

Let me begin by congratulating the co-winners of the first Young Investigator Award of the Society of Electroanalytical Chemists, Leonidas G. Bachas of the University of Kentucky and Werner G. Kuhr of the University of California at Riverside. This award was instituted by the Society to recognize young scholars who have made outstanding contributions to electroanalytical chemistry.

All those, myself included, who have researched the literature of electron transfers of organic systems ultimately find delight in the quantitative work of Dennis Evans of the University of Delaware. We all take pleasure then in seeing that Dennis is to be the Awardee at the Charles N. Reilley Award Symposium at the 1993 Pittcon in Atlanta. Congratulations, Dennis!

On a more somber note, I am struck by the frequency with which I have heard from, or about, our electrochemical colleagues in Russia and eastern Europe, telling of the difficulties of continuing their basic investigations and inquiring about temporary opportunities for work in the U.S. I would like to help facilitate these inquiries by inviting my U.S. colleagues to tell me about possible opportunities in their own laboratories, and about individuals who are seeking temporary opportunities, and I will make an effort to establish direct contacts. I have no intention of becoming an employment agency, but I believe that some better information flow should be possible. Just write me.

Royce W. Murray

Editorial

If you have been impatiently awaiting this Issue, I must apologize for the delay. It has just been one of those times when everything hit the fan at once, if you know what I mean. Also, it has been a fairly quiet period as far as news is concerned until just recently, then the deluge arrived. Unfortunately, some of the news was bad. They say bad luck comes in threes, and it was certainly true recently. Three more of our electroanalytical greats have passed away: Harvey Diehl, John K. Taylor and Buck Rogers. While I knew Prof. Diehl by his excellent scientific reputation only, John was my postdoc advisor, supervisor and co-worker at the Bureau of Standards for almost 25 years, and Buck was a very special friend, colleague, and mentor whom I shall sincerely miss. See Inside this Issue for more about these distinguished analytical chemists who have made significant contributions to the field of electroanalytical chemistry.

On a brighter side, I have learned that several of our members have received recognition on a variety of levels. Congratulations to Hector (Tito) Abruña, Larry Faulkner, Garry Rechnitz, Dennis Evans, Werner Kuhr, and Leonidas Bachas. See Inside for details. I hope I haven't missed anyone, but unless someone provides me with the information, I can't be aware of everything going on. After all, there is a limit to my omniscience! How's that for a non sequitur?

I received a letter from Al Bard with some constructive suggestions for the newsletter (see letters). I heartily agree with Al that it would be desirable to get more science into the newsletter. In fact, I attempted this very early on in my tenure as editor by suggesting a technical section on "unexplained phenomena." I even tried to seed the pot by publishing my own observations on the anomalous electrochemical behavior of the methylmercury cation (SEAC Communications 5(4), 2-3 (1988), alas, to no avail. Perhaps Al's suggestion for a column containing useful hints for the electrochemical lab or a column on exchanges of comments on recent publications would be even more productive and informative. Again, I'm always open to new ideas, constructive criticism, and articles. I think the idea about useful hints is especially good and encourage you to send in your contributions. Remember, something obvious and trivial to you may save someone else many hours of rediscovering the wheel.

At the SEAC Board meeting held during PITTCO '92, an old subject was revisited, this time by Joe Maloy. It is the question of a new logo for the Society. Previously, I had tried to come up with one for the newsletter when I first became editor. But, as usual, it fell on deaf ears; or on unplugged keyboards. (I was young and naive in those days; I thought the readership was alive!) Well, we're giving you another chance to show your stuff. As I stated in the April 1988 issue, "As far as the logo itself is concerned, I feel that some streamlining is in order. Our original logo is rather 'busy' and, while allegorically interesting, lacks, shall we say, scientific accuracy." In any case, the time has come to try again. More information appears in this issue.

