



AMERICAN CHEMICAL SOCIETY
DIVISION OF ANALYTICAL CHEMISTRY

NEWSLETTER

ANALYTICAL CHEMISTRY SERVES HUMANITY
THE SCIENCE OF CHEMICAL MEASUREMENTS FOR



ACS National Mtg.
Washington, D.C.
AUGUST 20-24, 2000

SUMMER 2000 ISSUE

Chair's Report



Most of the persons who attended the San Francisco ACS meeting will agree that the event was a great success. There was record attendance at the technical sessions, and the sessions showed the wide range of areas covered by Analytical Chemistry. Cooperation with other divisions appears to be beneficial to all the groups involved.

I hope that our division will turn its attention to outreach projects, and also greater interaction with

the local sessions. It would be extremely helpful to hear from the membership as to how the Division might be strengthened. If we heard from 25-50 persons via e-mail, we would be pleased. Another interesting question is the extent to which the academic and industrial chemists interact. If you have examples of successful cooperative efforts, please send them to me.

Our executive committee has discussed the extent to which

Analytical Chemistry would be acceptable if it was available exclusively in electronic form. You may be asked for your reactions to this question in a survey prepared by the editors of Analytical Chemistry.

Please feel free to contact me at williams@acs.wooster.edu if you have reactions to my comments. Theodor R. Williams

Subdivision of Chromatography Updates By-Laws



On March 13, 2000 at the Pittsburgh Conference in New Orleans, the Annual Meeting of the Subdivision was held. Besides discussing ideas for sponsored sessions at future ACS meetings, the new By-laws of the Subdivision was presented and voted upon by

the Executive Committee. They passed unanimously and now the Subdivision members must vote upon these updated Bylaws in general. The next opportunity for voting on passage of these new Bylaws will be the ballot for the upcoming elections.

The new Bylaws are presented

here. A summary of the major changes precedes the Bylaws themselves.

Summary of Major Changes in Subdivision Bylaws are:

The immediate past Chair will appoint and serve as the Chair of the Nomination Commit-

Continued on Page 10

Did you know?

Since March 27, as an entirely new benefit of membership in the American Chemical Society, full access to Chemical & Engineering News Online has been available to all ACS members - FREE!

You can access it via www.acs.org

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The Division 1) Provides a forum for discussions of advances in Analytical Chemistry. 2) Increases awareness of the field on other scientists and the general public. 3) Encourages students to select Analytical Chemistry as their field of study. 4) Advises the ACS on matters related to Analytical Chemistry and 5) Offers



CHAIR Theodore Williams
(330) 263-2115



[www.acs-analytical.duq.edu/
analytical.html](http://www.acs-analytical.duq.edu/analytical.html)



Contributions to the next Newsletter should be sent not later than Dec 1st, 2000 to:
Al Ribes - aribes@dow.com

Analytical Division Program Washington DC, August 20-24, 2000

Sessions include Awards Presentation on Monday morning, and four supporting awards session throughout the week.

Sunday afternoon

Analytical Chemistry: A Broad Spectrum of Career Opportunities

Sunday evening

Kolthoff Poster Session plus wine/cheese reception.

Monday Morning

Awards Session

Frontiers in Chemical Instrumentation.

Tuesday morning & afternoon

Detection of Explosives: Challenges for Chemists

Tuesday morning.

Distinguished Service in the Advancement of Analytical Chemistry

Tuesday afternoon.

Frontiers in Spectrochemical Analysis.

Wednesday morning & afternoon

Proteomics and genomics in the 21st century

Wednesday morning

Frontiers in Electrochemistry

Wednesday afternoon

Frontiers in Electrochemistry

Thursday morning and afternoon

Quantification of Measurement Uncertainty

Monday afternoon

DAC Dinner at the Washington DC



Phillips Seafood Grill

(on the waterfront)

900 Water St. SW

202-488-8515

Monday, August 21, 2000

Social Hour 6:00 pm

Dinner 7:00 pm

\$32

"Waterman's buffet" includes both seafood and traditional fare

Order tickets when you pre-register!

Our Web Site Is Being

The Division of Analytical Chemistry World Wide Web site is hosted by Duquesne University. The home page is <http://www.acs-analytical.duq.edu/>

and there are various informative pages linked from this page. The site received about 1200 hits per month from all around the world. New information is posted regularly on division business, meetings of interest to analytical chemists, education in analytical chemistry, and other topics.

The site is undergoing a major reorganization and redesign by Santasoft, Inc., a web site development company with offices in Germantown, Maryland, and Kan-

sas City, Missouri. The effort is being carried out during the summer months, and first results should be evident by the time this newsletter reaches you.

One major addition to the content is the abstracts for the Analytical Division papers at the ACS National Meetings. These are being posted starting with the papers at the San Francisco meeting of March, 2000. The abstracts are in Adobe Acrobat® PDF format, and eventually will be full-text searchable. It is intended to keep the abstracts available indefinitely, with the expectation that this will be more convenient for members than the traditional paper abstract separates,

which have been discontinued because of the high cost of producing and mailing them. Comments on the electronic abstract archive will be welcome.

The Editor also asks that information on meetings be submitted to him at rfhirsch@erols.com. Listings of web sites of graduate programs in analytical chemistry are also of considerable interest.

