



THE FILTER PRESS

Newsletter of the Georgia Section of the American Chemical Society

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2003 Herty Medal Goes to Professor Alan Marshall

Professor Alan G. Marshall of Florida State University has been chosen by the Herty Award Committee to receive the 2003 Charles Holmes Herty Medal. Professor Marshall is recognized for his seminal contribution in analytical chemistry. The award ceremony will be held in Atlanta at 6:30 pm on Tuesday, May 20, 2003. See inside of the Filter Press for meeting details.

Alan Marshall is Kasha Professor of Chemistry and Biochemistry at Florida State University and Director of the Ion Cyclotron Resonance Program at the National High Magnetic Field Laboratory. Among his many contributions to chemistry, Professor Marshall's greatest impact on science is his invention of Fourier Transform Ion Cyclotron Resonance (FT-ICR) mass spectrometry. FT-ICR was revolutionary in the field of mass spectrometry, providing a huge increase in sensitivity, resolution and speed. Professor Marshall has published more than 330 peer reviewed papers and four books.

During the ten years since he joined the faculty at Florida State University, Professor Marshall and his group have continued to pioneer in the technical development of FT-ICR mass spectrometry. They set new world records for mass resolution (e.g., baseline separation of two 900 Da peptides differing in mass by less than the mass of one electron) and mass accuracy (sub-ppm up to 1000 Da). In chemical analysis,

they recently "cracked" the complete chemical composition of the polar molecules in petroleum crude oil and coal: some 20,000+ distinct elemental compositions, opening up a new field of "petroleomics". In bioanalysis, Marshall and his colleagues use electron capture dissociation MS/MS to locate sites of phosphorylation or glycosylation in post-translationally modified proteins ranging from kinases to cerebrospinal fluid proteins.

Professor Marshall has received many awards and honors including the ACS Field/Franklin Award in Mass Spectrometry, the Spectroscopy Society of Pittsburgh Maurice F. Hasler Award, the New York Society of Applied Spectroscopy Gold Medal, the American Society for Mass Spectrometry Distinguished Contribution Award, the Kasha Professorship at Florida State University, the Thomson Medal of the International Society for Mass Spectrometry, the SSP Spectroscopy Award, the ACS Award in Analytical Chemistry, the ACS Florida Section Award, and Honorary Member of the Society for Applied Spectroscopy.

The Award Committee proudly awards the Herty Medal to Professor Alan Marshall, an outstanding scholar and educator.

The 2003 Herty Award Committee

*Dr. Lihong D'Angelo (Chair), The Coca-Cola Company
Professor Dabney Dickson, Georgia State University
Professor David Lynn, Emory University
Professor James Power, Georgia Tech*

Herty Award Banquet, Tuesday, May 20, 2003



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Councilor's Report Spring 2003

By Rigoberto Hernandez, ACS GLS Councilor

The 225th National Meeting of the ACS was held in New Orleans, LA, on March 26, 2003. This was the first meeting in which I served as a Councilor for our Georgia Section. Local section members would be pleased to hear that even new representatives, such as myself, are treated as equals within the Council. Nonetheless, they recognize our need to be brought up to speed, and offered a workshop to introduce new councillors to the structure of the council meeting as well as the committee structure. The committees are extremely important as they are collectively empowered to oversee the society's functions throughout the year.

In many ways, this was a great meeting to be introduced to the Council. There were essentially two primary votes and announcements that will affect you, the members, in so far as you'll be asked to take action this year through the casting of your votes:

(1) The candidates chosen to be placed on the ballot for President-Elect in the first stage of the ACS Presidential Succession are Dr. William Carroll and Dr. Michael Strem. Dr. Carroll emphasized the importance of renewing industrial support and involvement in the ACS. Within this spirit, he also hopes to increase the level of volunteerism by our membership within the society's many activities. Dr. Strem strongly emphasized his career as a small business man. As a consequence, he felt that his character and experience would add to the society's mission.

(2) A petition to revise the society's constitution and bylaws was passed by more than two-thirds of the councilors. This petition has been in development for just over four years. Several earlier versions were denied by the council, but it is clear that this latest version is much in need. In a nutshell, the proposal revises the mechanism by which local sections and divisions are funded by the society. It thereby accomplishes two objectives. The first is that it ensures that local sections and divisions are directly funded by members' dues and thus satisfy IRS 501c classification. The second is that it increases the funding of local sections slightly, and divisions dramatically. Both of these increases are necessary because the activities

—continued on page 3, column 1—

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–Conucilor’s Report, continued from page 2–

are necessary because the activities by the local sections and the divisions have been severely underfunded in the recent past. Unfortunately, increases in funding require increases in revenue, and the proposals will have to be funded by the membership through a staggered assessment over the next four years. The fact that the petition was approved, however, does not immediately actuate its provisions because it must first be approved by a two-thirds vote of the membership. The pressing need for this petition also led to the approval of a special election to be conducted this summer or early fall prior to the election of our Board representatives and president-elect.

