

ACS President Francisco to Address January CSW Meeting

CSW will hold its first 2010 dinner meeting on Thursday, January 14, in Marvel Hall of ACS Headquarters. Dinner information and other specifics are detailed on page 2. The speaker will be Dr. Joseph S. Francisco, 2010 ACS President and Professor of Earth and Atmospheric Science and Chemistry at Purdue University. The title of Dr. Francisco's talk will be "The Joys of Chemistry and the Challenges Ahead."

Joseph S. Francisco completed his undergraduate studies in Chemistry at the University of Texas at Austin with honors, and he received his Ph.D. in Chemical Physics at the Massachusetts Institute of Technology in 1983. Dr. Francisco spent 1983-1985 as a Research Fellow at Cambridge University in England, and following that he returned to MIT as a Provost Postdoctoral Fellow. In 1986 he was appointed Assistant Professor at Wayne State University. In 1991 he was a Visiting Associate in Planetary Science at California Institute of Technology. He accepted an appointment as Professor of Chemistry and Earth & Atmospheric Sciences at Purdue University in January 1995, and in 2006 was appointed as the William E. Moore Distinguished Professor of



Dr. Joseph S. Francisco (Photo Credit: Peter Cutts Photography)

Earth and Atmospheric Science and Chemistry at Purdue University. He served as President for the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) from 2005-2007. In 2008 he was elected to the Presidential succession of the ACS. He was President-Elect for 2009, will

serve as President for 2010, and will be Immediate Past President for 2011.

He has published over 400 peer-reviewed publications in the fields of atmospheric chemistry, chemical kinetics, quantum chemistry, laser photochemistry and spectroscopy. He was appointed by the Secretary of the Navy to be member of the Naval Research Advisory Committee for the Department of Navy (1994-1996). He has served as a member of the Editorial Advisory Boards of *Spectrochimica Acta (Part A)*; *Advances in Environmental Research*; *Journal of Molecular Structure: THEOCHEM*; and the *Journal of Physical Chemistry*. He is a co-author of the textbook *Chemical Kinetics and Dynamics*, published by Prentice-Hall.

Professor Francisco has received numerous national and international honors for his academic accomplishments. He was recently awarded an Alexander von Humboldt U.S. Senior Scientist Award by the German government, as well as being appointed a Senior Visiting Fellow at the Institute of Advanced Studies at the University of Bologna, Italy. He has been appointed to and served on committees for the National Research Council, NSF, ACS, and NASA.

Nominations for the 2010 ACS Fellows Program Will Open Soon

Nominations for the second class of the ACS Fellows Program will open in the first quarter of 2010. The ACS Fellows Program was created "to recognize members of the American Chemical Society for outstanding achievements in and contributions to Science, the Profession, and the Society." Selection of ACS fellows is based upon demonstrated contributions in two defined areas: 1) excellence in science/profession, and 2) outstanding service to ACS.

Each nomination will require a primary nominator and two secondary nominators. No more than one nominator may be from the same educational or governmental institution or industrial location as the nominee.

Nominations will be accepted via a completed nomination form by a primary nominator and accompanied by two secondary nominations. Each primary and secondary nominator must write a letter of recommendation of the nominee. The due dates for these (*continued, page 5*)

The Capital Chemist™



*A Publication of the
Chemical Society of Washington
Section of the American Chemical
Society*

Volume 60 Number 1 Jan 2010

Editor

Jeffrey A. Smiley
202-659-2650 voice
Email: csw@acs.org

Publisher

Chemical Society of Washington

Business Staff

CSW Publications Committee
Noel Turner, Chair
703-569-5153 voice

Business Manager

Jessica Pullen, CSW

Advertising Manager

MBO Services
PO Box 1150, Marshfield, MA 02050-1150
781-837-0424 voice
www.mboservices.net

CSW Correspondence

Kristy A. Martin, Administrator
CSW, 1155 16th Street, NW, O-218
Washington, DC 20036
202-659-2650 voice
email: csw@acs.org

CSW Web site: www.csw-acis.org or
<http://membership.acis.org/W/WashDC/>

Claims for missing issues should be sent to CSW at the above address. Member change of address should be sent to ACS, PO Box 3337, Columbus, OH 43210; phone 800-333-9511; e-mail: service@acs.org; or edit member profile online at www.acs.org.

