

In this my last President's Message, I would like to share some thoughts on those scientists who laid the foundations of our field of electroanalytical chemistry. One of the most critical strengths of electroanalytical chemistry is that it is inextricably bound to chemistry as a whole. Unlike some analytical methods, it is impossible to conduct a (voltammetric) electroanalytical experiment without at the same time effecting a chemical transformation. So, what we do in research and practice is both affected by the other fields of chemistry and, in return, can affect and be of interest to those fields.

It is easy to find in contemporary electroanalytical research a multitude of examples of the symbiotic relationship between physical, inorganic and organic chemistry, on the one hand, and electrochemistry on the other. Furthermore, these relationships have existed for many decades and in each field there have been practitioners who appreciated the power of electrochemical methods and exploited them for key research thrusts.

The biochemistry/electrochemistry interface is one of the most active. Recently, a colleague called my attention to the beautiful early paper by James Bryant Conant, "An Electrochemical Study of Hemoglobin" (J. Biol. Chem., 1923, 57, 401-414). Conant conducted simple potentiometric titrations of hemoglobin with ferricyanide and sodium dithionite and was able to determine the reversible formal potential for hemoglobin/methemoglobin under a variety of conditions.

Conant fully recognized the importance of demonstrating the reversibility of the process, the use of different materials for electrodes, and, accidentally perhaps, the value of surface modification (electrodes soaked in a solution of methemoglobin overnight gave superior results). At that time, the distinction between oxidation and oxygenation of hemoglobin was not fully developed. The former involves electron-transfer oxidation of the iron center in hemoglobin while the latter is the reversible binding of dioxygen to the molecule.

In a set of simple potentiometric experiments conducted in the presence and absence of oxygen, Conant was able for the first time to demonstrate and define the molecular distinction between oxidation and oxygenation. Conant was unusually broad in his scientific interest. Trained as a physical chem-

... as president of Harvard, became postwar U.S. ambassador to Germany, and developed a strong interest in the reform of secondary education.

[President's Message continued on the next page]

## Editorial

As you can see from this jumbo issue, two unusual phenomena have occurred. One, I have received considerable material (mostly from the officers of SEAC; but I'm certainly not complaining). And two, I am late in preparing this issue for publication (he says, with his tongue planted firmly in cheek). Note: for our foreign-born members, this is an idiomatic expression meaning it was said jokingly or facetiously. Not that I am always late; sometimes I am delayed by a lack of publishable material or I may be thrown off schedule by having to move my clock forward or back in the spring and fall.

However, this brings me to a more serious concern. As much as I enjoy editing your newsletter when I have the time, I feel that I may be losing my edge (along with my mind) in preparing the issue on a timely and frequent basis. I especially enjoy writing editorial because it provides me with a forum to expound on any topic with my usual candor, irreverence and so-called (by me) humor without having my audience walk away as they usually do in person.

Actually, you'd probably also like to walk away from this editorial, but you keep on reading in anticipation that I might actually say something profound, and you don't want to miss that precedent-setting event. In any case, I have spoken to Rick McCreery about my concerns and desire to turn over the reins of editorship to someone younger (or even older, but that may be difficult) who has the enthusiasm, time and devotion to carry on this important task. SEAC Communications is the voice of our organization and, without it, the membership would be poorly informed on events concerning SEAC and items related to electroanalytical chemistry in general. I suggest that anyone interested in being considered for the editorship contact Rick McCreery at [mccreery.2@osu.edu](mailto:mccreery.2@osu.edu).

Continuing on to other depressing matters, I was recently informed that one of our eminent members, Prof. Gleb Mamantov (Univ. of Tennessee), passed away last March 12th due to lung cancer. To quote one of his postdoctoral students, Haiming Xiao: "We lost a great group leader. The department lost an outstanding chairman and a distinguished professor. He worked until the last minute of his life. Last Tuesday, he organized a group meeting, and last Thursday he came to his office to work. This came too suddenly." There is little I can add to this fine tribute other than to say that our field has lost an outstanding educator and scientist.

[Editorial continued on the next page]

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**The Society for  
Electroanalytical  
Chemistry**

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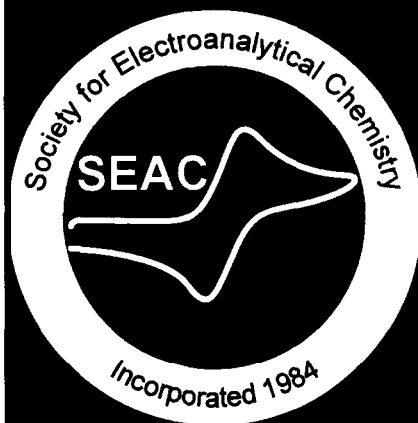
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[President's Message, cont.]