The observant ones of you will note a change in the overall appearance of the newsletter. That is because BAS, which formats and prints the newsletter for SEAC, has assigned a new person, Jeff Hanna, to work with me on producing this publication. Jeff has redesigned this issue, and we would welcome your comments on the layout changes.

Finally, please note my "new, streamlined" E-mail address:

Dick_Durst@cornell.edu

The old address still works, so if you have it already stored in a computer address book, there is no need to change it.

Dick Durst

The Society For Electroanalytical Chemistry

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Kudos

As we go to press, I have been informed that the SEAC Awards Selection Committee has announced the recipients of next year's **Relley** and Young Investigator awards. The very **deserving** winner of the Charles N. **Relley** Award is **Dennis Evans**. Apparently, the Young Investigator Award was too close to call because the first "winner" is actually two: **Leonidas Bachas** and **Werner Kuhr**. It's not dear to me at this time whether they **will** have to time-share the award plaque, cut it in two, or **receive duplicates**. Even more importantly, do they each get \$2507 I guess we'll all have to go to the award ceremony to find out! Congratulations to all three of you. More **details** on the redplents and the award symposium to be held at **PITCON '93** will appear in our next issue of **SEAC Communications**.

Although it is already history, belated congratulations go to **Larry Faulkner** who **received** the ACS Award in Analytical Chemistry sponsored by **Fisher Scientific**. An award symposium was arranged by **Mardn Majda** in his honor at the ACS National Meeting in San Francisco last April.

This year's **winner** of the ACS Award in Electrochemistry is **Garry Rechnitz**. **Garry will receive** this award at the ACS National meeting in Washington, DC. The award symposium, tentatively set for Tuesday morning (August **25th**), is **being** organized by Mark Meyerhoff and besides the award address by Garry, speakers **will** include **Harten** McConnell, Joe Wang, Adam **Heller**, and Mark Ar-

nold. Garry is **being recognized** for his many years of innovative biosensor and, before that, **ion-selective** electrode research.

[Is it just my imagination or is a major award to my old friend Garry long overdue? Maybe I am paranoid, but it seems that awards for electrochemical research in potentiometry are few and far between. Are we an amperometrically dominated discipline? Is potentiometry any less important or less practical? Not likely; just look at the real-world applications of **pH** and ion-selective electrodes **vis-a-vis** amperometric analyses and I think potentiometric sensors will win hands down. All I can **conclude** is that, as in many other fields, there are the "glamour" disciplines and the "country cousins."

Unfortunately, Garry, it has taken far too long to give you the **recognition** you deserve. (Even though this is not the editorial column, I am taking the editor's prerogative to editorialize!)

Speaking of "old" friends and potentiometrists: I want to congratulate Roger 'Mr. **pH**' **Bates** on his recently celebrated 80th **birthday**. Roger tells me he **still** plays tennis three times a week and jogs/walks on alternate days. **I wish** I had that much **energy!**

Finally, congratulations to **Tito Abruña** for the award of a Guggenheim Fellowship for 1992. (I found out about this one by reading some of the internal Cornell propaganda that crosses my desk. Surely there are other awards out there.

Electrochemistry: A Science at the Interface

This is the **title** of a **very interesting little** booklet **published** last year by the Beckman Center for the **History** of Chemistry in honor of **Michael Faraday** during the **bicentennial** of his birth. It includes a chart **showing** the major electrochemical developments over the past 200 years. This is the only weak part of the booklet since it doesn't include any **contributions** of **SEACers** (even though Al Bard and Larry Faulkner were on the brochure advisory committee). I wonder, can SEAC posthumously award honorary **membership** to **Mike Faraday**?

By sending for this publication, your name is placed on their mailing list to **receive** their newsletter **which** is **quite interesting** in itself. Although they solicit donations for the Center, it is very **low-**

keyed and you really have to be sharp eyed to find the solicitation.