GENERAL: The Capital Chemist (ISSN 0411-0080) is published monthly from January to December (except June, July, and August) by the Chemical Society of Washington, 1155 16th Street, NW, Washington, DC 20036. Periodical Postage is paid at Washington, DC and additional mailing offices. Subscription price is included in all membership fees; nonmember subscription is \$10.00 per year.

ISSN 0411-0080

POSTMASTER: Send address changes to The Capital Chemist, 1155 16th Street, NW, Washington, DC 20036.

CSW assumes no responsibility for the statements and opinions advanced by the editor or contributors to its publication or the products and services advertised herein.

Copyright ©2010, Chemical Society of Washington.

2010 Officers

President

Carol Henry, Consultant

President-Elect

Michael Doyle, University of Maryland

Secretary

Jason E. Schaff, FBI

Treasurer

Dorothy Zolandz, National Research Council,
National Academy of Sciences

THE CHEMICAL SOCIETY OF WASHINGTON PRESENTS: 1092nd Dinner Meeting

Thursday, January 14th
ACS Hach Building (ACS Headquarters)
1155 16th Street, NW
Washington, DC

6:00 pm SOCIAL HOUR
7:00 pm DINNER
COST \$24.00 Members & guests
\$12.00 Students

Menu includes: Choice of Entrée: Lemon Garlic Chicken (roasted chicken breast au jus) or Garden Vegetable Lasagna (with béchamel sauce); includes salad, fresh baked bread board, side dishes (mashed potatoes, vegetable medley), beverages and cookies.

Make reservations by **Monday, January 11, 2010, 12:00 noon**, to the CSW office: csw@acs.org or 202-659-2650. Please designate the names in your party. The public is invited to attend. You may attend the talk only, but reservations are appreciated. **Those who make a reservation but are unable to attend should send a check for the cost of their meal to the CSW office.**

Directions: The ACS Hach Building is located at the corner of M & 16th Streets in NW Washington, four blocks north of the White House. Please note that 16th Street is two-way, and M Street is one-way westbound.

Parking: Parking is available on the street after 6:30 p.m. or in nearby commercial parking garages (if you use a parking garage, please confirm that it is open past 10:00 p.m., as some close earlier).

METRO: Blue/Orange Line: McPherson Square or Farragut West; Red Line: Farragut North.

8:00 p.m. Featured Speaker: Dr. Joseph S. Francisco, ACS President 2010, William E. Moore Distinguished Professor of Chemistry and Earth and Atmospheric Sciences, Purdue University

Title: The Joys of Chemistry and the Challenges Ahead

Abstract: This presentation provides an overview of research developments in atmospheric chemistry and how the interplay between experiment and theory are providing unprecedented detail of the underpinning chemistry in global climate change. The lessons learned from chemistry in Earth's atmosphere provide valuable insight into chemistry of other planets in our universe, such as Mars. The connection between Earth and Mars chemistry will be discussed.

This presentation will also provide an overview of issues impacting the chemical enterprise, our competitiveness in the global marketplace, and how the American Chemical Society can play a leadership role in moving the chemical enterprise forward into the future.

Map: The "A" shows the location of the ACS Hach Building (ACS Headquarters) at 1155 16th St. NW. Note Metro stations McPherson Square (Blue/Orange line) and Farragut North (Red line). Parking on nearby streets is available at 6:30 pm.



Zory Glaser Receives CSW Community Service Award

Dr. Zory R. Glaser was presented with the CSW Community Service Award (CSA) at the December CSW Dinner Meeting, for “his many diverse services to the general public, his continuing service to CSW, and his innovative, compassionate help to wounded returning members of the U.S. military”.

Among the many activities in which Dr. Glaser has been involved, which were cited by Elaine Shafrin, Chair of the CSA Committee, were: his recognition by both the Navy and the Army for having organized and conducted at area military hospitals math and science review programs for college-bound patients (and staff) who were planning to attend or return to college; his participation in “Operation Welcome Home” activities at BWI Airport, for returning members of the military who have served in overseas locations; and that he had helped establish and had served as Leader (Advisor) of the (co-ed) Boy Scout ‘Medical-Specialty Explorer Post’ sponsored by the National Naval Medical Center.

Dr. Glaser served in the US Navy, first as an Electronics Technician, then as a Medical Service Corps officer (biophysicist/chemist), and then as a Commissioned Officer (biochemist/toxicologist) in the US Public Health Service (with assignments at NIOSH and at the FDA). He also served as a consultant to the USP, and is a member of the adjunct faculty at the School of Public Health, Johns Hopkins University.

