

お知らせ

第5回フローアナリシス国際会議 (FLOW ANALYSIS V) の開催

標記国際会議が1991年8月21～24日に熊本工業大学(熊本市)で開催されます。本誌70ページにプログラムを掲載していますように、講演件数は招待講演10件(内海外8件)、口頭発表29件(内海外20件)、ポスター94件の計133件(内海外93件)となっています。多数のご参加をお待ち致しております。

FIA研究懇談会会誌Vol. 8, No. 2への投稿記事の募集

事務局では記事のご投稿をお待ち致しております。原稿の締切は10月末日です。

FIA研究懇談会会誌Vol. 8, No. 2への広告の募集

事務局では下記の要領で会誌への広告を募集致しております。

記

広告原稿: そのままオフセット印刷(モノクロ写真製版、B5サイズ)できるもの

広告料: 1ページにつき年間(1号と2号)で3万円

原稿締切: 1991年10月31日

原稿送付先: 〒812 福岡市東区箱崎6-10-1

九州大学工学部応用物質化学教室

(社)日本分析化学会

フローインジェクション分析研究懇談会事務局

第15回フローインジェクション分析講演会

・日時、会場は日本分析化学会機関誌「ぶんせき」の会告欄でお知らせいたします。

特別賛助会員及び賛助会員の会費振込口座番号の変更

次のように口座番号がかわりましたので、振込の際は御留意下さい。

新口座番号: 西日本銀行箱崎支店、普通 1194508

FIFTH INTERNATIONAL CONFERENCE ON FLOW ANALYSIS (FLOW ANALYSIS V)

August 21-24, 1991 KUMAMOTO

Organized by The Japanese Association for Flow Injection Analysis
Sponsored by The Kyushu Branch of The Japan Society for Analytical Chemistry,
The Kyushu Branch of The Chemical Society of Japan and
Other Related Organizations.

The Scientific Program

THURSDAY, AUGUST 22, MORNING

(9:00-9:20)

Recent Advances in Flow Injection Technique -Sequential Injection, Sensor Injection and Sinusoidal Flow

Ruzicka, J. (*University of Washington, U.S.A.*)

(9:20-10:20)

Invited lecture

I-1. (9:20-9:50)

Flow-Through Chemical Sensors Based on the Integration of Separation and Detection

Valcarcel, M. (*University of Cordoba, Spain*)

I-2. (9:50-10:20)

Bioanalysis Using Flow Injection System (Tentative)

Johansson, G (*University of Lund, Sweden*)

(10:40-12:10)

Oral presentation

LI-1. (10:40-10:55)

Multisight Detection in Flow Analysis Part 1. Commutation for Achievement of Detector Leaping

Bergamin Filho, H., Zagatto, E. G. A., Brienza, S. M. B., Arruda, M. A. Z., Nogueira, A. R. A., Costa Lima, J. L. F. (*Centro de Energy Nuclear na Agriculture, University of Porto, Brasil, Portugal*)

LI-2. (10:55-11:10)

Error-Compensating Approach for Flow-Injection Systems

Pardue, H.L., Jordan, J. (*Purdue University, U.S.A.*)

LI-3. (11:10-11:25)

Study of Sample Injection Technology for On-Line FIA and Its Applications

Zhang, H., Cheng, W., Teng, F., Pan, H. (*Northeast Power Engineering Institute, China*)

LI-4. (11:25-11:40)

Membrane Based Gas-Sampling Coupled with Continuous Monitoring Using Flow

Injection Analysis

Frenzel, W. (*Technische Universität Berlin, Germany*)

L1-5. (11:40-11:55)

New Approaches to Coupling FIA and HPLC

Luque de Castro, M.D. (*University of Cordoba, Spain*)

L1-6. (11:55-12:10)

The Use of Flow Injection Analysis (FIA) in the Evaluation of Supported Liquid Membranes (SLM)

van Staden, J. F., Barnes, D. E. (*University of Pretoria, MINTEK, South Africa*)

THURSDAY, AUGUST 22, AFTERNOON

(13:00-15:00)

Poster presentation

P1-1. Determination of Selenium by Flow Injection Analysis with On-Line Preconcentration

Aoyama, E., Akamatsu, K., Nakagawa, T. Tanaka, H. (*Kyoto University, Kyoto Pharmaceutical University, Japan*)

P1-2. Determination of Low Level of Ammonium in Natural Waters Employing Pre-Concentration by Cation Exchange Resin in Flow Injection Analysis

Bergamin Filho, H., Santos Filha, M.M., Reis, B.F.D., Baccan, N. (*Centro de Energia Nuclear na Agricultura Univ., Federal de Sergipe-Aracaju-SE, Brasil*)

P1-3. Application of Automatic Reagent Sequencing to Segmented Flow Analysis
Coverly, S. (*Bran + Luebbe, Germany*)