It is sobering yet gratifying to know that master scientists such as J. B. Conant have preceded us along the pathways which we continue to explore today, perhaps in more detail and with greater precision, but certainly with no more imagination and insight than these early workers.

Enough historical meandering! I will bring this to an end with thanks and appreciation to the SEAC membership for support and encouragement during my two-year term as president. I also welcome the almost 200 new members who have joined our ranks in the last year, and finally, I will lead a big cheer for new president Rick McCreery who will grace this column with his thoughts in future issues of our newsletter.

*Dennis Evans*

[Editorial, cont.]

To end on some happier notes, I want to commend our relatively new (since July '94) Membership Chairman, Andy Ewing, for his extremely successful membership drive that resulted in about **200** new members during the past year. In this issue and based on information provided by Andy, I have tabulated the latest listing of one-year student memberships. Welcome to all of you, and I hope you will continue your membership in SEAC as your careers in electroanalytical chemistry develop.

Welcome also to our new President, Rick **McCreery**, who takes over the reins of leadership from Dennis Evans in July. I have enjoyed working with Dennis during his tenure, and I'm sure the Society joins me in thanking him for his outstanding service to our organization.

Finally, although he claims that the **Reilley** Award remembrances article was not in effect when he received the first Award in 1984, **Al Bard** has graciously (with some guilt-laying by the Editor) offered to provide us with some reflections of his illustrious career. As one of the "Elder Statesmen" of electroanalytical chemistry, I'm sure Al has some interesting stories to tell. Now if he can only find the time to reminisce.

*Dick Durst*

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**ICFIA '95**

**JAFIA**

**August 13-17, 1995 Seattle, Washington**

The Seventh International Conference on Flow Injection Analysis (**ICFIA '95**) and the 24th Semi-Annual Meeting of the Japanese Association for Flow Injection Analysis (**JAFIA**) will be held jointly at **Meany Tower Hotel** in Seattle, Washington.

The meeting will focus on developments in the growing fields of FIA and SIA — methods, applications, software, and hardware.

Publishers and producers of instruments, equipment, and software relevant to FIA are invited to exhibit.

Registration fees: \$275 (Students: \$125)

For a registration form or for more information, contact:

Gary D. Christian

Dept. of Chemistry, BG-10

University of Washington

Seattle, WA 98195

FAX: 206-685-3478

e-mail: christa@chem.washington.edu

# Minutes - Meeting of the Membership

Chicago, Illinois, March 2, 1994

The meeting was called to order by President Dennis Evans at 11:55 a.m. Approximately 30 members and their guests were present. The Minutes of the 1993 Meeting of the Society were distributed and approved.

The Finance Committee reported that the net worth of the Society now exceeds \$45,000. Of this, approximately 50% is in the Reilley Award Endowment Fund. The remainder is distributed almost equally between the Life Membership Endowment and Working Capital. The Secretary noted that the results of the most recent election had been announced at the last Board Meeting.

The following individuals have been elected as Officers for terms of office commencing on July 1, 1994: **President-elect**, Richard **McCreery**; Secretary, Joe Maloy; Treasurer, Joe Gordon. Directors elected for five year terms commencing on the same date include Ed **Bowden**, Jed Harrison and Joe Hupp.

President Evans advised the members that the Board had approved the investment of the Life Membership Endowment in higher yielding vehicles; the Reilley Award Endowment is to remain in certificates of deposit.

Henry Blount was recognized for having made much progress towards the design of a SEAC Membership Directory. The Secretary has been given the responsibility of completing this task in consultation with Henry Blount. To provide more time for the Secretary to do this, a new Membership Chairman will be appointed during the current year.

Certificates of Appreciation were awarded to retiring SEAC Board Members Mike Elliot, Mark Meyerhoff, Royce Murray, Frank Schultz and Joseph Wang, and to the Pittsburgh Conference President, Richard Howe and the Program Chairman, **Vince** Conrad.

President Evans announced the appointment of the following Chairmen of Standing Committees for 1994-95: Activities: Gary Christian; Membership: to be announced; Awards: Royce **Engstrom**; Nominating: William Geiger; Finance: Joe Gordon.

The meeting was adjourned at 12:02 p.m.