Zory has long helped to judge at area science/math/ technology fairs at the middle-school and high-school levels; has been involved in area Habitat for Humanity home repair, renovation and construction activities; has served as a volunteer instructor helping adults to learn to read, write and speak English; and has helped to prepare, serve, pack and



Dr. Zory Glaser, left, pictured with Elaine Shafrin

deliver food for an area homeless shelter and a food kitchen. Dr. Glaser has been a guest speaker in local high school and college chemistry seminars and courses; has served as a tutor/ mentor for area high school and college chemistry students; has served as a member of the civilian National Disaster Medical System; has been a Boy Scout merit badge counselor, a first aid and CPR instructor, and has served as a Montgomery County, MD Elections Judge.

At the dinner meeting, Dr. Glaser was recognized for service as CSW President in 2004, service as Editor of *The Capital Chemist* during 2003-05, and for receiving the 2007 CSW Charles L. Gordon Award for “his continued exemplary service to the Science of Chemistry and to the CSW”.

Contributed by Elaine Shafrin, CSW Awards Committee

CSW Election Results for 2010 President-elect, Officers

The CSW Tellers Committee met at the ACS offices on November 17, 2009, from 6:30-8pm.

The members of the Committee are:

- Jennifer Breidenich
- Daron Freedberg
- Carol Henry
- Kristy Martin
- Douglas Raber

There were 98 ballots cast that had signed signatures on the mailing envelopes. These ballots were all from CSW members in good standing. There were six ballots cast without signatures on the mailing envelope.

These ballots were also from CSW members in good standing, but were not included in the vote tally.

CSW election results 2010

For President-Elect:

Michael Doyle

For Secretary:

Jason E. Schaff

For Councilor (2010-2012):

Kim Morehouse

John Malin

John Ruth

For Alternate Councilor (2010-2012):

Robert Paul Barron

Elise Ann Brown

Steven Carlo

One Alternate Councilor seat will be vacant for 2010

For Manager (2010-2012):

Catherine Fenselau

Zory Glaser

Joshua Goldberg

Robert Wiacek

Wayne Wolf

Jennifer Young

2009 Year-end Message from CSW President Henry

As we see another year draw to a close, I am proud to say that 2009 was a successful year for CSW. As most of you know, the 238th National ACS Meeting was held in Washington, DC August 16-20, 2009. The CSW Host Committee put in a lot of long hours and hard work to make sure that visiting chemists from all over the country and the world were greeted at the Hospitality Booth with information, souvenirs and a smile. They did an exemplary job and even broke new ground in electronic communication with Twitter and CSW Facebook updates. The Special Issue of The Capital Chemist was informative with a unique historical perspective. We also explored new fund raising opportunities with eco-totes and wrist bands. I would like to say thank you to all of the people who worked so hard to make the National Meeting a success for CSW, but especially to Jim Zwolenik, Chair of the Host Committee, and Noel Turner, Chair of the Publications Committee.



Project SEED was also a huge success story this year. Project SEED is our largest outreach program and this year we were able to fund 8 economically disadvantaged students so that they could attend and participate in summer research programs. Walter Benson and his committee have worked hard to make this program successful. Could we have a better outreach than encouraging science education in our youth? If you want to help support Project SEED and Green Chemistry Education, you can make a tax deductible donation and receive an eco-tote in return. Please see the website (www.csw-acs.org) for further details.

Every year CSW participates in the Chemistry Olympiad and this year CSW was recognized with a Certificate for 25 years of participation. This program is run every year by Regina Cody who works quietly in the background. We all owe Regina a debt of gratitude for her work in this area. In addition, we have been chosen to host the International Chemistry Olympiad in 2012.

These are just the major accomplishments that CSW has had over the last year. I hope they make you proud to be a member of CSW. But now we must look to the year ahead. There is a place for each of you in CSW in the coming year. It could be as a volunteer, an active participant in CSW activities, or a board member.

There are numerous volunteer opportunities in CSW throughout the year. These do not have to be long-term commitments. You could help judge a science fair for a day. Jennifer Breidenich leads these efforts and would welcome your participation. You could entertain kids and even adults at an event like Chemathon or National Chemistry Week. Kim Morehouse continues to pilot these efforts with his enthusiasm and energy and would be happy to have you join him. You could monitor students during the Chemistry Olympiad. You could give a presentation to a local college chemistry club with our newest program called "Bridging the Gap," a program designed to allow CSW to get more involved with the local ACS student sections. You could write an article for The Capital Chemist (contact Jeff Smiley, Editor). You could help set up the new CSW website (contact Fred Fry).

