



THE FILTER PRESS

Newsletter of the Georgia Section of the American Chemical Society

Volume 10, Number 5

May, 2000

Year 2000 Herty Award Goes to Professor James Powers Of Georgia Tech

The year 2000 Herty Medal is awarded to James Powers, Regents' Professor of Chemistry and Biochemistry at Georgia Institute of Technology.

Dr. Powers received his BS degree in chemistry from Wayne State University and his Ph.D. in organic chemistry from MIT. He began his career as an Assistant Professor in UCLA in 1963, and then spent three years studying biochemistry at the University of Washington as a NIH Special Fellow. He joined the faculty of Georgia Tech in 1970, and rose through ranks to become Regents' Professor in 1987. In 1999, he was chosen as the Class of 1934 Distinguished Professor, which is Georgia Tech's Highest Academic Award.

Professor Powers has been involved in the design and synthesis of synthetic protease inhibitors for more than 30 years. He has made many fundamental contributions in the field of protease chemistry. His research group was responsible for synthesis of the first peptide chloromethyl ketone for a serine protease. He reported the first specific inhibitor for neutrophil elastase in 1973. This inhibitor has been used by hundreds of other investigators, and, for 15 years, was the reference compound for standardizing animal models of emphysema in testing drug candidates. Several major pharmaceutical companies have developed - ketoamide inhibitors, discovered recently in Professor Powers' laboratory, as potential drugs for treatment of coagulation disorders, stroke and immune disorders. Peptide phosphonate inhibitors for serine proteases, also discovered in his laboratory, are being actively developed for use in preventing transplant rejection. He also reported several novel classes of inhibitors of serine proteases, which have been of major importance as drug candidates, sensitive assay substrates and mechanism-based inhibitors. Dr. Powers has been the author of more than 170 research publications and 19 book chapters, and he has 31 patents.

In addition to his first class academic research, Professor Powers is an outstanding teacher. He is more than just a class room lecturer. He engages his students through his knowledge and his passion for science both inside and outside of the classroom. He also serves as a very good mentor for younger faculty members.

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Wednesday, May 31, at Georgia Tech



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Continued from Page 1

The Georgia ACS Section is proud to award the Year 2000 Herty Medal to Professor James Powers, an outstanding researcher and teacher.

Professor Powers will present his work at the Herty Award Celebration on Georgia Tech campus on May 31, 2000.

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

You can send a "camera-ready" copy of the advertisement to the address below or by

email to Alan Gabrielli at agabriell@spsu.edu. Be sure to indicate the number of months it should run as well as the size.

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THE FILTER PRESS

Newsletter of the Georgia Section of the American Chemical Society

The Filter Press (ISSN 1053-5721) is published monthly (except June, July, August, and December) by the Georgia Section of the American Chemical Society. Periodicals Postage Paid Atlanta GA.

Advertising and Business: Direct advertising copy and inquiries to Margaret Venable, Georgia Perimeter College, Science Dept. 555 N. Indian Creek Drive, Clarkston GA 30021, e-mail: mvenable@gpc.peachnet.edu

Graphics Design, Submission of materials for publication: Direct materials for publication to Alan Gabrielli, Southern Polytechnic State University, 1100 South Marietta Parkway, Marietta, GA 30060-2896, fax to (770) 528-7490, or email to agabriell@spsu.edu
Address Changes: ACS members should send address changes to ACS Membership Services, 1155 Sixteenth Street NW, Washington, DC 20036 or call 1-800-227-5558.

Postmaster: Send address changes to Margaret Venable, Georgia Perimeter College, Science Dept. 555 N. Indian Creek Drive, Clarkston GA 30021.

Wednesday, May 31st, at Georgia Tech

66th Annual Herty Medal Celebration Professor James C. Powers Georgia Tech

Date: Wednesday, May 31, 2000

Time: 6:30-7:00 arrive & social
7:00-8:00 dinner
8:00 - 9:00 Speaker

Dinner: Choice of: Chicken Tuscany stuffed with a blend of wild mushrooms, artichoke hearts and sundried tomatoes, served with herb polenta and topped with a Merlot sauce or Salmon en Croute served with Duexel wild rice medley and a lemon chive cream sauce.