Respectfully submitted,

Joseph T. Maloy

# Treasurer's Report - 1994 Board of Directors Meeting

New Orleans, Louisiana, March 7, 1995

## Financial Statement

In FY 1994, the net worth of the Society increased by \$3,264 to 945,367. The Society's assets consist of an endowment fund to sustain the Charles N. Reilley award (\$20,790) a fund created from Life Membership Dues (\$12,965), and a working fund (\$11,632).

## Budget Analysis

The Society budgeted \$10,200 for operations in FY94. Excluding Life dues and endowment contributions, income was about as projected. **Major sources** were dues, a contribution from the **Pittsburgh** Conference to defray symposium expenses and a donation from **Bioanalytical Systems**. Expenditures were less than projected, primarily in the symposium and membership expense categories. After allocations to endowments, the unobligated balance in the working fund increased by \$1,549 to \$11,632 (approx. 15%).

## Proposed FY96 Budget

Approval of the attached FY96 budget is requested. The projected income and expenses are approximately the same as FY95, with the addition of explicit projections for life dues and endowment contributions.

## SEAC INCOME STATEMENT FOR FISCAL YEAR 1994

Income		
Account	Budgeted	Actual
Interest - Checking	\$ 650.00	774.03
interest - CD	650.00	764.66
Endowment Contributions	0.00	220.00
Working Fund Contributions	4,900.00	4,938.00
Annual Dues Collected	4,000.00	3,937.50
Life Dues Payments	0.00	750.00
	<u>\$ 10,200.00</u>	<u>11,384.19</u>
Expenses		
Account	Budgeted	Actual
Symposium Expense	\$ 3,500.00	2703.75
Reilley Award Expense	3,000.00	3,112.59
Membership Expense	1,700.00	1,160.30
Newsletter Expense	1,200.00	1,109.59
Miscellaneous Expense	50.00	14.11
Allocations to Endowments	<u>750.00</u>	<u>1,734.66</u>
	<u>\$ 10,200.00</u>	<u>9,835.00</u>
<b>Net:</b>	\$ 0.00	1,549.19

[Treasurer's Report continued on the next page]

**SEAC BALANCE SHEET FOR FISCAL YEAR 1994**

<b>Assets</b>		
<i>Account</i>	<b>Budgeted</b>	<b>Actual</b>
Working Fund	\$ 10,083.00	11,632.00
Reiley Endowment		
- NBD Bank/Lafayette, IN	1,949.00	2,198.65
- Certificate of Deposit	19,504.00	18,591.62
Life Membership Endowment		
	<u>11,815.00</u>	<u>12,984.61</u>
	<b>\$ 43,351.00</b>	<b>45,386.88</b>
<b>Liabilities</b>		
<i>Account</i>	<b>Budgeted</b>	<b>Actual</b>
Membership Expense Payable	\$ 0.00	0.00
Newsletter Payable	0.00	0.00
	<u>0.00</u>	<u>0.00</u>
	<b>\$ 0.00</b>	<b>0.00</b>
<b>Net:</b>	<b>\$ 43,351.00</b>	<b>45,386.88</b>

**PROPOSED BUDGET FOR FISCAL YEAR 1996**

<b>Income</b>	<b>Budgeted</b>
<i>Working Fund Contributions</i>	
Pittsburgh Conference Stipend	\$ 3,500.00
Bioanalytical Systems Stipend	1,500.00
Ensmann Instrumentation	500.00
Annual Dues	3,600.00
Interest	<u>1,200.00</u>
<b>Total</b>	<b>10,300.00</b>
<b>Expenses</b>	
<i>Reiley Award Activities</i>	
Reiley Award Honorarium	1,500.00
Young Investigator Award Honorarium	250.00
Symposium Travel	3,500.00
Award Reception	<u>1,250.00</u>
	<b>6,500.00</b>
<b>Newsletter</b>	<b>1,400.00</b>
<i>Membership Expenses</i>	
Dues Collection	300.00
Membership Activities	750.00
Elections	250.00
Directory	<u>500.00</u>
	<b>1,800.00</b>
<i>Interest Allocation to Endowment</i>	550.00
<i>Miscellaneous</i>	50.00
<b>Total:</b>	<b>\$ 10,300.00</b>

## Professor R. Mark Wightman Receives 1996 Charles N. Reiley Award

Congratulations to Professor Ft. Mark Wightman as the 1996 Reiley Awardee. Wightman is the W.R. Kenan, Jr. Professor of Chemistry at the University of North Carolina at Chapel Hill, where he has been since 1989. Prior to that, he was on the faculty at Indiana University. He received his Bachelor of Arts degree from Erskine College in 1968, and completed his Ph.D. with Royce Murray at UNC-Chapel Hill in 1974. He worked with Ralph Adams as a Post-doctoral Associate at the University of Kansas for two years prior to taking his first faculty position.