If you would like a copy, **write** to the:
Beckman Cntr. for the History of Chemistry
3401 Walnut Street
Philadelphia, PA 19104-6228

Also, in the May 15th issue of *Science* (p. **1059-60**), one can read the reviews of **five** recent works on this interesting 19th century scientist. Apparently, a small cottage industry has developed to produce these, and quite a few more, Faraday **publications**.

Definitions

Originality:

The art of concealing your source.

Inverse Mass Law:

1/4 lb. of chocolate = 4 lb. of fat.

New Members

Robert C. Bess

PT Caltex Padfic Indonesia,
Rep. of Singapore, 1 0/31

Luclo Angnes

New Mexico State University 1 1/20

Peter W. Feguy

University of Louisville, 11120

Jeffrey D. Brewster

USDA, Agric. Research Service, 11/21

Ronald E. Nottle

Wake Forest University, 1 1/24

William E. Geiger

University of Vermont, 12/05

Hector Fernandez

Universidad Nacional de Rio
Cuarto, Argentina, 12/17

George C. Grant

Norfolk State University, 12/28

Christa L. Colyer

Trent University
Peterborough, Canada, 01/07

Hendrik Emons

University of Cincinnati, 01/16

Hao Zhang

University of Liverpool, UK, 01/21

Daniel Zavitz

Ohio State University, 01/28

Paul Pantano

University of California
Riverside, 02/11

Christie D. Allred

Ohio State University, 02/19

Robert M. Taylor

Leeds & Northrup Co., 02/28

Robin D. Greenhagen

University of Kansas, 03/04

Yuehe Lin

New Mexico State University, 03/07

Inam-Ul-Haque

University of Connecticut, 03/16

Michelle R. Gagnon

University of California
Riverside, 03/18

Carolyn Ribes

Dow Chemical, 03/22

Robert Kennedy

University of Florida, 03/23

Jose F. Rodriguez

University of Puerto Rico, 03/25

George C. Russell

University of Cincinnati, 04/28

Letters

April 2, 1992

Dear Dick:

I meant to compliment you on your efforts with the SEAC Newsletter. I do think we ought to try to get a little more science into the Newsletter, however. How about a column containing soliciting useful hints in the electrochemical laboratory; e.g., ways of making ultramicroelectrodes, cute little circuits for special purposes, sources for useful materials, etc. Another possibility would be a column requesting comments on recent papers in the literature and replies from the authors. This could be fun, if done carefully and well.

Thanks again and best wishes.

Sincerely,

Allen J. Bard

April 25, 1992

Dear Dick:

I am in process of moving to the University of Tokyo to assume, as of April 1992, the chair of analytical chemistry in its Chemistry Department. For the sake of smooth transition, I have been requested to still keep the present chair at Hokkaido University for another year as

"dual-chair". Accordingly, I will be mainly in Tokyo, while staying several days in Sapporo every month throughout the year 1992. So, if you have a chance this year to come to Japan, please let me know, and add Tokyo or Sapporo, wherever you like, in your itinerary. I would like to welcome you in any place. My permanent address in Tokyo is: Department of Chemistry, Faculty of Science, The University of Tokyo, Hongo, Tokyo 113, JAPAN. With best regards,

Sincerely yours,

Yoshio Umezawa

March 16, 1992

Dear Dick:

Please include the attached obituary, or abstract thereof, in the next SEAC Newsletter. The analytical community has suffered a great loss with the passing of Harvey Diehl. I am sure there will be a memorial set up in his name, but details are not yet available.

Please edit the "C." from this name. Prof. Diehl was not fond of his middle name or even the initial. Thanks.

Sincerely,

William F. Koch

Restaurant Renames Society

Each year the SEAC Directors honor the **Reilley Award** winner during the Pittsburgh Conference by holding an "informal dinner" for the **Awardee** at their own expense. This year, Activities Chairman Mark Meyerhoff arranged for the dinner to be held at the Le Jardin, an excellent New Orleans restaurant. The menu is reproduced for the edification of the Membership.