All dinners include beefsteak tomatoes topped with crumbled blue cheese and herb vinaigrette, Chef's vegetable du Jour, warm dinner rolls and butter, Tiramisu topped with fresh berries, and coffee, tea or milk. (Note: if you require a strictly vegetarian meal, please contact Katherine Seley at least two weeks in advance)

Cost: \$25 per person, full-time students with ID and high school teachers, \$20. Payment should be made to the ACS Georgia Section and will be collected at the door. Prices include tax and gratuity. Please indicate when making your reservation your choice of entree.

Location: Bioscience and Biotechnology Building,
Georgia Institute of Technology
315 Ferst Street (corner of Ferst and Atlantic)

Directions: Exit at the Techwood/10th/14th exit, go west on 10th Street to State Street, turn left onto State, go to the stop sign, turn left onto Ferst. The Bioscience building is one block east on the corner of Ferst and Atlantic. Parking is free and available anywhere around the building or nearby parking lots.

RSVP: Katherine L. Seley, 404-894-4013, <katherine.seley@chemistry.gatech.edu>
When making reservations, please state your name, professional affiliation, and telephone number. NOTE: Reservation deadline is 5:00 PM, Tuesday, May 23, 2000. **NO EXCEPTIONS!**

If you make a dinner reservation but fail to attend, you must still make payment for your meal to the treasurer, Angus Wilkinson, School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, Georgia 30332-0400 (404)- 894-7452.



2000 Georgia Section Meetings:

June

Summer Picnic **Cancelled**

September

Dr. Tony Shuker

October 4th

NMR on Polymers
Dr. Ben Luberoff

November 6th

Chemistry Profession
Dr. Cecil Dybowski

66th Annual Herty Medal Award Lecture

Proteolytic Enzymes: Explorations in Digestion

Dr. James C. Powers

Dr. Powers' lecture will describe the biological roles of various proteases which range from digestion to control of important physiological process such as coagulation, fertilization, and the immune defense. Diseases that result from uncontrolled and undesired proteolysis include emphysema, viral infections, arthritis, inflammation, and autoimmune disorders. Synthetic inhibitors for proteases include simple affinity labels, transition-state analogs, and mechanism-based inhibitors. Dr. Powers will discuss the prospect for future drugs based on protease inhibition.

of the method enabled him to be financially secure for the rest of his life.

In 1905, Herty joined the faculty of the University of North Carolina at Chapel Hill as Chairman of the Chemistry Department and Smith Professor. He was also appointed Director of Athletics. His research interests centered around natural products which had commercial promise, such as turpentine, soaps, leathers, and cottonseed oil.

In 1915-1916, Herty became the first President of the American Chemical Society. In 1917, he resigned from the University of North Carolina to become the first full-time editor for the journal of Industrial and Engineering Chemistry. Herty used his position as editor to write political editorials furthering the advancement of chemistry in the United States. His two main concerns were the formation of the Chemical Warfare Service and the ability of the United States to manufacture quality chemical products which had previously been purchased from Germany.

From 1921 to 1927, Herty served as President of the Synthetic Chemical Manufacturers Association, an organization that he helped to establish. He also collaborated with Francis P. Garvan on the alignment of chemistry and medicine which resulted in the start of the National Institutes of Health.

Herty became a private consultant to the chemical industry in 1928. His research focused on the conversion of pine pulp to newsprint. He formed the Savannah Paper and Pulp Laboratory in Savannah, Georgia with a \$50,000 grant from the Chemical Foundation and a \$20,000 per year grant from the State of Georgia. By 1933, the plant had developed a feasible process for pulp conversion. On March 31, 1933, the first newspaper was printed using paper created with the Herty process.