Finally, a series of committee reports were delivered during the meeting and clearly illustrated that the business of the ACS is continuing despite the substantial effort expended on developing the petition. Notable reports included those by representatives of Project Seed and the Committee on Minority Affairs. Both reported significant successes in increasing the number of underrepresented minorities from the beginning of the academic pipeline up through to the professional ranks. The pressing need to increase the number of such individuals has also led the Board to fund a Task Force on Minorities in Academe charged to implement the recommendations of the earlier committee chaired by Stanley Israel and reported by him in C&EN.

President Reichmanis also reported that despite international events and the fact that all of us are affected by it, we must continue to carry on the mission of the ACS. She emphasized the continuing need to increase communication between members and their leadership, as well as between the Society and the public. There is also sensitivity to the need for increasing the anticipation of younger members as well as aging members. She also offered, an inspired locution in suggesting that we should think of chemistry not just as the "chemistry of matter" but rather as the "chemistry that matters". ♦

**Herty Award Banquet
Tuesday, May 20, 2003
See Page 5 for details.**

SERMACS 2003 Update Number 2

David Gottfried, Associate General Chair SERMACS 2003

As preparations for the 55th Annual Southeast Regional Meeting of the American Chemical Society (SERMACS 2003, November 16-19, 2003 at the Renaissance Hotel in Atlanta) progress, an impressive array of chemists is being recruited to enlighten and educate participants through a wide variety of symposia, technical sessions, and workshops. In this second update, we will preview plans for symposia on electron and energy transfer and on the teaching of chemistry.

Electron and Energy Transfer Symposia

SERMACS 2003 will offer linked symposia on theoretical and experimental approaches to exploring electron and energy transfer phenomena in novel molecular systems. David Beratan (Duke University) is organizing a group of international experts to address primarily theoretical aspects of electron transfer phenomena in a symposium titled "Electron Transfer in Nanostructures." Joshua Jortner (Tel Aviv University) will explore the conceptual framework for bridge specificity for very long-range hole transport in large scale chemical systems (molecular wires) based on a 'molecular polaron' model. Jie Liu (Duke University) will examine the controlled synthesis of single walled carbon nanotubes using chemical vapor deposition. Ron Naaman (Weizmann Institute of Science) will demonstrate that new electronic and magnetic properties emerge when molecules are assembled as monolayers. Other speakers include Noel Hush (University of Sydney) and Kirk Schanze (University of Florida).

In a second, two-part symposium organized by Tom Netzel (Georgia State University), experimental aspects of electron and energy transfer with special emphasis on investigations of DNA and closely related systems will be discussed. This symposium will include some of the leading scientists in this broad subject area. Owing to the biological significance of radiation induced DNA damage, electron and hole transfer processes in DNA have attracted considerable experimental and theoretical interest. Various mechanisms including tunneling and hopping have been proposed to explain either long- or short-range transfer of electrons and holes through DNA. Michael Sevilla (Oakland University) will describe his group's efforts to investigate electron transfer for DNA in glasses, ices, and solids at low temperatures via electron spin resonance spectroscopy. Yitzhak Tor (University of

California-San Diego) will describe his group's success at site-specific incorporation of photo- and redox-active metal complexes into DNA oligonucleotides using solid-phase phosphoramidite chemistry. Fredrick Lewis (Northwestern University) and his co-workers base their study of electron transfer in DNA on the use of hairpin-forming bis(oligonucleotide) conjugates in which an organic chromophore serves as a linker connecting two complementary oligonucleotide arms. He will describe their use of femtosecond time-resolved transient absorption spectroscopy to learn about the dynamics of photoinduced electron transfer processes. David Waldeck (University of Pittsburgh) will present experimental results on electron exchange kinetics between redox proteins and electrodes that are modified with self-assembled monolayer films. Other invited speakers include Vladimir Shafirovich (New York University), Holden Thorp (University of North Carolina-Chapel Hill), Michael Therien (University of Pennsylvania), Garry Schuster (Georgia Institute of Technology), and Maria Michel-Beyerle (Technical University of Munich).

These two symposia will present a rare opportunity to hear first hand from the world's leading researchers about new experimental results on and theoretical models of electron and energy transfer in DNA-based systems, polymers, and other novel materials.

Teaching Chemistry as The Central Molecular Science

This symposium, organized by Morton Hoffman (Boston University) and Glenn Crosby (Washington State University) will focus on current trends in undergraduate chemical education. The increasingly inter- and multi-disciplinary nature of science has necessitated an evolution in teaching methods and reorganization of course material. The presentations by Hoffman, Crosby, Arthur Ellis (University of Wisconsin and NSF), and George McLendon (Princeton University) will emphasize new content and pedagogy to connect students' learning of chemistry to biotechnology and the biological sciences, nanotechnology and the material sciences, as well as green technology and the environmental sciences. Indeed, as the umbrella of molecular science continues to expand, encompassing more disciplines, chemistry nevertheless remains at the core. The participants will speculate on what chemical education might be like at the midpoint of the 21st century.