You could also become an active member of CSW. Attend a dinner meeting. Vote in the CSW elections. Nominate someone for a CSW award. Go to the CSW website and see what your local section is doing.

If you want to invest more time, you should consider running as a board member. If you have ideas of how we can change the society to reach more people and become more effective, there is a place for you as a manager or a councilor. It is easy to criticize how things are done, but it takes a strong person to step up and help to make changes possible. We have a new President-Elect this year, Michael Doyle, who will be taking over as President in 2011. He is enthusiastic for what CSW can accomplish and is looking forward to working with the CSW membership and Board. CSW is also fortunate to have Jason Schaff as Secretary and Dorothy Zolandz as Treasurer, along with Kristy Martin as our very talented CSW Administrator. She would be pleased to talk with you and answer your questions about how to get involved with CSW.

The opportunities are numerous and varied. CSW needs you. On behalf of the CSW Board of Managers, we welcome your participation. We had a great year in 2009. But if YOU get involved, imagine what we could do in 2010!!!
Sincerely,
Carol Henry
President, CSW

***It's easy being green!
Recycle this issue and
all recyclable
materials.***

Photos from the CSW Awards Ceremony at the December Dinner Meeting



Photo above: Dr. Fred Metz, CSW Awards Committee Chair, left, presented the Schubert Award for Outstanding Teaching of High School Chemistry to Mrs. Carol L. Gregory of Col. Zadok Magruder High School in Rockville, MD.

Photo at left: Dr. James E. Cassidy, left, received the Charles L. Gordon Award for exemplary service to the science of chemistry and to CSW. At right is Dr. Elizabeth Weisburger.

Save the Dates for Green Chemistry: June 21-24

The 14th Annual Green Chemistry & Engineering Conference returns to downtown Washington, DC on June 21-24, 2010. With the theme "Innovation and Application" and with one of the renowned founders of green chemistry, Dr. John Warner (President and CTO, Warner Babcock Institute for Green Chemistry) as the chair, this conference is shaping up to be one you won't want to miss! The tentative schedule for the week begins with a Student Workshop, Roundtable Meetings, and the Presidential Green Chemistry Challenge Awards Ceremony on Monday, June 21, followed by technical programming on June 22-24. Please visit the conference website, www.gcande.org, where more details will be posted as they become available.

Nominations for ACS Fellows to Open Soon

(continued from page 1) nominations have not been announced.

Fellows will be selected by a Selection Committee appointed and chaired by the Immediate Past President. Membership on the Selection Committee will be representative of the ACS. Members of the Fellows Selection Committee or current ACS Board of Directors will not be eligible to be nominators or nominees.

ACS Fellows will be recognized and honored at the Fall ACS National Meetings. Each Fellow will receive a

pin and a certificate.

Information on the ACS Fellows Program can be obtained in the "ACS Membership" section at the ACS website (www.acs.org). A complete roster of the 162 inaugural ACS Fellows can also be found at the ACS Fellows Program website, as well as in the July 27, 2009 issue of *C&E News*. Additional information can also be obtained by sending an email to: fellows@acs.org.

Contributed by Rob Wiacek and the CSW Public Relations committee.

CSW Calendar

Board of Managers Meeting
January 25, 2010

February Dinner Meeting
Thursday, February 11
Location: TBA

For the CSW Project SEED program, the following deadlines are important:

January 30, 2010: Research Proposals are due from Chemical Research Mentors.
Contact Dr. Walter R. Benson at WBenson270@aol.com or WWW.ACS.org/projectseed for more information or 202-872-4380

June 30, 2010: High School Students need to have their Student Financial Statement Forms submitted to Dr. Benson



50-year CSW Members at November Dinner Meeting: Back row (l to r): Thomas Spande, Donald Rea, Paul Lieberman, Robert Farncomb, Charlie Barnes and Robert Argauer. Front row, (l to r): David Van Ormer, Denys Voaden and Garnett Wood. Photo courtesy of Kim Morehouse.

Chem-Mystery



A possibly amusing amalgamation of chemistry, wordplay and trivia

This issue was prepared on December 19, during the snowstorm that dropped up to two feet of snow on the Washington area. This made *The Capital Chemist* wonder:

How many **moles** of snowflakes fell in the December 19 snowstorm?

- A. Greater than one mole
- B. About 1/100 of a mole
- C. Less than one millimole

The Capital Chemist has an estimated answer (page 7), but would welcome (and print) good responses from readers.