Division of Analytical Chemistry 2000 AWARDEES

Congratulations go to this year's DAC award winners! The selected scientists are noted leaders and innovators in their respective fields and have contributed to advancements in the chemical sciences via the development of concepts, instrumentation, and/or fundamentals in Analytical Chemistry. The selection was based upon candidate contributions in the areas of **teaching, chemical instrumentation, electrochemistry, spectroscopy, service, and early career research excellence.**

Recipients of the first four awards will receive a honorarium, a plaque, and travel expenses to the national ACS meeting in Washington D.C. to be held on August 20-25, 2000, and the awards will be presented at the Division of Analytical Chemistry Awards (DAC) Symposium. Individual symposia have been organized in honor of each of the recipients in addition to the annually hosted **DAC Awards Banquet.** All of the awards are made possible due to the continuous

Division of Analytical Chemistry J. Calvin Giddings Award for Excellence in Education
Sponsored by the Dekker Foundation
presented to:
Harold M. McNair

Harold M. McNair is Professor of Analytical Chemistry at Virginia Polytechnic Institute and State University



Harold M. McNair

(VPI)

Professor McNair received his B.S. degree in Chemistry from the University of Arizona in 1955, and both M.S. and Ph.D. degrees from Purdue in 1957 and 1959, respectively. He was awarded a Fulbright post-doctoral fellowship to study under Prof. A. I. M. Keulemans in The Netherlands in 1960. He then held several industrial positions which included working as a Research Chemist for Esso Research and Engineering, the European Sales Manager, Technical Director and General Manager for F&M Scientific (later Hewlett-Packard), and the Director of International Operations for Aerograph in Walnut Creek, CA.

Professor McNair joined the faculty at VPI as an Associate Professor in 1968 becoming Full Professor in 1971, and serving as head of the chemistry department from 1990 – 1992. His research interests include the isolation, concentration, and characterization of trace organic molecules in soil, water and biological fluids by GC, GC/MS, HPLC, and HPLC/MS, CZE, and SFE, including the development of SE/GC/MS interfaces. Current projects involve the analysis of pesticides in soil

and food, biogenic amines in fish, trace bomb residues in air, water and soil, and PNA's and PCB's in water and soil. Dr. McNair has published over 150 research papers, six books (two in Spanish), and numerous audio visual programs on GC and HPLC, and has supervised over 50 M.S. and Ph.D. theses. One book, *Basic Gas Chromatography*, has been translated into 12 languages, with over 130,000 copies sold in English. He has been very active in the ACS Short Course program and has offered over 180 courses in the past 25 years. Dr. McNair is a member of Phi Beta Kappa, Phi Kappa Phi, Sigma Xi, ASTM E-19, and the ACS has received a variety of awards including the IR 100 award as co-inventor of the CIRA-GC/IR Instrument (1975), the VPI Alumni Teaching Award (1983), Eastern Analytical Award in Chromatography (1989), and the Tswett Medal from the Russian Academy of Sciences (1977). He has served on numerous editorial boards including *Analyt. Chem.*, *J. of Liquid Chromat.* and the *J. of Chromat. Sci.*, and has served 5 years as Chairman of

Division of Analytical Chemistry Award In Spectrochemical Analysis

presented to:

Joseph A. Caruso

Joseph A. Caruso is Professor and Dean of the College of Arts and Sciences at the University of Cincinnati.

Professor Caruso received his Bachelor's degree in Chemistry from Eastern Michigan University and his Master's degree in Analytical Chemistry from Wayne State University. He then earned his Ph.D. from Michigan State under the direction of Alexander Popov. After a one-year



Joseph A. Caruso

post-doctoral fellowship with J. Lagowski at The University of Texas-Austin, he joined the faculty of the University of Cincinnati as assistant professor of Analytical Chemistry. He has been promoted to associate professor with tenure, full professor, department head of the Department of Chemistry, and presently holds the position as Dean of the College of Arts and Sciences. He has authored or co-authored over 225 scientific publications and presented over 200 invited lectures at scientific meetings.

Dr. Caruso's research interests are trace elemental analysis by atomic spectrometric methods. The principle focus is plasma source spectrometry. His interests in this area

Division of Analytical Chemistry 2000 AWARDEES

are wide ranging from sample introduction to instrumentation and detection. Both plasma optical emission and mass spectrometric detection are utilized for trace to ultra trace methods of detection. A strong interest of the group continues to be chemical speciation with element specific detection. Current studies involve He glow discharges as ion sources for mass spectrometry. His group's most recent studies involve speciation of bioselenium species in yeast-based food supplements, since these have cancer chemo-preventive properties.

Dr. Caruso is currently a member of the Society for Applied Spectroscopy, the American Chemical Society and Sigma Xi. He has received the 1990 Distinguished Alumni Award by Eastern Michigan University, the ACS 1992 Cincinnati Chemist of the Year Award, and the 1994

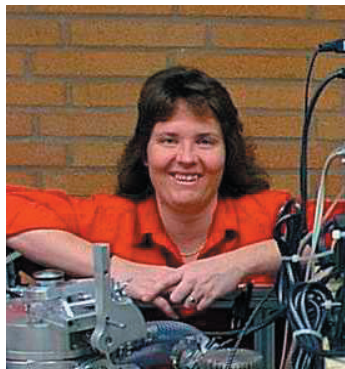
Division of Analytical Chemistry A. F. Findeis Award For Achievements by a Young Analytical Scientist
Sponsored by The Philip Morris Companies
presented to:
Kimberly A. Prather

Kimberly Prather is Associate Professor of Analytical and Environmental Chemistry in the Department of Chemistry at the University of California (UC), Riverside.

Professor Prather received her B.S. (1985) and Ph.D. (1990)

degrees in Chemistry from the University of California, Davis. Her dissertation research under the guidance of Prof. Robert Rosenfeld involved studies of the gas phase photodissociation dynamics of organic compounds. She later served as a postdoctoral fellow with Prof. Yuan T. Lee at the University of California, Berkeley from 1990 to 1992 studying the use of molecular beam techniques to characterize the mechanisms for the photodissociation of saturated hydrocarbons and pyridine.