Charles Holmes Herty made numerous contributions to chemistry in the development of new products and the advancement of new ideas. The Georgia Section of

Charles Holmes Herty

Charles Holmes Herty was a celebrated, patriotic chemist whose motto was "For Science and Country". He was born in Milledgeville, Georgia on December 4, 1867. Although orphaned at the age of eleven, Herty went to college at the University of Georgia, where he earned a B.A. degree and was the "First Honor Man" of the class of 1886. Herty attended Johns Hopkins University and received his Ph.D. in 1890. He studied with Ira Remsen, the eminent physical chemist. Herty's thesis dealt with complex ions of the Werner type.

Herty returned to the University of Georgia in 1891 as an instructor in chemistry and as the South's first football coach. He married Sophie Schaller in 1895, and they had three children. In 1899, Herty left Georgia to study in Europe; he worked under Witt and Kerner in Berlin, and under Werner in Zurich.

Upon returning to the United States, Herty joined the U.S. Forestry Service. His work was directed toward saving the pine forests in the Southeast. The naval stores industry had been systematically killing the forests in their efforts to collect tree resin using a trough which was backed into the tree wood. Herty developed a method to collect the resin in a metal cup, sparing the tree's life; the method was used by the Forestry Service for seventy-five years. Herty's patent

Chair's Message

the American Chemical Society pays tribute to this ingenious man each year by awarding a chemist from the Southeastern United States with the prestigious Herty Medal.

The Charles Herty biography was compiled from articles written by: Donald G. Hicks, SERNIACS Meeting, 1976

Marion T. Clark, The Filter Press, 1977, and M. M. Bursey, The Hexagon, 1983.

The Herty Medal

The Charles H. Herty Medal is a beautiful solid gold medallion awarded annually by members of the Georgia Section of the American Chemical Society. The purpose of the award is to give public recognition to the work and service of outstanding chemists who have significantly contributed to their chosen fields. All chemists in academic, government, or industrial laboratories in the southeastern United States (Virginia, West Virginia, Kentucky, Tennessee, Mississippi, Louisiana, Alabama, Georgia, Florida, North Carolina, and South Carolina) are eligible.

On May 31st we celebrate the awarding of the Herty medal to Professor James Powers for his contribution to science in the South. In addition, at this dinner, we will honor the section's 50-year members and we will present ACS Georgia Section Service Awards to 5 of our members for outstanding contributions to our Section. The recipients of these awards will be:

Rigoberto Hernandez for his contributions to the Section as Chair Elect, Chair and now past Chair.

Margaret Venable for excellent service as the Business Manager of the Filter Press for the past two years.

Chad Sines for sterling work as our Section Webmaster for many years.

Cynthia Spencer for coordinating the Chemistry Olympiad for the past two years, and this year, with outstanding results.

Leon Venable for his work in Chemistry Outreach over the past 16 years.

Please join me in recognizing all these people for their great contributions to chemistry in general and to our Section in particular.

Terry Say

Filter Press by Email

GA ACS members have the following options for receiving their monthly copies of the Filter Press

1 - by mail. This is the slowest most expensive, and least reliable way of distributing the Filter Press. Currently, every member is sent the Filter Press by regular mail

2- by email. Every month, I email a meeting announcement to those of you who indicated that you wished to be placed on the mailing list. This announcement gives meeting details and contains a link to the Filter Press web site (<http://www.spsu.edu/>

[phys_chem/gaacs.html](http://www.spsu.edu/phys_chem/gaacs.html)), where the entire Filter Press is available as a pdf file (easily viewed with the free Adobe Acrobat reader). If you want to receive this monthly notice, send me a message at agabriel@spsu.edu.

3- by email only. The newest option (not fully implemented) is to have your name removed from the mail distribution list and receive your copy of the Filter Press by email only. To select this option, please access http://chemistry.gsu.edu/ACS/fp_form.html and complete the form that you find there.

Alan Gabrielli

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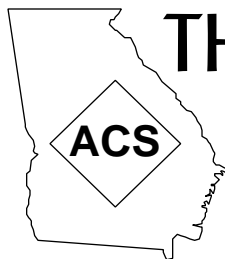
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Newsletter of the Georgia Section of the
American Chemical Society

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Periodicals Postage
PAID
Atlanta, GA
Publication No. 571-180

POSTMASTER: send address changes to

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