**SOCIETY OF ELECTRO
ANALYTICAL PHYSICISTS**

Tuesday, *March 10, 1992*

Blackened Sea Scallops &
New Orleans Style Barbequed Shrimp
or
Southern Louisiana Crabcakes with
Warm Rernoulade Sauce

Chiffonade of Five Garden Greens
Tossed in Poppyseed Dressing

or
Seafood and Andouille Gumbo

Sorbet
• t***

Choice of:

New York Strip Steak
Creole Mustard Butter
or

Mesquite Smoked Yellow Fin Tuna

Cajun Buerre Blanc
or
Duo of Petite Filet with Cracked
Pepper and Veal Stuffed with
Crabmeat and Tasso
• .***

New Orleans Praline Cheesecake
Bread Pudding
Cream Caramel Custard

Chef's Accompaniments

*Fresh Sourdough Bread with Butter
Coffee, Decaffeinated or Tea*

When questioned about the new name given to the Society by the restaurant management, the maitre d' held up what looked like an American Physical Society membership card and said, "I thought you were the ones doing cold fusion."

[The whole truth ends at the dotted line]

Joe Maloy

More Definitions

Law of Conservation of Intelligence:
The total intelligence of the Earth is constant, yet the population is growing.

Remember, if you want your spouse to listen and pay strict attention to every word you say, talk in your sleep.

SEAC Logo Contest

The SEAC Board of **Directors** has **decided** to hold a contest to select a new (or **retain** the old) Society logo. This has come about as explained in a memo from Joe **Maloy** to the SEAC Board last December. In **it**, he **indicates** that "our Bylaws state that the '...**Directors** shall provide a corporate seal, which shall be in the form of a drde and shall have **inscribed** thereon the name of the Society and the words and figures, Incorporated in **1984**, State of **Indiana**.'" He further points out that the currently used logo is not in **compliance with** this requirement and that some members do not like the **electrified** beaker design.

Book Review

Advances In Biosensors

Anthony P.F. Turner, editor
Volume 1, 1991

Reviewed by Dick Durst for Biosensors & Bioelectronics 7(2), 151 (1992)

"The more things change, the more they stay the same." This quote applies **quite well** to the **field** of biosensor R&D. No one would argue the fact that this **field** is one of the most **active** and **exciting** in many areas of analytical **technology**, e.g., **chemistry, biology, clinical medicine, and industrial process and environmental monitoring**. However, despite all of the ballyhoo, a relatively small number of these **devices** have ever reached the marketplace. In fact, earlier **predictions** of the commercial value of these **devices** would have you **believe** that they should now rival the **Gross National Products** of some **small countries**. When reading the plethora of **publications** on the subject, one can hardly **imagine** that there are any **shortcomings** to these sensors to explain the lack of **commercialization**. Of course, experts who

Consequently, at this **time** the Board **will** accept designs for consideration. They should be submitted to **Dick Durst**, and the **deadline** is set for December 31, 1992. The prize has not yet been announced by the Board, but the **editor** has learned from an **Impeachable** source that **it will** probably be somewhere between a year's membership renewal and \$10 **million** to be paid over one **glgyear**. Of course, the most significant reward **will** be the satisfaction and **pride** of **having** created a design that **will** have **International** recognition.

To get some of these creative **Juices** flowing, I would **like** to start by suggesting a couple of **Ideas** I proposed back in

1988: a logo based on the very recognizable **cyclic** voltammogram for the **redox** processes occurring on **platinum** in a **depolarizer-free** aqueous solution, or something **jazzier** such as a 3-D **chronovoltammogram** (a la the **Gsteryoungs**). Another suggestion came from **Mike Elliot** who has a copy of a sketch made by **Picasso** for **Frumklin**. He **will** devise a logo based on this design. So you see, the contest is well underway, and I'm sure you **will** be able to come up with even more interesting possibilities. Send them to me, and I shall **print** all of those that do not offend the good taste of **electroanalytical chemists**. Need I say more?

write technical papers and chapters for books such as this seldom are **objective** reporters. After all, this **is their** current rational **d'être**. Who can **blame** them for their **Pdlyannic** viewpoint?