Dr. Prather's current research involves the development of analytical methods for the continuous monitoring of aerosol particles from environmental sources such as water or ice particles in clouds, salt particles from ocean spray, or smoke from a variety of combustion sources such as second hand tobacco smoke. She developed aerosol-time of flight mass spectrometry (ATOFMS), which is the first analytical technique capable of providing both size and chemical composition information on individual aerosol particles in real time. Recent accomplishments



Kimberly A. Prather

include the development of transportable ATOFMS instruments that can be strategically positioned at various sites that will allow monitoring of the evolution of single particles in

the atmosphere over time. The transportable instruments will be used to study the direct effect of aerosols on visibility, pollution levels, and the global radiation balance. A second interest in her group is the use of ATOFMS as an on-line probe for monitoring heterogeneous gas-particle reactions in the laboratory. Her current group consists of 14 graduate students and two postdoctoral researchers.

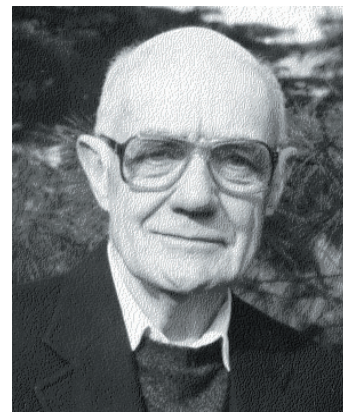
Professor Prather has received the American Society for Mass Spectrometry (ASMS) Award (1994), the GAeF Smuluchowski Award (1998), and the Kenneth T. Whitby Award (1999). She is also a recipient of the National Science Foundation Young Investigator Award (1994) and the National Science Foundation Special Creativity Award (1997). Her affiliations include the ACS, ASMS, American Association for the Advancement of Science, and the American As-

Division of Analytical Chemistry Award In Chemical Instrumentation
Sponsored by the Dow Chemical Company Foundation
presented to:
John Bennett Fenn

John Fenn is Research Professor of Physical and Analytical Chemistry at Virginia Commonwealth University (VCU). Professor Fenn obtained his B.A. (1937) degree in Chemistry from Berea College and Ph.D. (1940) degree in Chemistry from Yale University. He held several industrial and academic appointments at Monsanto, Princeton U. and the Office of Naval Research in London before joining the faculty at Princeton as the Professor of Aerospace Sciences from 1959-67. He was then Professor

of Chemical Engineering at Yale (1967-87) retiring as Professor Emeritus in 1987 before joining the faculty at VCU. Prof. Fenn's list of prestigious appointments and awards include: Honorary President VIth International Symposium on Molecular Beams, Holland (1977), Visiting Professor, University of Tokyo (1979), U.S. Senior Scientist Award, Alexander von Humboldt Foundation, West Germany (1982), Raymond and Beverly Sackler Distinguished Lecturer in Chemistry, U. of Tel Aviv (1984), Distinguished Visiting Professor, Chinese Academy of Sciences (1987), Kristiakowski Lecturer, Harvard (1991), and the ASMS Award for Distinguished Contribution in Mass Spectrometry (1992).

Professor Fenn is most noted for his seminal research on supersonic free jet expansion, electrospray ionization (ESI) and the subsequent development of Electrospray Mass Spectrometry (EMS), which has been noted as 'the most important analytical



John Bennett Fenn

method of the past quarter century.' His 1989 Science paper on the latter has received hundreds of citations annually and related topics on internet searches return thousands of hits. Dr. Fenn's publication of

Division of Analytical Chemistry 2000 AWARDEES

more than 100 papers and 19 U.S. patents pale in comparison to the impact that his research has made to the field of science! EMS has 'revolutionized the characterization of peptides and large biomolecules by mass spectrometry.' Such innovations encompass the interfacing of mass spectrometers to capillary electrophoresis and HPLC instruments that yield atto- to zepto-mole detection limits for analyte ranging from 100 - >10⁸ Daltons, and has contributed to dramatic transformations in the study of chemical reaction dynamics, spectroscopy, and the study of complex chemical systems leading to the birth of relatively new fields of nano-particles and proteomics. Several thousand mass spectrometers with ESI sources are sold per year in places such as medical schools, pharmaceutical companies, oil refineries, and science departments. The efforts of several Nobel laureates has been the seed of Professor Fenn's contribution to science, which as tendered by several of his colleagues is warranting of

B.S. degree in Chemistry from the University of California, Riverside in 1970 and his Ph.D. under Ralph Adams at the University of Kansas in 1974. His research involves spectroscopic probes of electrochemical pro-



Richard L. McCreery

cesses, with the goal of relating electrode surface structure to electrochemical reactivity.

Dr. McCreery's lab uses Raman spectroscopy, scanning tunneling microscopy, XPS, and electron microscopy to characterize carbon and metal electrodes, often in situ and dynamically. In parallel with the development of surface Raman spectroscopy has been the rapid growth of Raman applications to chemical analysis, in which the lessons learned from surface Raman have been incorporated into commercial analytical instrumentation. An additional application of surface spectroscopy is a multi-disciplinary project on anticorrosion coatings for aircraft alloys, in which the surface chemistry of chromate species is an essential component of understanding the effectiveness of widely used aircraft coatings.