Wightman gained a foundation in organic electrochemistry from his Ph.D. work and analytical neurochemistry from his post-doctoral work. He has developed a research program around the application of electroanalytical methods to the study of neurochemical problems.

He and his research group have made key contributions to the theoretical and experimental aspects of microelectrode voltammetry, to the application of microelectrodes to real-time in-vivo detection of neurochemicals, and to the understanding of neurochemical events including his recent work on the release of catecholamines from individual vesicles.

He has authored over 150 refereed publications and 24 students have received their Ph.D. degree with Professor Wightman, many of whom are themselves, in academic positions. Wightman is known for his contagious enthusiasm for science, his excellent communication skills, and as one of the nominating letters stated, "Mark has that essential scientific talent for asking the right question." Congratulations, Professor Wightman!

## Professor Louis Coury, Jr. Receives SEAC Young Investigator Award

Professor Louis A. Coury, Jr. of Duke University is the recipient of the 1996 SEAC Young Investigator Award. Coury is an Assistant Professor of Chemistry at Duke, where he began his career in 1990. He received his Bachelor of Science degree at Miami University in Oxford, OH in 1982, where he did his research with Joseph Cantrell, and his Ph.D. from the University of Cincinnati with William Heineman in 1988. He was a post-doctoral Research Associate in Royce Murray's lab at the University of North Carolina for two years.

Professor Coury had a highly productive time as a graduate student and a post-doctoral associate, working in the areas of polymer-modified electrodes and redox protein electrochemistry, respectively. As an Assistant Professor, Coury has focused on the application of sonication to electrochemistry and on the development of sensors using chemical and enzymatic amplification strategies. He has already published and presented extensively on his research at Duke and he has proven himself to be an effective grant writer. We congratulate him and wish him the best for a successful career.

## Shades of Homeopathy! (Or, "Where Have All the Ions Gone?")

by Dick Durst

As part of our continuing (infrequent, but continuing nonetheless) series on unexplained and unusual electrochemical phenomena, I was reminded by Al Bard's report of single-ion electrochemical detection of some work I described in my 1969 book "Ion-Selective Electrodes". (Good grief, I just realized that some of you students and young faculty weren't even born then!)

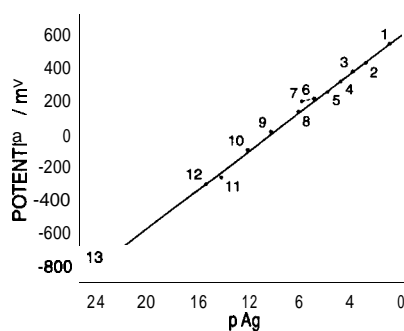
Be that as it may, my report concerned "sub-ion" detection using a silver ion-selective electrode. As can be seen in the accompanying figure, the electrode exhibited a linear response to silver ion over an activity range of 24 decades! Not only linear, but absolutely Nemstian!! And not only Nemstian, but almost instantaneous response!! Furthermore, the measurements were carried out in a solution volume of 5  $\mu\text{L}$ . From this, it is a simple matter to calculate that, at a  $\text{pAg}$  of 24.9, the probability of finding an ion of silver in this volume of solution is much less than one. In fact, many orders of magnitude less than unity!

As can also be seen, the only deviation from Nernstian response occurs in pure silver nitrate solutions below  $\text{pAg} = 7$  (i.e., points 6 and 7 in the figure); where the solubility of the silver sulfide membrane fixes limit of the detection for free silver ions. The observation should be a clue as to why the silver ion buffered solutions can be measured at even lower levels (including the lowest where no silver ions at all are added).

As a further aid in understanding the results, consider how  $\text{pH}$  buffers work. While it may appear to be an artifact (in fact, an early ISE expert described these results as "patently absurd", until the experiments were duplicated by others!), it all comes down to simple solution equilibria. I hope you have as much fun thinking about it as I had doing it.

[continued in the next column]

[Shades, cont.]