P1-4. The Design of Flow-Through Cells for Dialysis Based on a Laminar Flow Model and Experimental Results

Risinger, L., Johansson, G. (*University of Lund, Sweden*)

P1-5. Coupling of Non-Chromatographic Continuous Separation Techniques

Luque de Castro, M.D., Valcarcel, M. (*University of Cordoba Spain*)

P1-6. Direct Determination of Bitterness in Virgin Olive Oils Based on a Simple Automatic Continuous Sorption/Elution System

Luque de Castro, M.D., Valcarcel, M., Garcia Mesa, J.A. (*University of Cordoba, Spain*)

P1-7. The Model for Sample and Product Distributions in Straight and Coiled Reaction tubes of Flow Injection Analyzers

Andreev, V.P., Khidekel, M.I., Kondratyeva, T.V., Lipin, A.V. (*Institute for Analytical Instrumentation of the USSR, USSR*)

P1-8. Studies on Expansion of Dynamic Range of Working Curve in FIA

Kuroishi, T., Yasuda, K. (*Hitachi Ltd., Japan*)

- P1-9. A New Sampling Method for The Simultaneous Determination of Fe(III), Ti(IV) and V(V)
 Ci, Y., He, H. B., Chang, W. B. (*Peking University, China*)
- P1-10. Experimental Fluctuations of Flow Injection Signals
 Gine, M. F., Cui, H., Tuon, R. L., Krug, F. J., Arruda, .A.Z. (*University of Sao Paulo, Brasil*)
- P1-11. Reagent Introduction without Dilution in Flow Injection Procedures
 Tyson, J. F., Chalk, S. J. (*University of Massachusetts, U.S.A.*)
- P1-12. A Simple Model of Flow-Injection Manifolds for Prediction of Peak Heights
 Tyson, J. F., Bysouth, S. R. (*University of Massachusetts, U.S.A.*)
- P1-13. Determination of Hydride-Forming Elements in Metals by Flow Injection Atomic Absorption Spectrometry with On-Line Matrix Isolation
 Tyson, J.F., Kibble, H.A.B., Offley, S.G., Seare, N.J. (*University of Massachusetts, Philips Scientific, University of Techn, U.S.A., United Kingdom*)
- P1-14. Detection by Magnetic Susceptibility for Flow Analysis Procedures
 Tyson, J. F., Larue, R. M., Bogdanski, S. (*University of Massachusetts, Sherwood Scientific Ltd., U.S.A., United Kingdom*)
- P1-15. Improvement of Detectability of Selected Flow-Injection Procedures Using Digital Signal Filtering
 Trojanowicz, M., Szostek, B. (*University of Warsaw, Poland*)
- P1-16. Multi-Dimensional Flow Injection Extraction
 Thommen, C. (*CIBA-GEIGY AG, Switzerland*)
- P1-17. Study on Potassium Sodium Chloride Integrated Microconduit Potential Analytical System
 Cui, H., Sun, J. (*Institute of Applied Ecology, Academia Sinica, China*)
- P1-18. Study on Integrated Microconduits FIA-ISES Analytical System
 Cui, H., Sun, J. (*Institute of Applied Ecology, Academia Sinica, China*)
- P1-19. Sample Dispersion Property for Theoretically Composed Flow Injection Analysis System
 Korenaga, T. (*Okayama University, Japan*)
- P1-20. High Sensitivity Flow Sensing Method for the Determination of Proteins with Micro-Flow Plunger Pumps
 Korenaga, T., Zhou, X., Izawa, M., Takahashi, T., Moriwake, T., Shinoda, S. (*Okayama University Japan*)
- P1-21. Sequential Determination of Glucose, Fructose and Sucrose by Flow Injection Analysis with Enzyme Reactors and Spectrophotometric Detection
 Garcia de Maria, C., Townshend, A. (*University of Hull, United Kingdom*)
- P1-22. On-Line Spectrophotometric Determination of Low Levels of Free and

Combined Chlorine Residuals by Flow Injection

Verma, K., Jain, A., Townshend, A. (*University of Hull, United Kingdom*)

P1-23. Flow-Injection Amperometric System for Enzyme Immunoanalysis

Ivnitskii, D., Sitdicov, R., Kurochkin, V. (*Medical Institute USSR, USSR*)

P1-24. An Amperometric FIA Method for Estimation of Meat Freshness by Combined Use of Immobilized Enzyme Reactors and Peroxidase Electrode

Yao, T., Satomura, M., Wasa, T. (*University of Osaka Prefecture, Japan*)

P1-25. Split-Flow Microcalorimetric Determination of L-Ascorbate with Use of an Immobilized Ascorbate Oxidase Reactor

Satoh, I., Kawasaki, M., Sugawara, S. (*Kanagawa Institute of Technology, Japan*)

P1-26. Calorimetric Determination of Serum Phosphatidyl Choline Using an Immobilized Dual Enzyme Column