Professor McCreery's current grant support includes projects funded by the National Science Foundation, the Air Force Office of Scientific Research and the

William Keck Foundation. Other than a sabbatical in England, Dr. McCreery has remained at Ohio State from 1974-2000, living in Columbus with his wife, Jane,

Division of Analytical
Chemistry Award
For Distinguished Service
Sponsored by
Waters Corporation
presented to:
Roland F. Hirsch

Roland F. Hirsch is a program manager in the Medical Sciences Division of the U.S. Department of Energy (DOE)

Roland F. Hirsch is a program manager in the Medical Sciences Division, Office of Biological & Environmental Research, Office of Science, U.S. Department of Energy. He is co-director for DOE's Environmental Management Science Program. He chairs the structural molecular biology Task Group, and is involved in the Office's genome instrumentation research program and measurement science program. He served as acting director of the division 1995-1998.

Dr. Hirsch has served as secretary (1980-1983) and chair (1988) of the Division of Analytical Chemistry. He has edited the Division's site on the World Wide Web since it began in 1995 and has been a member of the editorial advisory board of the journal *Analytical Chemistry*. He has served on the ACS Council for more than 20 years and on several ACS committees (currently the Committee on Divisional Activities), chairing the Joint Board-Council Committee on International Activities 1990

to 1992. In 1979 he chaired the ACS North Jersey Section; prior to that he was chair of the Section's Analytical Topical Group and delegate to the Eastern Analytical Symposium.

Dr. Hirsch was educated at Oberlin College and the University of Michigan, where his Ph.D. dissertation topic was *The Analytical Chemistry of Technetium*. He was a member of the faculty of Seton Hall University from 1965 to 1988, serving as



Roland F. Hirsch

department chair and associate dean there. In 1975-76 he was a Senior Visitor at the Inorganic Chemistry Laboratory at Oxford University. He took a leave of absence from Seton Hall in 1984 to be a program manager in the Separations and Analytical Chemistry program in the Chemical Sciences Division of the Department of Energy. After four years in this position he joined the Biomedical Research Technology Program, National Center for Research Resources, National Institutes of Health. He returned to DOE in his current position in 1991. He represents the Department of Energy on the National Advisory Research Resources Council at NIH and is a member of several

Division of Analytical Chemistry Award In Electrochemistry

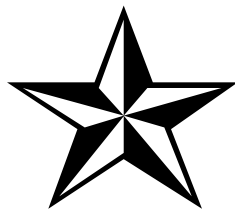
Sponsored by

The Electrochemical Instruments Division of EG&G Princeton Applied Research

presented to:
Richard L. McCreery

Richard McCreery is the Dow Professor of Chemistry at the Ohio State University .

Professor McCreery received his



On the occasion of Arnold Beckman's 100th birthday

April 10th, 2000

The Executive Committee of the Division of Analytical Chemistry passed a unanimous resolution at its March 25th, 2000 meeting extending its congratulations to Arnold Beckman.



We celebrate Arnold Beckman
as the inventor of the pH meter, the heliopot, and the quartz spectrophotometer.



We celebrate Arnold Beckman
as the entrepreneur who started Beckman Instruments.



We celebrate Arnold & Mabel Beckman
as the philanthropists who created the Beckman Foundation
to support programs in chemical and life sciences.

Meetings

(for details, and dates when not listed here, consult the DAC web site (see page 2 of this newsletter for address))

Meetings in 2000

16th Biennial Conference on Chemical Education, Ann Arbor, Michigan, USA, July 30 to August 3.

42nd Rocky Mountain Conference on Analytical Chemistry, Broomfield, Colorado, USA, July 31 to August 3.

Microscopy & Microanalysis 2000, Philadelphia, Pennsylvania, USA, August 13-17.

12th International Conference on Thermal Analysis and Calorimetry, Copenhagen, Denmark, August 14-18.

XVII International Conference on Raman Spectroscopy, Beijing, Peoples Republic of China, August 20-25.

International Conference on Synchrotron Radiation Instrumentation, Berlin, Germany, August 21-25.

15th International Mass Spectrometry Conference, Barcelona, Spain, August 27 to Sept. 1

Molecular Nanotechnology, Bethesda, Maryland, USA, November 3-5

Meetings in 2001

18th conference of the Australian and New Zealand Society for Mass Spectrometry, Gold Coast, Queensland, Australia, February 4-9

Computational Aspects of Biomolecular NMR, Bargaia (Pisa), Italy, May 6-11

Nuclear and Radiochemistry Undergraduate Summer Schools, San Jose, California and Brookhaven, New York, USA, June 18 to July 27

14th Conference of the International Society of Magnetic Resonance, Je-

Graduate Fellowship Awards

The ACS Division of Analytical Chemistry is pleased to announce that thirteen analytical chemistry graduate students have been selected by the Graduate Fellowship Committee to receive fellowships for either the 2000-2001 academic year (\$15,000) or the summer of 2000 (\$5,000). The fellowship program, sponsored by the generous benefactors named in the following student biographical sketches, encourages basic research in analytical chemistry and recognizes future leaders in the field.

Full-year Fellowships

Gary Baker of SUNY-Buffalo (Frank Bright). Baker's research involves tailored ceramics for sensing and catalysis, protein dynamics and activity within organized/constrained media, synthetic polymer mass spectrometry, and two-photon excited fluorescence-based diagnostics. His fellowship is sponsored by Eli Lilly & Co.

Cherokee Hoaglund Hyzer of Indiana University (David Clemmer) is developing ion mobility MS/MS methods for the analysis of large mixtures and for conformational studies of gas-phase ions. Her fellowship is sponsored by Merck & Co.

Andrew Leach of Indiana University (Gary Hieftje) is developing radioluminescent light sources for spectrochemical sensing applications and inductively coupled plasma time-of-flight mass spectrometers for ultratrace elemental analysis. His fellowship is sponsored by DuPont.