Silver Sulfide electrode response to silver activity (test solution vol. = 5  $\mu\text{L}$ )

(Solid line: 59.2 mV / pAg)

Point	Solution Composition	-pAg (calc)	E(mV)
1	$10^{-1} \text{M AgNO}_3$	1.1	+550
2	$10^{-3} \text{M AgNO}_3$	3	+438
3	$10^{-4} \text{M AgNO}_3$	4	+385
4	$10^{-5} \text{M AgNO}_3$	5	+323
5	$10^{-6} \text{M AgNO}_3$	6	+260
6	$10^{-7} \text{M AgNO}_3$	7	+225
7	$10^{-8} \text{M AgNO}_3$	8	+213
8	sat'd AgI	8.2	+150
9	sat'd AgI + $10^{-6} \text{M KI}$	10.3	+21
10	sat'd AgI + $10^{-4} \text{M KI}$	12.3	-91
11	sat'd AgCl + $1 \text{M Na}_2\text{S}_2\text{O}_3$	14.2	-256
12	sat'd AgCl + $0.1 \text{M KI}$	15.5	-298
13	$0.1 \text{M Na}_2\text{S} + 1 \text{M NaOH}$	24.9	-872

## Guilbault Emigrates

Professor George G. Guilbault joined the faculty of the University College Cork in March 1995.

Dr. Guilbault received his masters and doctorate degrees from Princeton University in 1959 and 1961. Following a short industrial appointment at Procter and Gamble in Cincinnati, he moved to the U.S. Department of Defense Research Laboratories at Edgewood Arsenal, Maryland, where he headed a research group devoted to the development of bioalarms for chemical agents.

In 1966, he accepted a position at the University of New Orleans, where he was appointed professor in 1969 and research professor in 1987. He has published 10 books, over 400 research and review articles, and has given more than 500 invited lectures around the world.

## Job Opportunity

Bioanalytical Systems, Inc. (BAS) is seeking a technical salesperson to represent a line of chromatography, electroanalytical and in vivo sampling products.

Based at the company's factory in West Lafayette, IN, the sales territory includes major cities in Canada and Mexico. Accounts include pharmaceutical companies, clinical laboratories, chemical manufacturers, government research labs and medical research centers within the region.

Applicants must be eligible to work in the U.S. and possess at least a bachelor's degree (B.S. or B.A.) in chemistry. Lab or sales experience related to electrochemistry, liquid chromatography, or in vivo sampling will be considered favorably. Mechanical aptitude, keyboard literacy, prior job experience in the pharmaceutical industry and competency with Windows-based software is also beneficial.

The successful candidate will demonstrate energy, an enthusiasm for sales, excellent written and oral communication skills, and a pleasant, engaging personality.

The technical sales representative will be expected to fully demonstrate the functions of BAS products, understand the range of applications for these instruments, and conduct routine maintenance of demonstration equipment. Direct customer interaction, via correspondence, tele-marketing, trade shows, demonstrations, and periodic visits to customer sites will comprise the majority of tasks associated with this position. Periodic laboratory work, in preparation for extensive demonstrations, should be expected. Interested applicants should submit a detailed resume including references and salary requirements to:

Mike Scott -ISR7/95  
Human Resource Assistant  
Bioanalytical Systems Inc.  
2701 Kent Avenue  
West Lafayette, IN 47906

*BAS is an Equal Opportunity/Affirmative Action Employer*

## New Members

Name	Date	Affiliation
John E. Bauer	3/13	Illinois State University
Louis A. <b>Coury</b> , Jr.	3/28	Duke University
Keith R. Darlington	1/22	Elf Atochem N.A.
Kirk T. Kawagoe	11/18	Axon Instruments, Inc.
Daniel A. Lowy	3/1	West Virginia University
Michael J. <b>Natan</b>	11/14	Penn State University
Paul <b>Stoecker</b>	3/22	Richard Stockton College of NJ
Rainer F. Winter	2/9	University of Vermont
Hongjun Yang	6/26	IGEN, Inc.