Satoh, I., Ozawa, T., Denielsson, B. (*Kanagawa Institute of Technology, University of Lund, Japan, Sweden*)

P1-27. Development of the Automatic Analysis System of the Fertilizer

Tomi, Y., Matsumoto, K. (*Chisso Corporation, Japan*)

P1-28. Determination of L-Glutamate by Amperometric Flow Injection Analysis Using Immobilized Glutamate Oxidase: Manifold for Simultaneous Detection of Component Signal and Blank Signal

Matsumoto, K., Sakoda, K., Osajima, Y. (*Kyushu University, Japan*)

P1-29. Flow-Injection Determination of L-Glutamate in Serum with an Immobilized Glutamate Dehydrogenase Reactor

Kiba, N., Moriya, T., Furusawa, M. (*Yamanashi University, Japan*)

P1-30. Development of Oxygen Detector for Flow Injection Analysis and Its Application to L-Lactate Analysis

Funazaki, N., Yodo, T., Asano, Y., Hayashi, K., Okugawa, T., Hatao, S. (*DKK Corporation, Nichirei Corporation, Japan*)

P1-31. Enzymatic Flow Injection Analysis in Non-Aqueous Media

Dardos, J.A., Braco, L., Delaguardia, M. (*Universitat de Valencia, Spain*)

P1-32. Flow Injection Spectrophotometric Determination of Acetaminophen in Drug Formulations

Verma, K., Jain, A., Stewart, K. (*University of Hull HUG 7RX VA, Polytechnic Institute and State University, United Kingdom*)

P1-33. Continuous Flow Catalytic Photodegradation of Pesticides

Peris-Cardells, E., Terol, J., Mauri, A.R., Guardia, M., de la Pramauro, E. (*University of Valencia, University of Torino, Spain, Italy*)

P1-34. Pyrolysis-Flow Injection Analysis Spectrophotometric Determination of Aminoacids in Aqueous Solutions

Burguera, J. L., Burguera, M., Guardia, M., de la Salvador, A. (*University of Los Andes, University of Valencia, Venezuela, Spain*)

- P1-35. The Determination of Total Trichloro-Compounds in Human Urine by Auto Analyzer II System
 Hamasato, I. (*Roudou Eisei Kyokai, Japan*)
- P1-36. Determination of Seafood Toxins in Foods Using Flow Injection Analysis
 Hungerford, J., Lee, S. (*Seafood Products Research Center, U.S.A.*)
- P1-37. Fluorimetric Determination of Trace Amounts of Calcium in Brine
 Wada, H., Atsumi, H., Nakagawa, G. (*Nagoya Institute of Technology, Japan*)
- P1-38. Direct Determination of Copper in Serum by Flow Injection Analysis
 Wada, H., Zhou, X.J., Yamada, H., Nakagawa, G. (*Nagoya Institute of Technology, Japan*)
- P1-39. Viscoelasticity Measurement of Human Blood with Special Reference to the Effect of Inertia, Average Shear Rate and Hematocrit
 Cai, S., Wu, X., Lin, Y., Xiao, J., Wu, Y. (*Bioengineering Center of Chongqing University, China*)
- P1-40. Continuous Flow Method for Determination of Trihalomethane Formation Potential
 Aoki, T., Kawakami, K. (*University of Osaka Prefecture, Japan*)
- P1-41. Selective Quantification of Methylamine in MRI Contrast Media by Flow Injection Analysis
 Johansen, G., Karstensen, K. H., Langseth, K., Vogt, N.B. (*Center for Industrial Research Nycomed AS, Norway*)
- P1-42. Flow Analysis of UV-irradiated Chemicals by Chemiluminescence and ESR
 Suzuki, S., Nakazawa, H., Fujita, M., Ono, S., Suzuki, M., Takitani, S., Sonoda, M., Sakagishi, Y. (*The National Institute of Public Health, Science University of Tokyo, Saitama Medical School, Japan*)
- P1-43. Experience with Flow Injection Analysis in Marine Chemical Research
 Shpigun, L. K., Kolotyrykina, I. Y., Zolotov, Y. A. (*Institute of General and Inorganic Chemistry, USSR*)
- P1-44. Field Application of FIA for the Determination of Nutrients in Natural Waters
 Ciceri, G., Ceradini, S., Martinotti, W., Queirazza, G., Ferraroli, R. (*CISE Technology Innovative ENEL, Italy*)
- P1-45. Reverse FIA Determination of Nutrients in Sea Water
 Lu, X., Kang, N., Liang, B., Chen, L., Hong, W. (*Ocean University of Qingdao, China*)
- P1-46. Experiences in the Determination of Inorganic Nitrogen ($\text{NH}_4^+\text{-N}$, $\text{NO}_2^-\text{-N}$, $\text{NO}_3^-\text{-N}$) in water by FIA and CFA
 Papke, G., Winter, B. (*Hessian Environmental Protection Agency Perstorp Analytical/Tecator, Germany*)
- P1-47. The Rapid Determination of Chemical Oxygen Demand in Aqueous Environmental Samples by Air Segmented Flow Analysis
 Tian, L., Wu, S. (*Nanjing University, China*)