Now, you ask, how does all of the **editorializing** apply to this book? **Only insofar** as this volume **is** so much **like** the other **publications** in this **field**. Perhaps for the next volume in the series, the **editor** should ask the authors to place more **emphasis** on the shortcomings of these **devices** and the developmental needs to make them **practical**. While the editor is to be congratulated for organizing an excellent **volume with** chapters authored by many of the leading experts in the **field**, I was somewhat disappointed by the lack of much really new information. Of course, in his Introduction, Prof. Turner does state that these **contributions** are overviews and a **"compendium of research-level publications"**. As such, this **Inaugural** volume **lives** up to its promise and **certainly will satisfy** the needs of many workers in this **field** who

do not have the **time** to keep up with all of the **"multifarious"** original publications scattered throughout the technical literature. In **addition** to the **compendium** nature of the **series**, it is intended that the chapters emphasize the latest **contributions** from the author's **laboratories** including relevant material that may not have appeared in the original publications, as well as **speculations** on future R&D directions. Should all of these goals be **achieved**, this series **will** certainly become a valuable tool for **maintaining** an awareness of new developments in a very **diverse field**.

In general, although this volume may over-emphasize electrochemical transduction (of course, this is in the eye of the beholder), it is otherwise **well-written**, with **minimal** typos and repetition. The most **eye-catching** data appear in a scatter diagram where the slope, intercept and standard error were given to **six** decimal places! Aren't computers wonderful?

E-Mail

Dear Dick:

It appears from the recent SEAC **Communications**, that E-mail addresses are **considered** an important tool of **communications**. Yet, it is hard to keep track of them. Printing a few here and there in the newsletter is not a bad **idea**. But how **about** trying to **compile** them?

Since the addresses would be mostly used by people who have access to E-mail, **it would be** possible to do the **compilation** and distribution via E-mail.

I am tied up in so many projects I **volunteered** to do, I do not believe I am offering this - but I am **willing to help with**

the list - unless somebody else (**like** **BAS**) is already **compiling** one.

I suppose **if** you asked in the newsletter who are interested to send me a message with name and E-address (which is in the header anyway) to **t40pvy1@niu**, I would make a list and then, as **time** goes by, I would return the list to all the callers.

Cheers,
Petr Vanysek

Dick:

I was re-reading some old issues of SEAC **Communications**. and was

pleased to pick up a few more E-mail addresses on the Internet. My company (Air Products and Chemicals, Inc.) recently got linked to the net, and I'm **finding** it the easiest way to keep in touch with colleagues. I wonder if you'd consider publishing a directory of E-mail addresses of SEAC members? I'd be happy to compile them if you don't have **time/inclination**. Keep up the good work!

Andy Gilicinski
(giliclag@town.apci.com)
Electroanalytical Laboratory,
Air Products

Obituaries

Harvey **Diehl**

November 1, 1910 - February 26, 1992

Former Iowa State University professor Harvey **Diehl**, 81, Ames, died of heart failure following a stroke.

Harvey **Diehl** was born in Detroit, **Michigan** and was a 1938 graduate of the University of Michigan. He held Instructorships at Cornell University and Purdue University. In 1939, he **joined** the **chemistry** faculty at **ISU**. He **published** four textbooks and more than 155 **original** research papers. He was **active** in the **American Chemical Society** and served on the **editorial** boards of numerous **scientific** journals and as a consultant to industry.

In 1958, the **American Chemical Society** honored **him** with the **Fisher Award** in **Analytical Chemistry**, the most important award in **his field** given in the U.S. The Iowa **Section** of the **American Chemical Society** rewarded his **teaching** and research in **analytical chemistry** with its **Gold Medal** in 1961. He received the first John Anderson Wilkinson **Teaching Award** of the **ISU Chemistry Department**. The university made him a **Distinguished Professor** in **Sciences and Humanities** in 1985.

