Warsaw, Poland)

10:05 – 10:25 **O-25** “*A miniature lab-on-valve atomic fluorescence spectrometer integrating  
a dielectric barrier discharge atomizer demonstrated for arsenic  
analysis*”, Yong-Liang Yu, Zhuo Du, Ming-Li Chen, Jian-Hua Wang  
(Northeastern University, China)

10:25 – 10:45 **O-26** “*Development of novel silica monolith as a support for immobilized  
enzyme based on the FIA system and application of the system for  
determination of urea*”, Yasuhiro Iida, Hiroomi Kan, Ikuo Satoh  
(Kanagawa Institute of Technology, Japan)

10:45 – 11:05 **Coffee Break**

**Chair persons: E. A. G. Zagatto, P. Kuban**

11:05 – 11:25 **O-27** “*Flow manipulation effects on sensitivity in gas-diffusion sequential  
injection analysis*”, Spas D. Kolev, Paula R.L.V. Fernandes, Dalibor  
Satinsky, Petr Solich (The University of Melbourne, Australia;  
Universidade do Porto, Portugal; Charles University, Czech Republic)

11:25 – 11:45 **O-28** “*Chemometrics, an overlooked tool for optimizing sequential injection  
analysis methods*”, Abubakr M. Idris, Fahad N. Assubaie (King Faisal  
University, Saudi Arabia)

11:45 – 12:05 **O-29** “*Lab-at-Valve (LAV) flow and batch-wise analyses*”, Kate Grudpan  
(Chiang Mai University, Thailand)

12:05 – 12:25 **O-30** “*Mathematical modeling of flow-injection systems*”, Tomasz Sokalski,  
Markus Kass, Christian Müller, Ari Ivaska (Åbo Akademi University,  
Finland; KWH Mirka, Finland; Clyde Bergemann GmbH, Germany)

12:25 – 14:00 **Lunch Time**

**Chair persons: T. Imato, A. O. S. S. Rangel**

14:00 – 14:20 **O-31** “Automation of chemical analysis using computer-controllable modules for liquid-flow pumps and valves”, Shoji Motomizu (Okayama University, Japan)

14:20 – 14:40 **O-32** “On-line separation and preconcentration of histamine in fish meal samples”, Nabil A. Fakhre, Mohamad S. Abdullah (University of Salahaddin, Iraq)

14:40 – 15:00 **O-33** “Towards flow-based systems for less reagent and low cost method for determination of urinary albumin”, Wanida Laiwattanapaisal, Temsiri Songcharoen, Usakorn Kunanuvat, Wichaporn Intharachuti, Chakorn Chinvongamorn, Thitima Maturros, Thanom Lomas, Supot Hannongbua, Adisorn Tuantranont, Orawon Chailapakul (Chulalongkorn University, Thailand; Rajamangala University of Technology Thanyaburi, Thailand; National Electronics and Computer Technology Center, Thailand)

## Posters

15:00 – 17:00 **P-81 ~ P-121** Poster Presentation (40 posters) with Coffee  
(Presided **M. Ishii and A.S. Attiyat**)

Core time 15:00 – 16:00 Odd numbers

16:00 – 17:00 Even numbers

18:00 – 21:00 **Banquet**

(Presided by **H. Ukeda and H. Itabashi**)

**Award Ceremony for Winners of FIA Honor Awards**

(Presided by **N. Teshima**)

Welcome speech by the organizer of 16<sup>th</sup> ICFIA

## 10/3 (Friday)

### Lectures

**Chair persons: T. Nagaoka, M. A. Segundo**

09:00 – 09:20 **O-34** “Computational characterization of titanium(IV)-porphyrin reagent used in the flow injection analysis of hydrogen peroxide”, Kiyoko Takamura, Takatoshi Matsumoto (Tokyo University of Pharmacy and Life Sciences, Japan; Tohoku University, Japan)

09:20 – 09:40 **O-35** “On-line dialysis coupled to high-performance liquid chromatography for the determination of some organic acids in Thai wine”, Orawan Kritsunankul, Benjaporn Pramote, Jaroon Jakmunee (Naresuan University, Thailand; Chiang Mai University, Thailand)

09:40 – 10:00 **O-36** “*New flow injection kinetic spectrophotometric method for the determination of trace amounts of nitrite in real samples*”, Siavash Nouroozi, Razieh Mirshafian (*Zanjan University, Iran*)

**Chair persons: K. Tsukagoshi, S. Nouroozi**

10:00 – 10:20 **O-37** “*Determination of sulfite in wine by flow analysis with a membraneless vaporization apparatus*”, Chatchalida Boonpanaid, Thanawat Danvanichkul, Kamonthip Sereenonchai, Nathawut Choengchan, Duangjai Nacapricha, Koichi Oguma (*Flow Innovation-Research for Science and Technology Laboratories, Thailand; King Mongkut's University of Technology North Bangkok, Thailand; Mahidol University, Thailand; King Mongkut's Institute of Technology Ladkrabang, Thailand; Chiba University, Japan*)

10:20 – 10:40 **O-38** “*Flow-based methods for fast screening of antioxidant capacity*”, Marcela A. Segundo, Luís M. Magalhães, Salette Reis, José Luís F. Costa Lima (*Universidade do Porto, Portugal; Centre for Rapid and Sustainable Product Development, Portugal*)

10:40 – 11:00 **O-39** “*Simultaneous spectrophotometric determination of iron(II) and total iron using flow injection analysis*”, Abdulrahman S. Attiyat, Idrees F. Al-Momani, Mazen A. Moussa (*Yarmouk University, Jordan; Hashemite University, Jordan*)

11:00 – 11:25 **I-5** “*Combined use of flow techniques with chromatographies*”, Closing Lecture by Prof. Víctor Cerdà (*University of the Balearic Islands, Spain*)

11:25 – **Closing Ceremony**  
**(Presided by K. Matsumoto)**  
**Poster Awards for Students**