P1-48. Development of FIA-lmc Multi-Function Valve Flow Injection Analyser; Continuous On-Line Monitoring of Residual Chloride in Potable Water and COD in Waste Water

Zhang, G., Zhu, Q., Guo, X. (*South China Institute for Environmental Science, China*)

(15:20-16:20)

Invited lecture

I-3. (15:20-15:50)

Flow Analysis Based on Reaction with Buffer Solutions

Ishibashi, N. (*Kyushu University, Japan*)

I-4. (15:50-16:20)

Kinetic Aspects of Flow Injection Analysis. Procedures Based on Kinetic Enhancement and Kinetic Discrimination

Hansen, E. H. (*The Technical University of Denmark, Denmark*)

(16:30-18:00)

Oral presentation

L2-1. (16:30-16:45)

Application of Square Wave Voltammetry for the Determination of Ascorbic Acid in Soft Drinks and Fruit Juices Using Flow Injection Analysis

Fung, Y.S., Mo, S.Y. (*Hong Kong University, Hong Kong*)

L2-2. (16:45-17:00)

Simultaneous Determination of Nitrite and Nitrate in Environmental Samples Using Flow-Injection Biamperometry

Trojanowicz, M., Matuszewski, W., Szostek, B. (*University of Warsaw, Poland*)

L2-3. (17:00-17:15)

Alternative Methods of Automatic Dilution for Segmented- Flow Analysers

Coverly, S. (*Bran + Luebbe, Germany*)

L2-4. (17:15-17:30)

Simultaneous Determination of Serum Iron and Copper with 2-(5-bromo-2-pyridylazo)-5-(N-propyl-N-sulfopropylamino) Aniline by Flow Injection Analysis

Sakai, T., Kang, S. W., Ohno, N., Ida, K. (*Asahi University, Japan*)

L2-5. (17:30-17:45)

Determination of Cyanide by Flow Injection Analysis Using an Intermediate Product of the Pyridine-Barbituric Acid Chromogenic Reaction

Ma, H., Liu, J. (*Research Center for Eco-Environmental Sciences, China*)

L2-6. (17:45-18:00)

Continuous Flow Analysis of Vanadium by the Catalytic Reaction with Bindschedler's Green Leuco Base

Sugiyama, M., Hori, T. (*Kyoto University, Japan*)

FRIDAY, AUGUST 23, MORNING

(9:00-10:00)

Invited lecture

I-5 (9:00-9:30)

Electrochemical Detection in Flow Injection Analysis

Toth, K. (*Institute for General and Analytical Chemistry, Technical University of Budapest, Hungary*)

I-6. (9:30-10:00)

Application of FIA in Process Analysis

Christian, G. D., Ruzicka, J. (*University of Washington, U.S.A*)

(10:20-12:20)

Poster presentation

P2-1. Remote Spectrophotometric Water Quality Monitoring

Benson, R. L., Worsfold, P. J. (*Polytechnic South West, United Kingdom*)

P2-2. Porous Membrane Permeation of Halogens and Its Application to the Determination of Halide Ions and Residual Chlorine by Flow Injection Analysis

Motomizu, S., Yoden, T. (*Okayama University, Japan*)

P2-3. Flow Injection Determination of Anionic Surfactants After Solvent Extraction by On-Column Visible Absorption and Fluorescence Detection

Motomizu, S., Kobayashi, M. (*Okayama University, Japan*)

P2-4. Matrix Effect on the Simultaneous Determination of Silicon and Phosphorus with On-Line Column FIA Spectrophotometry

Li, Y., Nawa, Y., Narusawa, Y. (*Rikkyo (St. Paul's) University, Japan*)

P2-5. Spectrophotometric Determination of Phenolic Compounds by Flow Injection Analysis

Frenzel, W., Frenzel, J. O., Moller, J. (*Technische Universitat Berlin, Tecator, Germany, Sweden*)

P2-6. Flow Injection Spectrophotometric Detection of Sulfite and SO₂ Following Gas-Diffusion Separation

Frenzel, W., Hillmann, B. (*Technische Universitat Berlin, Germany*)

P2-7. Determination of Sulfate Ion by FIA with Barium Chloranilate Reaction Column

Ueno, K., Sagara, F., Higashi, K., Yakata, K., Yoshida, I., Ishii, D. (*Kumamoto Institute of Technology, Japan*)

P2-8. Development of Micro Flow Photometric Titration Method

Sagara, F., Kobayashi, T., Tajima, T., Ijuin, H., Yoshida, I., Ishii, D., Ueno, K. (*Kumamoto Institute of Technology, Japan*)

P2-9. Automatic Titration Based on the Establishment of Flow Gradients in Continuous Configurations