Brian Polk of Georgia Tech

University (Jiri Janata) is developing chemically sensitive field-effect transistor arrays based on the modulation of the work function of selective conducting polymer layers by an analyte vapor. His fellowship is sponsored by GlaxoWellcome.

Aaron Wheeler of Stanford University (Richard Zare) is developing microchip-based devices and techniques for the quantitative analysis of the contents of individual sub-cellular organelles. His fellowship is sponsored by Procter & Gamble.

Summer Fellowships

David Collins of Brigham Young University (Milton Lee) is working on the development of a high resolution gas-phase electrophoresis system to be coupled to time-of-flight mass spectrometry, which will allow for high-throughput analysis of combinatorial chemistry libraries. His fellowship is sponsored by the Society of Analytical Chemists of Pittsburgh (SACP).

Benjamin Cutak of the University of Kansas (Cynthia Larive). Cutak's research focuses on environmental chemistry through the use of pulsed-field gradient NMR to investigate the aggregation of humic substances and their interactions with hydrophobic pollutants, such as herbicides. His fellowship is sponsored by the SACP.

Peter Krouskop of Michigan State University (Victoria McGuffin). Krouskop's research involves the development of a Monte Carlo simulation and its application as a unified approach to explore the fundamental re-

lationships of mass transfer and chemical reaction in chromatography and chromatographic reactors. His fellowship is sponsored by the Dow Chemical Company Foundation.

Lijuan Li of Duke University (Linda McGown). Li's research focuses on capillary electrophoresis and frequency-domain fluorescence lifetime detection for four-decay DNA sequencing and immunoassays. Her fellowship is sponsored by the R.W. Johnson Pharmaceutical Research Institute.

Amy Michel of the University of Colorado (Kathy Rowlen and John Birks) uses atomic force microscopy to study gas-solid reactions of carbonaceous particles. Her fellowship is sponsored by the Perkin-Elmer Corporation.

Jing Ni of Iowa State University (Marc Porter) is developing a miniaturized fluid control and delivery system for a chip-scale liquid chromatograph and SERS-based detection scheme for high throughput immunosensing. Her fellowship is sponsored by Eastman Chemical.

Peter Wuelfing of the University of North Carolina at Chapel Hill (Royce Murray). Wuelfing's research is aimed at modifying the solid-state electronic conductivity properties of alkanethiolate monolayer protected Au clusters by controlling factors such as core charge and attached redox probes. His fellowship is sponsored by the SACP.

Chris Zangmeister of the University of Arizona (Jeanne Pemberton) is studying chlorine releasing heterogeneous reactions that occur on alkali halide and

ice surfaces in the atmosphere. His fellowship is sponsored by the SACP.

Honorable Mention

The Graduate Fellowship Committee noted honorable mention for fellowship applicants **Chun-Sheng Liu** of the University of Alberta (Norman Dovichi) and **Patrick Vallano** of Oregon State University (Vincent Remcho).

Applications for 2001-02 DAC Graduate Fellowships

Applications are being accepted for the 2000-01 Division of Analytical Chemistry Graduate Fellowships. These fellowships are available to full-time graduate students working toward a Ph.D. in analytical chemistry. Applicants must have completed their second year of graduate studies by the time their fellowship would begin. The applicant's graduate thesis advisor must be a member of the Division of Analytical Chemistry of the ACS, and only one nomination per advisor will be accepted. In addition to the application forms, applicants must submit three letters of recommendation and copies of their undergraduate and graduate transcripts.

Detailed information about the DAC Graduate Fellowship Program and about the application process for the 2000-01 fellowships may be obtained by visiting the program's home page (<http://www.wabash.edu/acsgraduatefellowship/home.htm>). Application forms may be downloaded from this web site or may be obtained by contacting Professor Richard F. Dallinger of Wabash College - e-mail (preferred): dallinger@wabash.edu; phone: 765-361-6242; fax: 765-361-6340. Completed appli-



Piece of cake!

How to join Dac

Send check payable to the Div. of Analytical Chemistry for the membership class:

ACS member \$14
NOT ACS member \$18
Student \$8
(include ACS member number or copy of student i.d. for discount)

Add \$2 for enrollment in the Subdivision of Chromatography and Separations Chemistry

V

Include your name & address and mail to

John N. Richardson
Dept. Chemistry
Shippensburg University
Shippensburg, PA 17257
(717)477-1774
FAX (717)477-4048
JNRICH@ARK.SHIP.EDU

Graduate Fellowship Committee Recog-

The members of the Graduate Fellowship Committee who generously give many hours of effort in evaluating applications and selecting recipients are:

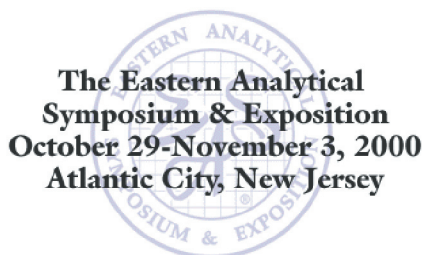
Paul Edmiston – College of Wooster
Patrick Epperson – Lawrence Livermore National Laboratory
Nile Frawley – Dow
Angela Harmon – Merck
Mary Kaiser – DuPont
Susan McIntosh – Perkin-Elmer
Margaret Merritt – Wellsley College
Grover Owens – Procter & Gamble

Eugene Rickard – Eli Lilly
Michael Riebe – GlaxoWellcome
Candace Sass – Eastman Chemical
Allen Sharkins – Society of Analytical Chemists of Pittsburgh
Sabina Slavin – Bonaire Consulting
James Weber – R.W. Johnson Pharmaceutical Research Institute

The Committee would like to recognize four members who have completed their terms – Dr. Jennifer Finnegan-McCafferty of sponsor Merck (and Summer 1995 fellowship

recipient), Dr. William Tindall from sponsor Eastman Chemical, Ms. Sabina Slavin from Bonaire Consulting (and, previously, from Perkin-Elmer) and Professor Ted Williams from the College of Wooster (long-time member and Committee Chair from 1973-1982). They have our gratitude and thanks for the wonderful work they have done for the Committee.