Harvey **Diehl's** research interests **included chelate ring** chemistry, **oxygen-carrying cobalt** compounds and the **Faraday constant**. He was a member of the **American Chemical Society** and Iowa Academy of Sciences.

John K. Taylor

John **Keenan Taylor**, 79, analytical chemist at the National Bureau of Standards (**retired**) and author and lecturer on quality assurance for analytical chemical measurements, **died** on March 26, 1992.

Dr. Taylor was noted for his **contributions** to very high accuracy measurements. As an analytical **chemist**, his polarographic, voltammetric, and **coulometric** measurements were made at the highest accuracy attainable, based on physical standards of current and time. During his exceptionally long career as a **civil servant** at NBS (57 years)

he worked on the preparation of pure platinum metals, the separation of isotopes by electrochemical methods for the Manhattan Project, directed research in microchemical analysis, air and water pollution analysis, and gas and **particulate** analysis, and directed programs on quality assurance and voluntary standards. On retiring from NBS, he presented numerous workshops on **quality control** and **quality assurance**.

After graduation from high school, John **joined** NBS and concurrently attended George Washington University (BA 1934), and the University of Maryland (MS 1938 and Ph.D. 1941).

He was very **active** in professional **societies**, **serving** terms as president of the Chemical Society of Washington (1953) and of the Washington Academy of **Sciences** (1966), and Chairman of the Division of Analytical Chemistry of the American Chemical Society (1967).

He was the author of three **books** and over 250 articles in scientific **publications**. He **edited** four books and held two patents.

John received the Exceptional **Service** (Gold Medal) Award and the Rosa Award from the Department of Commerce, the **Fitch Memorial** Award from the George Washington University, the D.C. **Educational Society** Award, the **American Institute of Chemists** Honor Award, the **Chemical Society of Washington Achievement** Award, and the Award of **Merit** from ASTM.

Lockhart Burgess Rogers

Buck Rogers, Graham **Purdue** Professor Emeritus at the **University** of Georgia, passed away on March 31 st. Those who knew him well **will** always remember **him** as a **distinguished** scholar, **inspiring** teacher, and true friend. Buck left **his lasting** mark on many areas of analytical chemistry, including **electrochemistry**, luminescence, thermal methods, trace analysis and separation **science**. But more importantly, Buck also left his mark on several generations of students, both graduate and **under-**

grads, who **will** carry on **his** traditions of scientific excellence, **diversity**, originality and, hopefully, enthusiasm.

Buck received **his** B.A. from Wesleyan University in 1939 and Ph.D. from Princeton University in 1942. He began **his teaching** career at Stanford **University** ('42-'46) and went on to a brief assignment at Oak Ridge National Laboratory ('46-'48). Returning to **academia**, he stayed about a dozen years each at MIT ('48-'61), Purdue ('61-'74), and Georgia ('74 until **his** retirement in 1986). Buck authored over 250 papers in collaboration with 84 Ph.D. students, 37 postdocs, 20 M.S. students and 16 undergraduates.

He is the **recipient** of more than two dozen awards and honors including the 1968 ACS Award in Analytical **Chemistry**, the 1972 Dal Nogare Award, the 1974 ACS Award in Chromatography, the 1985 **Benedetti-Pichler** Award, the 1985 Analytical Chemistry Division Award for Excellence in Teaching, and the 1989 Pittsburgh **Analytical Chemistry** Award.