Valcarcel, M., Rios, A., Marcos, J. (*University of Cordoba, Spain*)

- P2-10. Multiparametric Flow-Through Chemical Sensor Based on Derivative Synchronous Spectrofluorimetry
Valcarcel, M., Luque de Castro, M.D., Chen, D. (*University of Cordoba, Spain*)
- P2-11. Fluorometric Determination of Fluoride in Flow Injection System
Tohnai, A., Tanaka, A., Deguchi, T. (*Kumamoto University, Japan*)
- P2-12. Fluorometric Determination of Cyanide and Thiocyanate Based on Koenig Reaction in Flow Injection System
Deguchi, K., Tanaka, A., Deguchi, T. (*Kumamoto University, Japan*)
- P2-13. Determination of Thorium and Uranium by Flow Injection Analysis
Oguma, K., Kuroda, R., Matsumoto, M. (*University of Chiba, Japan*)
- P2-14. Spectrophotometric Determination of Silver with Rhodamine B by Flow-Injection Analysis
Santelli, R.E., Pereira, K.A.G., Pedrazzi, E.M. (*Fluminense University, Brazil*)
- P2-15. Chromium Determination in Natural Waters by AAS and Preconcentration with Activated Alumina Using Flow-Injection Analysis
Santelli, R. E., Pannain, M. C. (*University of Fluminense, Brazil*)
- P2-16. Flow Injection Determination of Ascorbic Acid with Chemiluminescence Detection
Hong-Bin He, Yun-Xiang Ci (*Peking University, China*)
- P2-17. Flow Injection On-Line 8531 Fibre Column Separation and Preconcentration System for Efficient FAAS Determination of Trace Gold in Ores and Metallurgical Samples
Wu, X., Qi, W., Zhou, C., Gao, Y. (*General Research Institute for Non-ferrous Metals, China*)
- P2-18. Time-Based and Volume-Based Sampling for Flow Injection On-Line Sorbent Extraction Graphite Furnace Atomic Absorption Spectrometry
Welz, B., Sperling, M., Yin, X. (*Bodenseewerk Perkin-Elmer GmbH, Germany*)
- P2-19. On-Line Microwave Sample Treatment for the Determination of Mercury in Water and Urine by Flow Injection Cold-Vapour Atomic Absorption Spectrometry
Welz, B., Tsalev, D., Sperling, M. (*Bodenseewerk Perkin-Elmer GmbH, University of Sofia, Germany, Bulgaria*)
- P2-20. Simultaneous Determination of Arsenic, Selenium and Antimony in Water by an ICP/Hydride Method
Pretorius, L., Kempster, P.L., van Vliet, H.R., van Staden, J. F. (*Hydrological Research Institute, University of Pretoria, South Africa*)
- P2-21. Flow Injection-Fourier Transform Infrared Analysis
Guardia, M., de la Garrigues, S., Gallignani, M., Burguera, J.L. Burguera, M. (*University of Valencia, University of Los Andes, Spain, Venezuela*)
- P2-22. The Use of Flow Injection in the Study of Micellar Interactions
Guardia, M., de la Peris-Cardells, E. (*University of Valencia, Spain*)

- P2-23. Flow Injection Analysis as a Tool for Monitoring of Metabolic Regulation by Phosphorylation
Baba, Y., Tsuchiko, M., Hirano, H., Yoza, N. (*Kobe Women's College of Pharmacy, Kyushu University, Japan*)
- P2-24. Potentiometric Flow Injection Analysis of Concentrated Hydrogen Peroxide
Imato, T., Ishibashi, N. (*Kyushu University, Japan*)
- P2-25. Potentiometric Flow Injection Analysis of Aromatic Amines in Nonaqueous Solvents
Katafuchi, A., Imato, T., Ishibashi, N. (*Kyushu University, Japan*)
- P2-26. Potentiometric Flow Injection Analysis of Trace Oxidative Species by Using Fe(III)-Fe(II) Potential Buffer
Ohura, H., Imato, T., Yamasaki, S., Ishibashi, N. (*Kyushu Sangyo University, Kyushu University, Japan*)
- P2-27. Potentiometric Flow Analysis Device Using Membrane Coated Carbon-Rod Ion-Selective Electrode Detectors
Wang, E., Kamata, S. (*Kagoshima University, Japan*)
- P2-28. Continuous Flow Determination of Phosphate with a Lead Ion-Selective Electrode
Hara, H., Kusu, S. (*Shiga University, Japan*)
- P2-29. Influence and Contribution of Coated Open-Tubular Solid-State Silver Halide Ion-Selective Electrodes on Dispersion in Flow Injection Analysis
van Staden, J. F. (*University of Pretoria, South Africa*)
- P2-30. On-Line Dialysis on Flow Injection Analysis
van Staden, J. F. (*University of Pretoria, South Africa*)
- P2-31. Differential Detection in Flow Injection Analysis Using Flow-Through Tubular Ion Selective Electrodes
Alonso-Chamarro, J., Bartroli, J., Barber, R., Camarasa, M., Del Valle, M. (*Universidad Autonoma de Barcelona, Spain*)
- P2-32. Use of a Miniaturized ISE as a Reference Electrode in an ISFET Detector for Flow Injection Analysis
Alonso-Chamarro, J., Bartroli, J., Jimenez, C. (*Universidad Autonoma de Barcelona, Spain*)
- P2-33. Simultaneous Determination of Cr(VI) at Two Different Concentration Levels Using a Flow Injection System Based on Sandwich Technique
Alonso-Chamarro, J., Bartroli, J., Barber, R. (*Universidad Autonoma de Barcelona, Spain*)
- P2-34. A Competitive ELISA for Steroids in the Femtomolar Range with Electrochemical Detection in a FIA-System
Kronkvist, K., Lovgren, U., Edholm, L., Johansson, G. (*University of Lund, Sweden*)
- P2-35. Blocking Effect of Surfactants on Chemically Modified Electrodes