Further information about the DAC Graduate Fellowship Program can be found on the Program web site



Eastern Analytical Symposium

Eastern Analytical Symposium is planning an exciting and informative exposition and symposium in Atlantic City, NJ, October 29 to November 3. The new venue provides a larger space for the exposition. Attendees will find it more convenient to go back and forth from the show floor to the technical sessions, as they are all located within the Convention Center. Hotels, also, are convenient to the Convention Center and there will be no lack of after hours entertainment, as there might have been in previous years in Somerset!
A strong program of invited

sessions on topics as diverse as Bioseparations, Chemometrics, Miniaturization in Analytical Chemistry, and Conservation Science is planned, in addition to the contributed papers. Of special interest to the academic community are two invited symposia: one on the Analytical Chemistry Curriculum and how it is likely to be changed by advances in analytical science in the new millenium and the other on Undergraduate Research for Science Excellence. The symposium on curriculum was organized by the Middle Atlantic Regional Academic Analytical Chemists Confer-

ence (MARA-ACC), which is holding its biennial meeting in conjunction with the EAS. Both of these invited sessions are on Monday. Nine awards for distinguished work in various fields of analytical chemistry, will be presented during the conference. These include the ACS Division of Analytical Chemistry Findeis Young Investigator Award, which this year will be awarded to Kimberly Prather. The complete preliminary program is available in the EAS publication, The Retort. To be placed on the mailing list, contact easinfo@aol.com, or visit the EAS web site at www.eas.org.

At the Washington DC meeting



Detection of Explosives Challenges for Chemists

Organized by Robert Q. Thompson, Oberlin College

Morning Session: Pre-Blast Detection.

Chair: **Frank Fox**, U.S. FAA.

Frank T. Fox, U.S. Federal Aviation Administration

Tutorial: Explosives detection methods for airline passenger luggage.

Jimmie C. Oxley, University of Rhode Island. Tutorial: Availability and analysis of explosives residue.

Richard A. Strobel, U.S. Bureau of Alcohol, Tobacco, and Firearms. ATF explosives detection research and development efforts.

Allen N. Garroway, U.S. Naval Research Laboratory. Detection of landmines by nuclear quadrupole resonance.

David A. Atkinson, Idaho National Engineering Laboratory. Explosives detection using ion mobility spectrometry: what's next?

Steven G. Burmeister, U.S. Federal Bureau of Investigation. Explosives detection: FBI case studies

Afternoon Session: Post-Blast Detection.

Chair: **Dean D. Fetterolf**, U.S. FBI.

Dean D. Fetterolf

Introductory remarks.

Mark L. Miller U.S. Federal Bureau of Investigation. Tutorial: Detection of explosives residue

Kelly Mount

U.S. Federal Bureau of Investigation. Tutorial: Investigating bombing incidents; case studies

Yehuda Yinon

University of Central Florida. LC/mass spectrometry of explosives: mechanistics and applications

Bruce R. McCord Ohio University. Capillary electrophoresis and ion chromatography for low explosives analysis.

Jose R. Almirall Florida International University. Application of solid phase microextraction to explosives residue.

Thomas F. Jenkins Cold Re-

Nuclear and Analytical Techniques in Weapons Non-Proliferation

*Technology in support of treaties

*Non-Proliferation Treaty

*Comprehensive Nuclear-Test-Ban Treaty

*Chemical Weapons Convention

*Biological Weapons Convention

*START, START II, START III

*Global monitoring

*Regional monitoring

*On-Site Inspections

*Laboratory or field analysis

*Ultra-sensitive analytical techniques

*Sample collection and processing

*Portable instrumentation

*Methods for land mine detection

*Nuclear Weapons

*Fissile material control

*Dismantlement

*Chemical Weapons

*Biological Weapons

*Rapid detection during

“events”

*Intermittent/continuous monitoring

*Long range detection

*Delivery Systems

*Related topics.

Policy Overview:

Introductory talks on government policy will be presented by the following

invited speakers:

Jay Davis - Defence Threat Reduction Agency

Mona Dreicer -

Department of State

Website:

Please visit the symposium website at <http://www.pnl.gov/dnct-symposium>

Deadline for Awards Nominations

Divisional Award Guidelines can be found at the Division of Analytical Chemistry web site (see page 2). For the 2001 Awards, nominations shall be sent no later than September 1st, 2000 to:

Theodore R. Williams
Department of Chemistry
The College of Wooster
Wooster, OH 44691
(330) 263-2115; FAX

Subdivision of Chromatography Updates By-Laws

Continued from page 1

tee.

Dates for nomination and election deadlines were changed to reflect actual practice.

The Executive Committee was expanded to a total of eight and shall meet at least once a year.

The Chair-elect and Secretary shall now serve at least two years.

The Chair, Secretary or their designees can be nonvoting delegates to the Executive Committee meeting of the Analytical

Section 2. (a) The duties of the officers shall be such as usually pertain to the offices they hold, and also any other duties as may be delegated or herein prescribed. (b) The Chairman-Elect shall serve as Chairman of the Scientific Program Committee for the Subdivision, and is responsible for preparation of the preliminary and final programs for approval by the Executive Committee of the Division. (c) The Secretary shall carry out all of the duties outlined in the Constitution and Bylaws of the Society, and is responsible for the preparation of any annual report of the Subdivision. The Secretary is also responsible for preparation and distribution of a Newsletter periodically throughout the year. (d) Various committees of the Subdivision, other than the Executive Committee and Nominating Committee whose duties have been defined elsewhere, shall have such authority and perform such duties as may be determined from time to time by the Chair or Executive Committee.