My fond memories of Buck go back to 1960 when he recruited me to work with **him** at MIT. When he accepted a **position** at Purdue in 1981, he gave me the **option** of going with **him** or **remaining** at MIT and selecting a new mentor. It was a very **difficult** decision because MIT had always been an **academic Mecca** for me. I chose to stay there and complete my studies, but I always had some regrets that I **didn't** go **with** Buck. Happily, he and I remained friends, but he never ceased to tease me when **introducing** me as the student who wouldn't **follow** him to Purdue. I was also very honored when Jim Anderson invited me to **present** a talk at Buck's Pre-retirement Symposium at Georgia in 1986. **Considering** the quantity and quality of Buck's students and colleagues, I was extremely pleased to be **invited** and, because of my **feelings** for Buck, being part of this event was very important to me.

Buck will be missed, but not forgotten. **His** legacy lives on in everyone he touched.

SEAC Directory

Henry Blount, our man in Washington, has bravely taken on the job of updating and revising the SEAC membership directory. I spoke to him recently about **including** e-mail addresses in the new directory and he is amenable to doing this and proposed the **following mechanism** for achieving this goal. He is currently entering the latest membership data into his computer. Then, if I understood **him** correctly, each member **will** be sent a copy of **his/her** current information with a request for **corrections** and additional information, such as the e-mail address. He will then update the **files** and the **directory will** be printed. **This**, as you can well **imagine**, is a **monumental task** and the **Society owes Henry a big vote of thanks**.

I also want to take this opportunity to thank everyone who has written me supporting the idea of an e-mail address compilation and especially Petr Ványsek and Andy Gillinski who have even volunteered to perform this service (see e-mail correspondence).

Meetings

FACSS

September 20-25, 1992

This year's FACSS meeting will be held September 20-25 in the Adam's Mark Hotel, Philadelphia PA. The Electroanalytical program is divided into three areas and includes sessions organized by James Anderson, Rick Baldwin, and Brenda Shaw. The sessions are scheduled for Tuesday and Wednesday. Special Thanks to the session organizers and program sponsors. Hope to see you there.

You can refer questions about the preliminary program to:

Anna Brajter-Toth,

Electroanalytical Program Chair

Department of Chemistry

University of Florida

Gainesville, FL 326112046

Phone 904-392-7972

Bitnet ATOTH@UFPINE

"Electrochemical Detection of The Future: Is There A Future After Catecholamines?"

R.F. Shoup, P.T. Kissinger, C. Duda and J. Giltzen, Bioanalytical Systems "Measuring Pharmacological Events In Vivo with LCEC: New Challenges and Opportunities"

I.S. Krull, L. Dou, L. Chen, and J.R. Mazzeo, Northeastern, "Identification and Quantitation of Peptides and Proteins by Liquid Chromatography/Electrochemical Detection with Post-Column Photolytic Detection"

R.P. Baldwin, P. Lou, X. Qi, and J. Ye, University of Louisville, "New Electrode Materials and Structures for Chemical Analysis"

S. Sloss and A.G. Ewing, Pennsylvania State, "Scanning Electrochemical Detection in Narrow-Base Capillary Electrophoresis"

A.M. Yacynych and E.R. Reynolds, Rutgers, "Ultra-micro Amperometric Biosensors"

"Analytical Laboratories on Chips: The Genome Project of Analytical Chemistry?"

R.M. Wightman, J. Jankowski, and T. Schroeder, University of North Carolina, "Monitoring Dynamic Chemical Events at Individual Biological Cells"

T. Cotton, Iowa State, "Spectroscopic and Electrochemical Characterization of Chemically Modified Electrodes"

J.L. Anderson, University of Georgia, "Microanalytical Laboratories on a Chip: Prospects and Pitfalls for a Fantastic Voyage"

K. Sella, D.J. Harrison, Z. Fan, A. Manz, University of Alberta, "The Won-

ders of Micromachining: Chemical Analysis and Electrophoresis on a Chip"

J.F. Rusling, University of Connecticut, "Stabilized Surfactant Films - Coatings for Multiplex Sensors"

"New Ways of 'Looking' at Surfaces: New Methods for New Materials"

M.D. Porter, Iowa State, "Scanning Tunneling and Atomic Force Microscopic Studies of Thiolate Monolayers on Gold"