### New Student Members

Sonia A. S. Aceuedo	10/14	University of Puerto Rico
Kathryn S. Alber	10/14	Miami University of Ohio
Sudath Amarasinghe	11/2	University of Iowa
Brian B. Anderson	10/24	Penn State University
Marc R. Anderson	1/26	University of Kansas
Maria E. M. <b>Arteaga</b>	10/13	University of Puerto Rico
Greg <b>Asbury</b>	1/11	Augusta College
Marie Autret	10/28	University of Houston
Ibrahim H. A. Badr	10/13	University of Michigan
Christian Bauer	10/24	Universitat <b>Potsdam</b>
Paula J. Beyer	10/24	Penn State University
Ximba J. Bhekumusa	11/10	Bucknell University
Renee Blanchard	10/19	University of Illinois
<b>Gert</b> Blankenstein	10/20	University of Washington
Liza V. Blasini	10/13	University of Puerto Rico
Christine M. Book	10/24	Univ. of Maryland - Baltimore County
Pierre Boulas	10/9	University of Houston
Robin M. Bright	11/11	Penn State University
Kate M. <b>Bullard</b>	10/24	Penn State University
Melissa Bunn	11/9	University of North Carolina
James D. Burgess	11/12	Virginia Commonwealth University
John L. E. <b>Cambell</b>	10/31	California Institute of Technology
Claudio D. Cebaous	7/11	Univ. <b>Nacional</b> de Rio Cuarto
Helen Chan	1/20	Lehigh University
Guangyao Chen	10/24	Penn State University
Guoliang Chen	10/24	North Dakota State University
Peihong Chen	1/18	Ohio State University
Qiang Chen	10/11	New Mexico State University
Ta-Yung Chen	10/27	University of Iowa
Mik P. Chetwyn	3/2	University of Kansas
<b>Malgorzata</b> Ciszowska	10/27	North Carolina State University
Tom L. Colliver	10/24	Penn State University
<b>Jayne B. Corbell</b>	11/12	University of Arkansas
David E. <b>Countant</b>	10/11	University of Michigan
<b>Stacey</b> R. Crummedy	10/24	Penn State University
Malonne I. Davies	11/21	University of Kansas
<b>Jacobe Deerhake</b>	10/12	Bucknell University
Daniel Derr	11/28	Colorado State University
Catherine <b>DeSantis</b>	11/8	University of Cincinnati
Winifred I. <b>DeSimone</b>	11/11	Indiana <b>U./Purdue</b> U./Indianapolis
<b>Simona Dragan</b>	10/19	Northern Illinois University
Michael W. Ducey, Jr.	10/12	University of Michigan
Anna G. Edwards	10/27	University of Tennessee
Mohaned Elrutb	10/14	University of Regina
R. Torre-Espades	10/13	University of Michigan
W. Russell Everett	1/12	University of Arkansas
Anna M. Farrenkopf	10/19	University of Delaware
Suzanne Ferrere	11/30	Colorado State University
Garrett Forbes	10/19	University of Illinois
Audrey P. Fox	1/11	Penn State University
Brian L. Frey	2/24	University of Wisconsin
Bin Fu	10/14	University of Michigan

[New Members List continued on the next page]

## From the E-Mailbag

Dear Dick:

Enclosed please find a little curiosity that might be suitable, if space permits, for inclusion to the **SEAC communications**:

I need a new car and a Volkswagen is still what I like. So I sent for a brochure, which convinced me even more of my right choice. The brochure for the 1995 VW Golf cars lists among the standard safety features a "polyethylene fuel cell." Great, no worry about gasoline, all I need is to hang around the plastic recycling bins... Unfortunately, this is not a success of electrochemistry in disguise. What it really means is that the fuel tank is for safety reasons molded in polyethylene in a single piece (a cell?).

Petr Vanysek  
Northern Illinois University

Dear Dick,  
Indeed signing up and the connection to ELETQM-L works fine. Some mails are coming in irregularly and some interesting discussions are going on, although - of course - there is also a lot of strange things being posted.

Bernd Speiser  
University of Tübingen  
(Any of you have been reading ELETQM-L probably noticed that Bernd is one of the major contributors to this bulletin board. I'm not sure if he considers any of the materials that he has posted as being 'strange'. - Editor)

Dear Dick,  
I am trying to collect some data regarding the use of standard **redox** systems in non-aqueous solvents. We have experimental results in nitromethane, **acetonitrile**, DMF, pyridine, dichloromethane, propylene carbonate and various mixtures of these, from our laboratory. I would be interested, however, to see if other groups have collected similar data and whether these could be combined to some empirical scale of e.g. the ferrocene standard in the most common organic solvents used in electrochemistry. Thus, I have prepared a little announcement, which I would like to ask you to include in the next issue of the **SEAC communications**. Maybe there are some non-aqueous electrochemists out there, who could and would like to contribute to such a collection. Thank you very much. The announcement follows:

To all electrochemists working with **non-aqueous solvents**:

[New Members, cont.]