Section 3. The Chairman and Secretary of the Subdivision or their designees shall be nonvoting delegates to the Executive Committee of the Division. In addition to the usual duties associated with their respective offices, the officers of the Subdivision shall also serve as a steering committee for the Subdivision.

Section 4. Election of Officers and Executive Committee Members. The immediate past Chairman shall appoint a Nominating Committee to be chaired by the immediate past chairman, or in his absence by the next preceding past chairman, consisting of at least three members of the Subdivision, by October 15/February 1. The immediate Past Chair shall serve as the Chair of the Nominating Committee. The election shall be held by mail according to the following formula:

A. Nominations shall be made as follows:
(a) On or before November 30/March 1 the secretary shall inform the members of the offices to be filled at the next election, and shall invite suggestions for nominees. A return of one percent (1%) of the members suggesting an individual for a specific office shall be a prerequisite for nomination in this manner. Such suggestions of nominees to be valid must be signed by the member making the nomination and received by The Nominating Committee no later than February 1/April 1.

(b) Except as provided for in paragraph (c) below, there shall be on the election ballot at least one (1) and not more than three (3) candidates each for the offices of Chair-Elect and Secretary.

(c) The Nominating Committee shall determine which candidates meet the requirements for mail nomination according to paragraph (a) above. If the number of such candidates is less than the maximum specified in paragraph (b) above, the Committee may nominate one or more additional candidates, as it chooses, provided only if the total proposed for any office in the mail nomination equals or exceeds the maximum specified in paragraph (b), the Nominating Committee shall add no more than one additional candidate for this office. If the total number of candidates now exceeds twice the maximum number specified in paragraph (b), the Nominating Committee shall, by selecting those with the highest number of votes or by voting on tied candidates, reduce the number of candidates proposed in the mail ballot until the total number of candidates (including the Committee nominee) is not more than twice the specified maximum number. The names of these candidates shall then appear on the election ballot.

(d) The Nominating Committee, after ascertaining that each candidate is a member of the Subdivision, and after obtaining the consent of each candidate, shall by April 1/May 1 furnish the Secretary the names of candidates for each office to appear on the election ballot.

B. Elections shall be by secret ballot as follows:

(a) The Secretary shall mail to each member of the Subdivision by May 15 an election ballot on which the nominees for each office are listed in alphabetical order.

(b) Each voter shall indicate his choice for each office to be filled by appropriately marking his ballot. The ballot is then to be mailed to the designated office committee so that it will be received no later than July 1/July 10.

(c) A plurality of the voters cast shall constitute election.

(d) In case of a tie vote in the election, it shall be the prerogative of the Executive Committee to break the tie by a secret ballot election. The candidate receiving a plurality of the votes cast by the Executive Committee shall be declared elected.

C. The Chairman-Elect shall automatically succeed

III, Section 5 (c).

Section 5. Terms of Office

(a) The Chairman, the Chairman-Elect and the Secretary shall serve for at least two years, or until their successors are elected/qualified.

(b) The terms of the Chairman and Chairman-Elect shall begin an October 1 of the year of their election and that of the Secretary shall begin on January 1 of the following year.

(c) The Executive Committee may fill a vacancy in any office. The member so elected shall serve until the next regular election.

Section 6. Executive Committee (a) The Executive Committee shall consist of the officers of the Subdivision, the immediate two past chairmen and two or more additional members sufficient to make a total committee membership of seven/eight. The additional members shall normally be elected to 2-year terms. A majority of the members shall constitute a quorum of the Executive Committee for approval and the transaction of business. The Executive Committee shall meet at least twice/once each year. A meeting may be called at any time by the Chairman or by the request of any three members of the Executive Committee.

(b) The Executive Committee shall conduct the business of the Subdivision and direct its activities. It shall authorize all expenditures.

BYLAW IV-COMMITTEES

Section 1. The Chairman shall appoint such committees as may be necessary. These committees shall be constituted with the advice and consent of the Executive Committee unless otherwise provided for in the Bylaws. The term of office of members of committees shall be specified by the Chairman.

BYLAW V-DUES

Section 1. Members of the Subdivision shall pay dues annually to the Division Treasurer as determined by the Executive Committee of the Division.

BYLAW VI-MEETINGS

Section 1. The Subdivision shall meet at each national meeting of the Society, unless the Executive Committee votes otherwise.

Section 2. Any meeting of the Subdivision shall may be held in conjunction with the annual meeting of the Division or with any other national meeting related to analytical- or separations-chemistry.

Section 3. The Executive Committee may call special meetings of the Subdivision, if notice is given to the membership in writing or by the publication in the official organ of Society at least six weeks in advance.

Section 4. Those members of the Subdivision present at any annual or special meeting shall constitute a quorum. The most recent edition of Roberts Rules of Order shall be the authority in matters not covered by the Society Bylaws.

Section 5. The fee for registration at any special meeting shall be decided by the Executive Committee, in accordance with the Bylaws of the Division and the American Chemical Society.