Skoog, M., Kronkvist, K., Johansson, G. (*University of Lund, Sweden*)

P2-36. Immunoassay in a FIA System Based on Capacitance Measurements on a Modified Gold Electrode

Swietlow, A., Skoog, M., Johansson, G. (*University of Lund, Sweden*)

P2-37. Mediatorless Electrocatalytic Reduction of Hydrogen Peroxide at Peroxidase Modified Graphite Electrodes

Csoregi, E., J.-Pettersson, G., Gorton, L. (*University of Lund, Sweden*)

P2-38. In-Flow Speciation of Cu, Zn, Pb and Cd in Fresh Water by Differential Pulsed Anodic Stripping Voltammetry (DPASV)

Martinotti, W., Queirazza, G., Realini, F., Ciceri, G. (*ENEL Environmental Division, Italy*)

P2-39. Automated Simultaneous Determination of Chloride and pH by Flow Injection Analysis

Alonso, J., Alvares-Ribeiro, L.M.B., Machado, A.S.C., Alern, L., Bartroli, J., del Valle, M. (*Universitat Autònoma Barcelona, Facultat de Ciències do Porto, Spain, Portugal*)

P2-40. The Application of Microprocessor to Industry Process FIA Analysis

Teng, F., Zhang, H., Pan, H., Cheng, W. (*Northeast Power Engineering Institute, China*)

P2-41. Flow Injection Analysis for On-Line Monitoring and Control of Industrial Fermentation Processes

Nikolajsen, K., de Bang, M., Holm, K.A., Gram, J. (*Novo Nordisk A/S, Denmark*)

P2-42. Fully Automated System for the Continuous Monitoring of Ammonium Ion in Fish Farming Plant Water by Flow Injection Analysis

Muraki, H., Higuchi, K., Sasaki, M., Korenaga, T., Toei, K. (*Sanuki Industry Co., Ltd., Tokyo Kasei Kogyo Co. Ltd, Keiyu Industry Co., Ltd, Japan*)

P2-43. Catalytic Determination of Ultratrace Amounts of Manganese by Flow Injection Analysis

Nakano, S., Nozawa, M., Yanagawa, M., Kawashima, T. (*Tottori University, University of Tsukuba, Japan*)

P2-44. Indirect Spectrophotometric Determination of Complexing Agents by Flow Injection Analysis Based on Redox Reaction of Copper(II) with Iron(II)

Itabashi, H., Umetsu, K., Satoh, K., Kawashima, T. (*University of Tsukuba, Japan*)

P2-45. The Application of Air-Segmented FIA in Catalytic Kinetic Analysis

Zhi, Z. L., Tian, L. C. (*China Pharmaceutical University, Nanjing University, China*)

P2-46. Flow Injection Spectrophotometric Determination of Trace Cobalt with 2-(5-Bromo-2-Pyridylazo)-5-(N-Propyl-N-Sulfopropylamino)-Aniline :Use of Promoting Effect of Copper(II) on Complex Formation Reaction of Cobalt

Yamane, T., Koshino, K. (*Yamanashi University, Japan*)

SATURDAY, AUGUST 24, MORNING

(9:00-10:00)

Invited lecture

I-7. (9:00-9:30)

Industrial Applications of FIA

van der Linden, W. E. (*University of Twente, The Netherlands*)

I-8. (9:30-10:00)

Flow Injection Analysis of Trace Elements by Use of Catalytic Reactions

Kawashima, T. (*University of Tsukuba, Japan*)

(10:20-12:05)

Oral presentation

L3-1. (10:20-10:35)

Industrial Process Monitoring by Flow Injection Analysis

Laurin, P. M., Worsfold, P. J., Norman, P., Crane, M., Barnett, N. W.
(*Polytechnic South West, I.C.I. Deakin University, United Kingdom, Australia*)