Hongying Gao	1115	University of Cincinnati
Peter F. Gavin	10/24	Penn State University
Bernhard Gollas	11/29	University of Tübingen
Sandra Gonzalez	10113	University of Puerto Rico
Gary E. Gray	10/20	Georgia Institute of Technology
Nicole R. Grove	10/26	Georgia Institute of Technology
Peter T. Gulyas	10/17	University of Sydney
Mike Hadwiger	11/18	University of Kansas
Jianfeng Hong	2/16	University of Louisville
Dannette Hansen	312	University of Kansas
Julie Heaton	2/3	University of South Dakota
Diane M. Heckert	11/18	University of Kansas
Susan M. Hendrickson	11128	Colorado State University
Charles Henry	1/12	University of Arkansas
Janet Herdan	10/13	Tufts University
Spencer E. Hochstetler	1114	University of North Carolina
Thomas C. Hodge	10/19	Georgia Tech
Angela J. Horn	1/13	Ohio State University
Kai Hu	11119	University of Delaware
Tao Hu	312	University of Kansas
Tina Huang	1/27	University of Kansas
Ying Huang	10/13	University of Tennessee
Richard S. Hutchins	2/4	University of Kentucky
Tracey S. Jackson	1/12	University of Arkansas
Glenn Jirka	10/19	University of Illinois
Claire Jordan	2/24	University of Wisconsin-Madison
Mahmoud M. Kamel	1/19	University of Georgia
Arien D. Kaufman	10119	Purdue University
Dawn K. King	10/24	North Carolina State University
Billy Y. Lai	312	University of Kansas
Maria T. Lee	1118	University of Cincinnati
Won Yong Lee	10/19	University of Illinois
Brent L. Lewis	10/13	University of Delaware
Yi-Chun Liu	1/14	Ohio State University
Sherri Lovelace	10/28	University of Vermont
Matthew Z. Luo	2/16	University of Louisville
Louis A. Lyon	10/20	Northwestern University
Scott MacLeod	11/1	University of Vermont
Christine MacTaylor	10/24	Penn State University
Peter J. Mahon	1111	Indiana U./Purdue U./Indianapolis
Robert A. Mantz	10/26	North Carolina State University
Alice Martin	10/19	University of Illinois
Sean Mellican	1/25	Loyola University of Chicago
Ravi K. Meruva	10/10	University of Michigan
Paul Moberg	1112	University of Iowa
Patricia G. Molina	8/11	Univ. Nacional de Rio Cuarto
Marcela B. Moressi	8/1	Univ. Nacional de Rio Cuarto
Noseung Myung	10/17	Clark University
Milind P. Nagale	1/12	University of Arkansas
P. Narula	10/12	Wake Forest University
Naren Nash	10/28	University of Vermont
Roberta R. Naujok	1/31	University of Wisconsin-Madison
Dave Nemer	10/28	University of Vermont
Murat Niyazmbetova	11130	University of Delaware
Indra Noviandri	10/17	University of Sydney
Janese C. O'Brien	10/14	University of South Dakota
Edward W. Oliver	11/16	University of Delaware
George S. Owens	10/24	Univ. of Maryland - Baltimore C.
Sangryoul Park	11/17	University of Kansas
Munoz Pedred	10/11	New Mexico State University
Qiyuan Peng	11/1	Indiana U./Purdue U./Indianapolis
Kristina Peterson	10122	University of Washington
Franqois Pichot	11/28	Colorado State University
J. Preston	10/19	University of Illinois
Maiella Ramos	10/13	University of Massachusetts
Betsy B. Ratcliff	10/14	University of South Dakota
Kenneth G. Ray III	1/13	Ohio State University

[Letters continued on the next page]

[New Members List continued on the next page]

[Letters, cont.]

In non-aqueous solvents, one often uses reference systems such as **ferrocene/ferrocinium (fc/fc<sup>+</sup>)**, bis(biphenyl)chromium or the like. According to Gritzner and Kuta, *Pure Appl. Chem.* 56, 461-466 (1984) such systems can also be used to compare potentials in various solvents.

In order to set up a potential scale for the most commonly used solvents in organic and organometallic electrochemistry, it would be interesting to collect formal potentials for **fc/fc<sup>+</sup>** and other such reference systems in various solvents measured under various conditions in **laboratories** all over the world. Of course, it would be necessary to have experimental information for such a collection and comparison, since various contributions to the formal potential of the reference system have to be taken into account, e.g. diffusion potentials between the fc solution and the actual reference electrode (e.g. **Ag/Ag<sup>+</sup>**) used.