Apply by February 1 for Green Chemistry Student Awards

The Joseph Breen Memorial Fellowship sponsors young international green chemistry scholars to participate in an international green chemistry technical meeting, conference, or training program of their choosing. "Young" international scholar is defined as undergraduate students, graduate students, and post-docs. This award is sponsored by a fund that commemorates the commitment and accomplishments of Joe Breen for the advancement of green chemistry.

The Kenneth G. Hancock Memorial Award honors outstanding student contributions to furthering the goals of green chemistry through research or education. The award is a one-time cash award in the amount of \$1,000 and is open to all undergraduate and graduate students. The award is sponsored by the ACS Division of Environmental Chemistry and the U.S. Department of Commerce, NIST.

Please help the ACS Green Chemistry Institute® spread the word about these awards to students and young scholars. There is no limit on the number of applications that can be submitted from any one academic institution or project advisor, and students may apply for both awards. For details on how to apply for the awards, go to: www.acs.org/greenchemistry > Green Chemistry Awards.

The Retired Chemists Group

offers a social program of luncheons and outings available to all. Check www.csw-acs.org/retired.html

ACS Publications from DC Area Research Groups

This feature of *The Capital Chemist* is a compilation of selected publications in ACS journals, appearing recently, from area institutions.

Mynthia Cabrera[‡], Michelle F. Paguio[‡], Changan Xie[§] and Paul D. Roepe^{*‡†} (2009) "Reduced Digestive Vacuolar Accumulation of Chloroquine Is Not Linked to Resistance to Chloroquine Toxicity," *Biochemistry* (Rapid Report), **48** (47), 11152–11154. (‡ - Department of Chemistry, § - Department of Biochemistry and Cellular and Molecular Biology, † - Center for Infectious Diseases, Georgetown University, Washington, DC)

Kan-Nian Hu, Wai-Ming Yau and Robert Tycko* (2009) "Detection of a Transient Intermediate in a Rapid Protein Folding Process by Solid-State Nuclear Magnetic Resonance," *J. Am. Chem. Soc.*, Article ASAP, Publication Date (Web): December 10, 2009. (Laboratory of Chemical Physics, NIDDK, NIH, Bethesda, MD)

BUSINESS DIRECTORY

SERVICES

NMR_{Service} 500MHz

***Mass**

***Elemental Analysis**

NuMega Resonance Labs

numegalabs.com P-858-793-6057



Eastern Scientific

www.easternsci.com

781-826-3456

Vacuum Pump Problems?

Eastern Scientific specializes in the repair and precision rebuilding of all makes of mechanical vacuum pumps.



Free pick-up & delivery
Restrictions apply

CAREER SERVICES

★ Institute for Defense Analyses★

- Are you a PhD with a strong quantitative bent and a breadth of knowledge that you think makes you stand out from your peers?
- Are you a PhD scientist or engineer that has always been interested in the policy surrounding the government's decisions about technology? And do you wonder about the quality of scientific advice that goes into such decisions?
- Do you have lab experience, but prefer computer based or theoretical research with interdisciplinary flavor? Or perhaps you are a theoretician, with extraordinary talents that cut across several fields?

If those questions caused you to pause and think, IDA may be the right place for you to develop a challenging and satisfying career. IDA is a place where your work could have outstanding impact. Most of our analyses support the Departments of Defense and Homeland Security as well as the Executive Office of the President and Joint Chiefs.

Please visit www.ida.org to learn more about us. To apply, e-mail your resume to <http://jobs-ida.icims.com/jobs/1223/job>, specifying Capital Chemist. In addition to openings for PhDs we also have paid summer internships for rising seniors and grad students. IDA is proud to be an equal opportunity employer.



CAREER SERVICES

PROMOTE YOUR PRODUCTS AND SERVICES • ADVERTISE IN THE CAPITAL CHEMIST

The Capital Chemist readership is greater Washington DC's largest source for chemical and biochemical buyers. *The Capital Chemist* reaches more than 4,300 readers each month. It has been estimated that these buyers annually purchase more than \$215,000,000 of:

- EQUIPMENT
- SUPPLIES
- CONSULTING SERVICES

Placing an advertisement in *The Capital Chemist* is the lowest cost method of reaching this select audience.

