



THE FILTER PRESS

Newsletter of the Georgia Section of the American Chemical Society

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February, 2002

Plutonium — An Element for all Seasons

***Dr. Gregory Choppin
Florida State University***

Plutonium is one of the best known elements. To the general public, the name often evokes images of destruction, reactor accidents, etc. This is unfortunate, as the chemistry of plutonium provides unusual opportunities to examine a broad spectrum of principles. For example, the metal has six allotropic forms: In aqueous solution, plutonium has five oxidation states, four of which can coexist simultaneously. Each of the oxidation states provides distinctive spectral properties, and since all have hard acid characteristics, reflect the effects of cationic charge density on chemical behavior. Dr. Choppin is one of the most highly regarded professionals in the field of plutonium chemistry. His talk reviews the rich diversity in the chemistry of this fascinating element and serves to illustrate many principles.

Dr. Gregory R. Choppin received his Ph.D. from the University of Texas. After three years at the Lawrence Radiation Laboratory of the University of California, he joined the faculty at Florida State University in 1956. From 1968 to 1976, he served as chairman of

the Department of Chemistry. He is now R. O. Lawton Distinguished Professor of Chemistry. Dr. Choppin has received the Florida Section American Chemical Society Award (1973), the Southern Chemistry Award (1971), The CMA National College Chemistry Teacher Award (1979), and The American Chemical Society Award in Nuclear Chemistry (1985). He has served as secretary-treasurer of the Inorganic Division (ACS) and chairman of the Division of Nuclear Chemistry and Technology (ACS). He received the Seaborg Award in Actinide Separation Science (1989) Presidential Citation Award of the American Nuclear Society (1991) and The Chemical Pioneer Award of the American Institute of Chemistry (1997). His major research interests are Inorganic and Radiochemistry Chemistry with emphasis on the lanthanide and actinide elements. Potentiometry, calorimetry, NMR and optical spectroscopy are among the methods used to study the thermodynamics and kinetics of complexation and redox behavior of these elements. Emphasis is placed on systems of relevance to the environmental behavior of the f-elements.

Thursday, February 21, 2002 at the Park Tavern, Atlanta

<http://chemistry.gsu.edu/ACS>



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February Chair's Message

Greetings!

Hard to believe February is here and all of us have so much to do with our professional and personal lives... whatever your link is to the always exciting, ever-changing world of chemistry, your Georgia ACS is here for you...

February's meeting will feature Dr. Gregory Choppin and the wonderful world of plutonium chemistry. To the general public, mere mention of the word "plutonium" causes a wide variety of reactions – most having to do with environmental and health concerns. Dr. Choppin is one of the leading experts in his field and his presentation will focus on the many positive benefits that plutonium chemistry offers.

For those of you about to embark on a job search, whether a new graduate or a chemist in career transition, plan on attending our March **Careers in Chemistry** meeting. Have your questions and your resumes ready and we'll try to cover some of the essentials to assist your success.

Our chair-elect Joe Stoner is heading up nominations for our 2002 elections. It is never too early to put your name in the ring if you are interested in volunteering for ACS service. You may express your interest directly to joe.stoner@juno.com. In addition, we are continuing signups for our membership email database. So become a part of our growing contact list by sending your name and email address to me at bstar1@bellsouth.net.

Stay warm in Georgia's wintry weather and see you at the meetings!

Brian

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Postmaster: Send address changes to Brian Fowler, 3466 Irwin Bridge Rd., Conyers, GA 30012

Plutonium - An Element for All Seasons**Dr. Gregory Choppin****Florida State University****Park Tavern****Atlanta, GA****Date:** Thursday, February 21, 2002

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 Salad Served With Balsamic Vinaigrette, Choice of Entrée
 Chicken Piedmont: Boneless breast of chicken sautéed with garlic butter, white wine and fresh basil, tossed with herb-roasted potatoes, spinach, vine ripe tomatoes and crumbled Feta.

Atlantic Salmon: Fresh Atlantic salmon brushed with honey peppercorn glaze. Served with asparagus and Georgia pecan rice pilaf.
 Coffee, Decaf Coffee and Freshly Brewed Iced Tea, Assorted Baked Goods for Dessert

Location: Park Tavern
 500 10th Street
 Atlanta, GA
 404-249-0001
www.parktavern.com

Directions: Take Tenth Street exit off I-75/85. Go east on Tenth Street until it dead ends at Monroe. Park Tavern is on the corner of Tenth and Monroe, at the southeast corner of Piedmont Park.

Cost: \$23.00 per person, children, full-time students with ID and high school teachers, \$18.00. Payment should be made to the **ACS Georgia Section** and will be collected at the door.

RSVP: Brian Fowler, Bridgestar Inc. 770-602-4222, bstar1@bellsouth.net
 When making reservations, please state your name, professional affiliation, and telephone number. **Reservation deadline is 5:00 PM on Monday February 18, 2002. If you make a dinner reservation but fail to attend, you must still make payment for your meal.**



2002 Georgia Section Meetings:

March

Careers in Chemistry Meeting

April

Science Play Competition

May

2002 Herty Award

Appreciation Plaque for Dr. Ferris

A plaque with the following inscription was presented to Dr. Jim Ferris at the January Georgia Section Meeting.

The Georgia Section of The American Chemical Society appreciates a gift from Dr. Jim Ferris and The Institute of Paper Science and Technology that helped support the 9-26-01 event proclaiming the Savannah Pulp and Paper Laboratory of Georgia chemist Charles H. Herty to be an ACS National Historic Chemical Landmark.

Dr. Herty's work there was a quintessential example of scientists helping U.S. industry.

His recognition, aided by IPST, will inspire future discoveries that advance paper science and technology.

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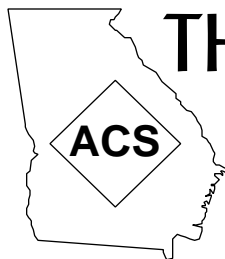
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The Right People, The Right Match, The Right Way



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