L3-2. (10:35-10:50)

Determination of Trace Rhenium in Seawater and Natural Samples by Inductively Coupled Plasma Mass Spectrometry with On-Line Preconcentration

Shabani, M. B., Masuda, A. (*University of Tokyo, Japan*)

L3-3. (10:50-11:05)

COD Determination in Wells and Rivers Waters by FIA Using a Microwave Oven During the Oxidation Step

Ferraroli, R., Balconi, M.L., Borgarello, M., Realini, F. (*CISE, ENEL, Italy*)

L3-4. (11:05-11:20)

Differential Determination of Ammonium, Nitrite and Nitrate by Flow Injection System

Tanaka, A., Sonoda, K., Kajiwara, K., Deguchi, T. (*Kumamoto University, Japan*)

L3-5. (11:20-11:35)

Sensitive Flow Injection Analysis Technique for the Determination of Dissolved Organic Carbon in Natural and Wastewaters

Mckelvie, I. D., Edwards, R. T., Ferrett, P. C., Hart, B. T., Bapat, J. B. A
(*Monash University, University of the South Pacific (Koshy, K), Australia, Fiji*)

L3-6. (11:35-11:50)

Indirect Photometric Determination of Potassium Ion in Water Based on the Precipitation with Tetraphenylborate Ion and a Crown Ether Using Flow Injection

Motomizu, S., Yoshida, K., Toei, K. (*Okayama University, Japan*)

L3-7. (11:50-12:05)

Determination of Nutrients in Sea Water by TRAACS 800

Jodo, M., Kawamoto, K. (*Bran + Luebbe, Tokyo Kyuei, Japan*)

SATURDAY AUGUST, 24 AFTERNOON

(13:30-14:30)

Invited lecture

I-9. (13:30-14:00)

Research on Flow-Injection Analysis in China

Fang, Z., Sun, L. (*Institute of Applied Ecology, Academia Sinica, China*)

I-10. (14:00-14:30)

Flow Injection Atomic Spectrometry - A New Analytical Technique

Tyson, J., Bysouth, S. Debrah, E., Gluodenis, T., Grzeszczyk, E. (*University of Massachusetts, U.S.A.*)

(14:30-17:20)

Oral presentation

L4-1. (14:30-14:45)

Flow Injection Atomic Spectrometry Determination of Inorganic Arsenic(III) and Arsenic(V) Species by USE of an Aluminium-Column Arsine Generator and Cold Trapping Arsine Collection

Burguera, M., Burguera, J. L., Brunetto, M. R., de la Guardia, M., Salvador, A. (*University of Los Andes, Venezuela*)

L4-2. (14:45-15:00)

Improvement of Detection Limits for Flow Injection Flame Atomic Absorption Spectrometry by Dedicated Signal Processing

Welz, B., Sperling, M., Koscielniak, P. (*Bodenseewerk Perkin-Elmer GmbH, Jagiellonian University, Germany, Poland*)

L4-3. (15:00-15:15)

Flow Injection Analysis of Potassium Ion Using Flame Photometer as a Detector

Miyaji, T., Okui, M., Mikami, M., Hibi, K. (*JASCO, Japan*)

L4-4. (15:15-15:30)

Chemiluminescence Detection in FIA

Worsfold, P. J., Yan, B., Lewis, S. (*Polytechnic South West, United Kingdom*)

L5-1. (15:50-16:05)

Determination of Glucose and Lactate in Ultra-Low Concentrations by FIA

Benthin, S. Nielsen, J. Villadsen, J. (*Technical University of Denmark, Denmark*)

L5-2. (16:05-16:20)

Automated Spectrophotometric Determination of Acid Laccase Activity in Fermentation Samples Using Syringaldazin and a Flow Injection Analyzer

Holm, K.A. (*Novo Nordisk Research Institute, Denmark*)

L5-3. (16:20-16:35)

Use of an Immobilized Alkaline Phosphatase Column for Flow-Calorimetric Determination of Cobalt(III) Ions

Satoh, I., Watanabe, K. (*Kanagawa Institute of Technology, Japan*)

L5-4. (16:35-16:50)

Flow-Injection Determination of Inhibitors in Fish Using Immobilized Diamine Oxidase

Hungerford, J., Arefyev, A. (*Seafood Products Research Center, Bach Institute of Biochemistry, U.S.A., U.S.S.R.*)

L5-5. (16:50-17:05)

Selective Electrochemical Detection in FIA Based on Enzyme Modified Electrodes

J.-Pettersson, G. (*University of Lund, Sweden*)

L5-6. (17:05-17:20)

Flow-Injection Determination of Polyphenols Using Extracted Solutions of Banana Pulp and Spinach Leave as Carriers

Uchiyama, S. Suzuki, S. (*Saitama Institute of Technology, Japan*)

1992 Winter Conference on Flow Injection Analysis

WCFA 92 will be held in Scottsdale, Arizona, January 12-15, 1992. It will focus on how industrial FIA techniques have helped solve real world problems. New hardware and software-driven applications will be presented. The following areas will be highlighted: process chemistry, biotechnology, instrument design, new methods, atomic spectroscopy, electrochemistry. There will be a vendor exhibition. Deadline for abstracts for presentation (20 min.) and posters, and for preregistration, is December 3, 1991.