For further information and other options for promoting your company's products and services visit:

www.mboservices.net

SERVICES

NEW ERA ENTERPRISES, INC.
NMR-IR/FTIR-UV-VIS-FL
sampling supplies & accessories

Three major catalogs / pricing to view and download from
www.newera-spectro.com

One source for Spectroscopic
Sampling Supplies

CAGE Code: 44ME9
DUNS: 556785657

1-800-821-4667 cs@newera-spectro.com



Micron Analytical Services

COMPLETE MATERIALS CHARACTERIZATION
MORPHOLOGY CHEMISTRY STRUCTURE

SEM/EDXA • EPA/WDXA • XRD XRF • ESCA • AUGER • FTIR • DSC/TGA

Registered with FDA • DEA GMP/GLP Compliant

3815 Lancaster Pike Wilmington DE. 19805

E-Mail micronanalytical@compuserve.com

Voice 302-998-1184, Fax 302-998-1836

Web Page: www.micronanalytical.com

Chem-Mystery Answer: Probably C. A Google search yielded this statement from Professor Richard Banks of Boise State: "If one mole of snowflakes fell evenly on the United States, the depth of the snow would cover all of the highest buildings."

Advertisers in this issue:

Eastern Scientific 7
Institute for Defense Analysis 7

Micron Inc. 7
New Era Enterprises..... 7
NuMega Resonance Labs..... 7

Ginkgogate: The Stench of Scandal in the Nation's Capital

Carmen Drahl, C&E News

Reprinted with permission from C&E News

It was the fall 2008 election season in Washington, DC, and the smell of possibility was in the air. Unfortunately, that wasn't the only smell around.

All over town, ginkgo trees were dropping their malodorous fruit, a yellowish grape-sized berry, all over the sidewalk. Unsuspecting pedestrians crushed the berries underfoot, releasing a putrid bouquet containing butanoic acid, an acrid-tasting compound that also turns up in vomit.

The stench was the result of a setback in controlling the ginkgoes' fruit production at the District's Urban Forestry Administration, which plants and maintains the city's street trees. Local bloggers raised a stink over the fetid fruit and dubbed the scandal Ginkgogate, as only Beltway insiders can.

The ginkgo is an ancient tree with elegant, fan-shaped foliage. Ginkgoes can be male or female, but only the females produce fruit, explains John P. Thomas, associate director of Urban Forestry for the District. The capital has about 6,000 female ginkgoes, the legacy of a planting project that took place before experts could tell the sexes apart at the sapling stage, he says.

Instead of removing the trees, the city decided to block their fruit production by spraying them with Sprout Nip, a plant growth regulator containing chlorpropham, which is a carbamate that affects plant mitosis. But spraying isn't a simple fix—the process requires lots of equipment, such as spray trucks, and needlessly exposes a tree's surroundings to the chemical. What's more, timing is essential for the spray to work. The exact window in which chlorpropham works best differs in different pockets of the city, complicating the situation, Thomas says.

A few years ago, District workers

began testing an alternative—dikegulac sodium, a sugar derivative that blocks DNA synthesis. Dikegulac can be given to trees in a variety of ways, from spraying to simply pouring it at the base of a tree, says Gary Custis, manager of field research and technical services at PBI/Gordon, which sells dikegulac under the name Atrimmec.

The District opted to use specialized needles to deliver small amounts of dikegulac just under ginkgo trees' bark. In smaller scale tests, the injected dikegulac was as effective as Sprout Nip at blocking ginkgo-berry formation. So in 2008, officials decided to try it citywide.

The fruits of that labor turned out to be rather more pungent than anyone had expected. "To this day we aren't sure what went wrong," Thomas says. Countless factors may have been at play, from temperature variations to the

exact method of injection, he adds.

"It may have come down to timing," speculates Chip Doolittle, president of ArborSystems, the company that sells the dikegulac product Pinscher, which the District used. As with Sprout Nip, there exists a precise window where Pinscher will work best.

"Working with plant growth regulators is definitely not a cookie-cutter thing," says Jacqueline K. Burns, who studies plant physiology at the University of Florida Citrus Research & Education Center. "Environmental conditions may not be conducive to the same effect every year."

The District hasn't given up on Pinscher, Thomas says. Although his department sprayed Sprout Nip this year, they're back to tinkering with Pinscher so they can figure out how to make it work. "Understanding the use of these chemicals and delivery systems is a big untapped market," he says.



Butanoic acid: Olfactory offender

CSW: Celebrating over a Century of Service to Washington DC Area Chemists

The Capital Chemist
(USPS 556-400)
Publication of The Chemical Society of Washington
Section of The American Chemical Society
Dated Material

Periodical Postage
PAID
at Washington, DC