BYLAW VII-PAPERS AND PUBLICATIONS

Section 1. All titles, abstracts and manuscripts of papers must be in the hands of the Chairman of the Scientific Program Committee of the Subdivision or his or her designee, on or before the date stated in the preliminary program announcements appearing in various publications of the Division or the Society. Authors must submit four copies of a 200- to 250-word abstract and may be required to submit one copy of a complete paper or one copy of a 1000-word abstract if so noted in the publications listing deadlines for submission of such titles, abstracts and manuscripts.

Section 2. The Chairman of the Scientific Program Committee of the Subdivision or any other individual

the programs of the Division.

Section 3. A symposium organized by and presented before the Subdivision or the Division is the property of the Subdivision. No such symposium or a significant number of papers therefrom, may be published without the approval of the Executive Committee, or the Chairman of the Scientific Program Committee as its designated representative.

BYLAW VIII-AMENDMENTS AND POSSIBLE CONFLICTS WITH DIVISIONAL BYLAWS

Section 1. The Bylaws may be amended at any annual meeting of the Subdivision by a three-fifths affirmative vote of the members present, provided that two weeks notice of the proposed amendment with the text thereof has been sent to members of the Subdivision. The Bylaws may be amended by mail ballot by a three-fifths affirmative vote of those voting, provided that the deadline for receipt of ballots is at least 30 days after the texts of the proposed amendment and the ballot have been mailed.

Section 2. In the event that any of these Bylaws are found to conflict with those of Division, the Division Bylaws shall supersede.

Approved by the Executive Committee of the Subdivision, 13 March 2000.

Approved by the Executive Committee, ACS Division of Analytical Chemistry, 28 August 1984 & 25 March, 2000. Bylaw III, Section 4, A(d) amended by ballot August 1987

J. G. Nikelly, Secretary 30 August 198. Ronald E. Majors, 25 March, 2000.

*BYLAWS OF THE SUBDIVISION OF CHROMATOGRAPHY AND SEPARATIONS CHEMISTRY

Division of Analytical Chemistry
American Chemical Society

BYLAWS*

BYLAW I-NAME AND OBJECTS

Section 1. The name of this organization shall be the SUBDIVISION OF CHROMATOGRAPHY AND SEPARATIONS CHEMISTRY (hereinafter the Subdivision), Division of Analytical Chemistry, (hereinafter the Division), American Chemical Society (hereinafter the Society).

Section 2. The objects of the Subdivision shall be the promotion of chromatography and separations chemistry in all their aspects; the presentation of programs or papers on the above related fields at national meetings of the American Chemical Society; and cooperation with local sections and regional groups; the organization and sponsorship of symposia on topics of interest to separations chemists; the development of activities to promote the growth of separations science; and the establishment of means for increasing the professional and scientific advancement and communication status and the contacts between scientists interested in chromatography and separations chemistry.

BYLAW II-MEMBERS AND AFFILIATES

Section 1. Membership in the Subdivision is open to all members of the Division, including any National Affiliates and Division Affiliates who indicate their wish to join the Subdivision and who pay the annual dues. Application for membership shall be sent to the Secretary of the Division.

Section 2. Members of the Subdivision shall have the privilege of voting for and holding elective positions in the Subdivision.

Section 3. Members may resign their membership in the Subdivision by submitting a letter of resignation to the Secretary of the Subdivision during the year for which the member's dues are paid.

BYLAW III-OFFICERS AND EXECUTIVE COMMITTEE

Section 1. (a) The officers of the Subdivision shall be members and shall consist of a Chairman, a Chairman-Elect, and a Secretary. (b) No person who is not a member in good standing of the Subdivision shall serve in any elective or appointive capacity, unless in a properly designated ex-officio or consulting status.

Subdivision of Chromatography Updates By-Laws

ACS Meet- ings 2001

SAN DIEGO, California

(APRIL 1-5, 2001)

Bioanalytical/ Bioinformat-
ics

Nanomaterial Analysis

Program Chair: Bruce R.
Chase

(302) 695 4434;

bruce.chase@usa.dupont.
com

CHICAGO, Illinois (AU-

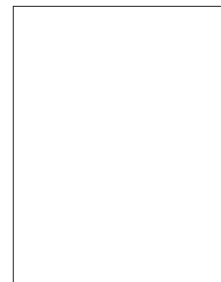
The 52nd Southeast and 56th Southwest Joint Regional Meeting,

Hosted by the Louisiana Section, will be held at the Hyatt Regency Hotel, New Orleans, LA, December 6-8, 2000. The meeting will include 35 planned symposia, and general lecture and poster sessions including one for undergraduates for which contributions are solicited. The Southwest Regional Award and a high school chemistry teaching award will be presented at a special awards luncheon. The topics covered in the symposia include chemically modified surfaces, advances in bioanalytical mass spectrometry, miniaturized chemical analytical systems, chiral separations, macromolecules in signal transduction, chemical modification of textile fibers, the role of the

laboratory in the learning process, nanomaterials, supramolecular chemistry, computer-aided drug discovery, crystal engineering, organic electronic materials, chiral carbanions, advances in physical chemistry of nanostructures and others. The symposia represent the following divisions: Analytical, Biochemistry, Cellulose, Paper and Textiles, Chemical Education, Inorganic, Medicinal, Materials, Organic, Physical, Polymers and Undergraduate. Abstracts are due by October 1, 2000. The preferred form of abstract submission is by word document email attachment of the standard ACS form available from the ACS web site. Abstracts should be sent to Ronald F. Evilia, phone (504) 280-6313, acscom@uno.edu. If necessary, a hard copy of the completed abstract form may be sent to Dr. Ronald F.



DIVISION OF ANALYTICAL CHEMISTRY
AMERICAN CHEMICAL SOCIETY
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Washington, DC 20036



WE ARE ON THE WEB!

www.acs-analytical.duq.edu/analytical.html



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