J.L. Stickney, University of Georgia, "Surface Chemistry of Compound Semiconductor Electrodes"

O.R. Melroy, IBM, "In-Situ Structural Studies of UPD Layers Using X-ray Diffraction"

R.C. Engstrom, University of South Dakota, "Fluorescence Imaging of Localized Corrosion Processes at the Electrode/Solution Interface"

J.L. Anderson, University of Georgia, "Spectroelectrochemical Investigations of Environmental Redox Components"

GORDON RESEARCH CONFERENCE ON PHYSICAL ELECTRO-CHEMISTRY

August 3-7, 1992

Colby Sawyer College

Hector D. Abrufia, Chair

William E. O'Grady, Vice Chair

Monday:

B. Hammers, Scanned Probe Microscopes: Capabilities and Limitations

J. Porter, Studies of Electrochemical Interfaces with Electron Tunneling Techniques

M. Weaver, Atomic Structure and Dynamics of Ordered Metal-Solid Interfaces by STM and IR

M. Porter, Organic Monolayer Films: Structure, Reactivity, STM and AFM Studies

Tuesday:

M. Berkowitz, Water Next to Metallic Surfaces

W. Little, Superconductivity: A Study from Its Surface

B. Miller, Electrochemistry of Superconductors

W. Schmickler, Theory of Second Harmonic Generation and Its Relevance to Electrochemistry

Wednesday:

M. Toney, Surface X-ray Scattering of Electrochemical Interfaces

C. Korzeniewski, vibrational Spectroscopy at Interfaces

A. Russell, The Use of Synchrotron Radiation in the Far-Infrared in the Study of Electrochemical Interfaces

J. Hupp, Surface Intervalence Reactions at Semiconductor

Thursday:

J. Als-Nielsen, Photoinduced Electron Transfer in L-B Films

C. Chidsey, Long-Distance Electron Transfer in Self-Assembling Monolayers at Electrode Surfaces

S. Creager, Redox Chemistry in Mixed Monolayer Films

Friday:

M. Ward, Electrocrystallization of 1-D Materials

P. Pintauro, Novel Developments in Organic Electrosynthesis

EASTERN ANALYTICAL SYMPOSIUM

November 16-20, 1992

Somerset, New Jersey

Monday Morning, November 16

Detection of Carcinogens by DNA Intercalation. **John Horvath**, National Institute of Standards and Technology.

Electrochemical Formation of Conductive Organic Solids for Biosensor Applications. **John H. Luong** and An-Lac Nguyen, Biotechnology Research Institute, Montreal, Canada.

Electrochemical Detection of Traditionally Non-Electroactive Analytes.

Richard Baldwin, University of Louisville.

Matrix Effects on the Accuracy of Ionized Calcium and Magnesium Measurements in Blood Serum and Ion Selective Membrane Electrodes. **Paul D'Orazio**, Ciba-Corning Diagnostics Corp.

Electropolymerized Films for Chemical Sensors. **Robert J. Gelse**, ISP Chemicals, Inc. and Alexander M. Yacynych, Rutgers University.

Monday Afternoon, November 16

New Computer Games and Gadgets for Electroanalytical Chemistry

COOL Answers to your Electrochemical Questions: Pretty CV's Are No Longer Enough. **Robert S. Rodgers** and Matthew R. Rhodes, EG&G Princeton Applied Research.

Chronoamperometric Biosensors. **Joseph Jordan** and Marguerite K. Clorkosz, Pennsylvania State University.

Opening Windows to Electrochemical Solutions. **Peixin He**, Bioanalytical Systems, Inc.

Software for Multi-Time Domain Voltammetry and Pulsed Amperometric Detection. **Jeffrey F. Anderson**, Murray State University.

New Acquisition Algorithms for electrochemical Analysis by Artificial Intelligence. **Joseph T. Maloy** and Beth Sarsfield, Seton Hall University.