Thus, if you work with such systems, and you were interested to contribute to such a collection of potentials and an empirical potential scale in non-aqueous solvents, please send me your data. I would appreciate receiving data with the following details:

- type of reference system
- solvent
- reference electrode used to measure EO (e.g. **Ag/Ag<sup>+</sup>**, 0.01 M in **CH<sub>3</sub>CN**)
- experimental conditions (type of experiment, e.g. CV, temperature, concentration of reference system, supporting electrolyte and its concentration, and the like)
- value of EO of reference system

Thank you,  
Bemd Speiser  
Institut für Organische Chemie  
Auf der Morgenstelle 18  
D-72076 **Tübingen**, Germany  
phone and fax: **+49-7071-296205** (office) **+49-7071-296242** (laboratory)  
**e-mail: bs@echem3.orgchemie.chemie.uni-tuebingen.de, OR bemd.speiser@uni-tuebingen.de**

Dear Dick:  
Enclosed is a scientific program announcement of meeting details for the Seventh International Conference on Flow Injection Analysis (ICFIA '95) and the 24th Semi-Annual Meeting of the Japanese Association for Flow Injection Analysis (JAFIA). We would appreciate your inclusion of the announcement in the next issue of SEAC Communications. (Editor's Note: please see page 2.)

Thank you,  
Gary D. Christian  
University of Washington

[New Members, cont.]

Gregory Reeder	11/8	University of Cincinnati
Troy Reimer	1/27	University of Kansas
Darwin R. Reyes	10/14	University of Puerto Rico
Vanessa R. Reyes	10/13	University of Puerto Rico
Barbara Rhoden	10/24	Penn State University
Cynthia Rice	10/14	SUNY College - <b>Potsdam</b>
Melissa M. Rieger	10/19	Georgia Institute of Technology
James M. Roberts	10/24	North Carolina State University
Matthew Roberts	11/7	Cornell University
Carmen M. Rodriguez	10/13	University of Puerto Rico
Chaoying Rong	11/2	California Institute of Technology
David M. Ryan	1/12	Miami University of Ohio
Iffaaz Salahuden	3/2	University of Kansas
Michael J. Samide	10/26	Indiana University
Louis Scempavia	10/20	University of Washington
Loranelle Schultz	10/19	University of Illinois
Chariclea <b>Kelley-Scordilli</b>	10/26	North Carolina State University
David <b>Scotty</b>	10/19	University of Illinois
Hong Shen	11/8	University of Cincinnati
Minglian Shi	1/26	California Institute of Technology
Jonathon Shoer	10/26	Texas A&M University
<b>Artjam</b> V. Sokirko	10/17	Trent University
Yuan Song	11/20	University of Kansas
Lisa D. <b>Spurlock</b>	10/11	University of Florida
Jennifer Stoyanoff	10/19	University of Illinois
Anne Sullivan	10/20	Georgia Tech
Beverly Swaile	11/16	University of Cincinnati
Franklin D. Swanek, Jr.	10/24	Penn State University
Susanne T. Swanker	10/27	University of Massachusetts
Stephen Theberge	10/21	University of Delaware
Baomin <b>Tian</b>	10/12	New Mexico State University
Lydia <b>Tiedje</b>	10/19	Purdue University
Flavio Tinoco	10/31	University of Iowa
Eric R. Travis	1/11	University of North Carolina
Stephen E. Treimer	2/27	University of Iowa
Darrell Uhrhammer	10/31	Indiana U./Purdue U./ <b>Indianapolis</b>
Jessica Urbanik	10/25	North Carolina State University
<b>Phillip</b> D. Voegel	2/16	University of Louisville
Mark Vreeke	11/8	University of Texas
Timsey L. Welch	1/12	University of Arkansas
Ohanghe Wen	9/13	University of Massachusetts
<b>Roderick</b> Wilkinson	2/16	University of Louisville
Steven J. <b>Woltman</b>	12/17	University of Pittsburgh
Bizuneh Workie	10/13	Tufts University
Haiming Xiao	10/27	University of Tennessee
Jun Xu	1/13	Ohio State University
Meng Ye	3/2	University of Kansas
Susan E. <b>Zerby</b>	10/24	Penn State University
Haiyan Zhang	10/11	Colorado State University
Xia Dong <b>Zhang</b>	10/24	University of Maryland
Yumo Zhang	10/19	University of Illinois
Gang Zhao	11/26	University of Toledo
Jun Zhao	1/17	Ohio State University
<b>Yeping</b> Zhao	11/19	University of Kansas
Min Zhong	3/2	University of Kansas
Jianxun Zhou	3/2	University of Kansas
Rong Zhou	10/24	Penn State University
Welhong Zhou	2/16	University of Louisville
Xiao Zhou	3/2	University of Kansas
Lois Zook	10/29	University of Iowa

Welcome to our new student members. My apologies to anyone who finds a typo in his/her entry. Some of the names were rather unusual — and fascinating — and the quality of the text from which the information was retrieved was barely legible in places. If you find an error, please contact me and I shall print a correction.

Thanks — Editor