ACS Regional High School Teaching Award

This year's winner of the Regional James Bryant Conant Award in High School Teaching (sponsored by Albemarle Corporation) is Marsha Ottem of Greenville High School

(Tennessee). The purpose of this award is to recognize, encourage, and stimulate outstanding teachers of high school chemistry in the United States. The award, which consists of a \$1000 honorarium and certificate, will be presented to Mrs. Ottem as part of the SERMACS 2003 high school teaching program on Sunday, November 16.

Important SERMACS 2003 Dates

Call for Papers: June 9, 2003

Abstracts Open: July 14, 2003

Advance Registration Open: August 7, 2003

For more information please visit the meeting's website at www.cas.gsu.edu/sermacs. Help publicize this next regional meeting by distributing and posting the SERMACS 2003 poster, available on-line at www.cas.gsu.edu/files/sermacs/misc/sermacsposter.pdf (or .doc). ♦

Legislative Action Network

Are you concerned about federally supported R&D? Are you concerned about the future of K-12 science education? If yes, then JOIN the ACS's Legislative Action Network (LAN) and let your concerns be heard.

The LAN gives ACS members an easy, effective way of providing sound, nonpartisan advice to elected officials. Participating LAN members will receive approximately six e-mail alerts per year prior to key congressional decisions. These alerts explore the issue's background, the potential effect it might have on the scientific enterprise, and the position ACS holds. By clicking on a link, members have direct access to the ACS Legislative Action Center where they can review action alerts, edit sample letters, and send them to their legislators within minutes. In addition, monthly e-mail news summaries keep members up-to-date on decisions being made in both the Congress and the White House.

You can sign up for the LAN online at www.chemistry.org/government/action. If you have any questions regarding the LAN, please contact Brad Smith in the ACS Office of Legislative and Government Affairs at 1-800-227-5558, extension 4479. ♦

May Meeting

2003 Herty Award Banquet
Professor Alan G. Marshall, FSU

Petite Auberge Restaurant
Atlanta, GA

Date: Tuesday, May 20, 2003

Time: 6:30 - 7:00 p.m. Arrive
 7:00 - 8:00 p.m. Dinner
 8:00 - 9:00 p.m. Program

Dinner: Seasonal Mixed Greens
 Choice of Mixed Dressings

Chicken Cordon Bleu
or

Beef Burgundy Roast, braised in red wine
 and mushroom sauce

Black Forest Crème, light vanilla mousse,
 layered with sour cherries

Location: Petite Auberge Restaurant
 2935 N. Druid Hills Road
 Atlanta, Georgia 30329

Directions: General Directions from within Atlanta:
 Drive North on I-75/I-85 to I-85 North, take
 Exit #89A North Druid Hills Road), turn
 right from the exit ramp onto North Druid
 Hills Road going East towards Decatur, pro-
 ceed 1.8 miles on North Druid Hills Road to
 the Toco Hills Shopping Plaza. Turn Right
 into the shopping plaza and proceed through
 the parking lot to Petite Auberge Restaurant.

Cost: \$ 25.00 per person; high school teachers,
 \$20; full-time students with ID, \$10.00.
 Payment should be made to the **ACS**
Georgia Section and will be collected at
 the door.

RSVP: Joe Stoner, (770)248-2172, Alcott Chroma-
 tography, joe.stoner@juno.com. When mak-
 ing reservations, please state your name,
 professional affiliation, and telephone num-
 ber. Reservation deadline is 5:00 PM on
 Monday, May 19. If you make a dinner res-
 ervation but fail to attend, you must still
 make payment for your meal.

Don't forget that you can advertise in the Filter Press! Advertise employment positions (temporary or permanent), goods, services, etc. Prices for advertisements per issue are:

Full Page	7" x 10"	\$200
Half Page	7" x 5"	\$150
Quarter page	3 1/2" x 5"	\$100
Eighth page	3 1/2" x 2 1/2"	\$50

*There is a 10% discount for 4 or more issues.

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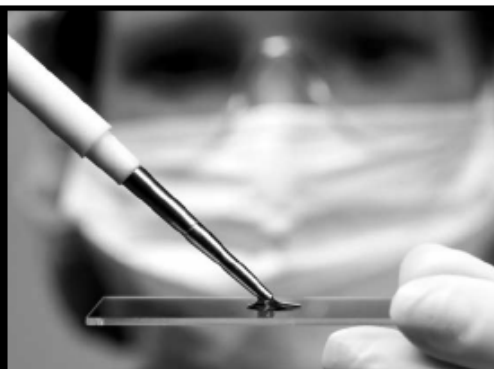
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