For information, write to:

WCFA 92
Gary D. Christian
University of Washington, BG-10
Seattle, WA 98195
TEL: 206-543-1635
FAX: 206-685-3478

**WINTER
CONFERENCE
ON
FLOW
INJECTION
ANALYSIS**



SCOTTSDALE, ARIZONA

JANUARY 12-15, 1992



WCFIA 92

Scottsdale, Arizona • January 12-15, 1992

WINTER CONFERENCE ON FLOW INJECTION ANALYSIS

(WCFIA 92)

Scottsdale, Arizona

January 12-15, 1992

FIA techniques are being used in many laboratories throughout the world. Although the idea of injecting a sample has been around for many years, the concept of controllable dispersion is only starting to be more clearly understood. As a result, FIA is being viewed as an alternative that can simplify analyses which previously were time consuming or presented difficulties in data acquisition.

Much of the progress that FIA has made over the years is the result of better hardware designs and the practical implementation of chemistry. This conference strives to bring these two important aspects of science together.

WCFIA 92 will focus on how industrial FIA techniques have helped solve real world problems. New hardware and software-driven applications will be presented.

The conference will consist of two and a half days highlighting the following areas:

- Process Chemistry
- Biotechnology
- Instrument Design
- New Methods
- Atomic Spectroscopy
- Electrochemistry

In addition to the technical sessions, the conference offers a unique opportunity for the informal exchange of information and ideas among the chemists and engineers working in the FIA field.

Call for Papers

If you are interested in presenting a paper or poster, or exhibiting hardware at WCFIA 92, return the Presentation Reply Form by November 15, 1991. Accepted papers will be 20 minutes in length. We suggest using 35 mm slides for the presentation. Posters should fit on 4' x 6' presentation boards. If you would like to display products at the conference, let us know your space and power requirements and any other needs you may have.

Sunday Excursion

Since many airfares are lower for Saturday arrivals, **WCFA 92** is planning an optional group outing for participants and/or families on Sunday, January 12, 1992. The Scottsdale area is rich in Old West culture and activities. Additional details will be sent with your registration confirmation.

Vendor Participation

The following vendors will attend the conference: Lachat Instrument Company; Perkin-Elmer Corporation; Eppendorf Inc.; Perstorp Analytical; Alitea USA; and Novatek. As discussed at **WCFA 91**, we are encouraging specific component vendors for intelligent samplers, pumps, and valves to attend.

Pre-Registration

DEADLINE: December 3, 1991

Regular conferee	\$200
Student conferee	\$100
On-site registration	\$250

Registration includes conference dinner and conference memento.

To register, complete and return the Pre-Registration Form on the back of this flyer. Registration may be done by FAX (206)685-3478 or by phone (206)543-1635. A confirmation package will be sent to you by December 15, 1991. Registration cancellations will be assessed a \$50 administration fee.

Housing

Embassy Suites Resort Hotel, 5001 N. Scottsdale Road, Scottsdale, Arizona 85250, phone (602)949-1456. Room rates are \$105-120 plus tax. Rates include airport shuttle, complimentary breakfast buffet, and a two-hour nightly cocktail reception. Recreation facilities include tennis, golf, exercise rooms, pool, and spa. Shopping malls are abundant in the neighborhood, and well-known "Old Scottsdale" is just a walk down Scottsdale Road. Please make housing reservations directly with the hotel.

Organizing Committee

• G. D. Christian, University of Washington, Seattle, Washington • G. E. Pacey, Miami University, Oxford, Ohio • J. Ruzicka, University of Washington, Seattle, Washington

To register for **WCFIA 92**, complete and return the Pre-Registration Form. If you wish to present a paper or exhibit products at **WCFIA 92**, complete both the Pre-Registration Form and the Presentation Reply Form and return them to:

WCFIA 92
Gary D. Christian
Department of Chemistry BG-10
University of Washington
Seattle, WASHINGTON 98195

Pre-Registration Form

YES! I plan to attend **WCFIA 92**

January 12-15, 1992
Embassy Suites Resort Hotel
Scottsdale, Arizona

My purchase order is attached.

Enclosed is a check payable to

WCFIA 92 for \$ _____

Name _____

Company _____

Address _____

City _____

State _____ ZIP _____

Telephone () _____

FAX () _____

Presentation Reply Form

I would like to:

- present a 20-minute paper
 present a poster
 display instruments and/or components

Presentation Title: _____

Authors/Affiliations: _____

Please attach or send a 200-word abstract by
November 15, 1991.