

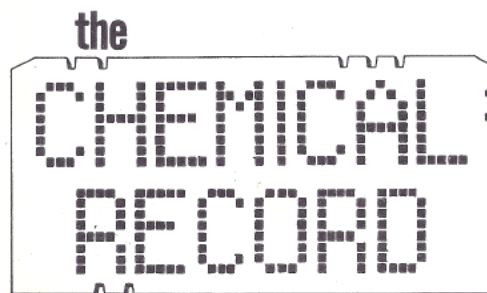
50 Years
The Chemical Record
1958-2008



Volume 50, Number 2 – March, 2008
 Columbus Section of the American Chemical Society, Inc.
 George Greene, Editor — Ron Mitchum, Section Chair
www.acscolumbus.org

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Upcoming Meetings

By Ronald Mitchum, Chair

- March 20 Thursday Monthly Section Meeting: **Dr. Tracy Hamilton**, ACS Tour Speaker, will present *Zymurgy: Art and Science of Making Beer*. **This meeting will be held at Barley's Smokehouse, 1130 Dublin Rd., Columbus, OH. Put it on you calendar and don't miss this one.**
- April 29 Tuesday No meeting; enjoy the many community activities!
- May 20 Tuesday Monthly Section Meeting and presentation of Columbus Section Award at Ohio Dominican University. TBA

FROM THE CHAIR

By RK Mitchum

The February meeting was held at the Clintonville Women's Club. Dr. Henry Bungay presented "Biomass Energy Without Hype". The talk was well received and Dr. Bungay offered a CD containing a large amount of information regarding the topic. This information was available to those who wanted a copy at the meeting and will be made available to anyone requesting a copy to ronaldmitchum@core.com.

Everyone really enjoyed the venue and the Clintonville Women's Club did a great job hosting our meeting.

This month Dr. Hamilton will talk to us about "Zymurgy: Art and Science of Making Beer". I looked this up at www.whatisthis.com and found the following: "zymology is the study of fermentation. The word was originally used to describe the science involved in these processes but it has since become more broadly used to describe the brewing of alcoholic beverages. A zymurgist (or zymologist) is one who studies zymurgy". Well there it is. So sit aside the ole ale and come and join in for an evening at the brewery.

COMMITTEE MEMBERSHIP

By RK Mitchum

There are a number of committees which need members or leadership. If we all do a little it will add up to a lot. Pick a committee, get active and make it work for you. *Editor's Note: A roster of committees and chairs appears elsewhere in this issue of The Chemical Record.*

SECTION LEADERSHIP

By RK Mitchum

It is not too early to think about running for an office for next year. It may be just what you are looking to do.

Here is a Sticky Topic

By RK Mitchum

The meetings that are held each month are for the benefit of our membership. We try to offer a venue which will not only entertain and enlighten our membership but also appeal to the palate. In doing so we have to plan in advance for the number of members who will be present at the meeting and guarantee a set number of attendees. The Section's cost for the event depends upon the attendance and also the menu offered. When the reservations close this number is transmitted to the hosting establishment and we are committed to the cost associated with the number of attendees guaranteed. When a member does not come to the meeting and your meal is not paid, the cost is still incurred. So make it a point to pay for your dinner even if you can not attend, since the cost is incurred.



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MEETING NOTICE

Columbus Section of the American Chemical Society, Inc.

www.acscolumbus.org

Thursday, March 20, 2008

Program: *Zymurgy: Art and Science of Making Beer*

Dr. Tracy P. Hamilton


University of Alabama, Birmingham

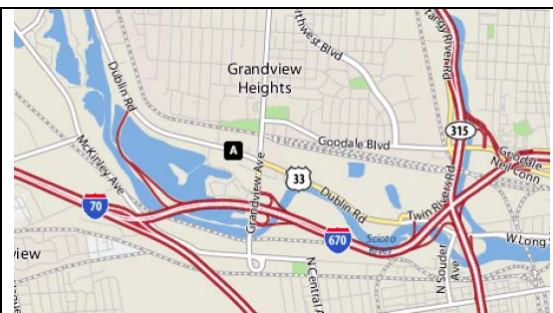
Barley's Smokehouse and Brewpub Ale House

1130 Dublin Road

Columbus, OH 43215

614-485-0BBQ (0227)

5:00-6:00PM	Executive Committee Meeting (open to all members)
6:00-6:45 PM	Reception: Hors d'Oeuvres to be served.
6:45-7:30 PM Dinner	Start with a Side Salad followed by Certified Angus beef brisket carved tableside or Hunter Pale Ale Chicken Breast with Bourbon Baked Beans and Low Country Coleslaw. Leave room for the Tasty Bites Dessert Tray. Your choice of Iced Tea, Lemonade or Coffee. You can personally partake in the Barley's Beer Sampler for an additional \$15 per person.
7:30-8:30 PM Speaker	Dr. Tracy P. Hamilton: <i>Zymurgy: The Art and Science of Making Beer</i>
Cost	\$25 per person members and non-members, \$20 for unemployed members and \$5 per student. Payment will be collected at the door; cash and checks accepted. Remember this is a meal order and must be paid.
Reservations	Please use the voice mail reservations service by calling 614-447-3600 extension 7047. Follow the template for reservations*. Alternatively, please send e-mail to The Columbus Section at the following e-mail address: acscols@cas.org
*Voice Mail/E-Mail Reservations Template	<ul style="list-style-type: none"> • First and last name: Please spell last name. • Membership category: member, retired, emeritus, unemployed, student, non-member, other. • Employer. • Your choice of entrée: Certified Angus beef brisket or Hunter Pale Ale Chicken Breast • Your phone number, in case we need to contact you. • If you intend to attend the Executive Committee meeting, please state so to allow early entry.
Reservation Deadline	5:00 PM, Friday, March 14, 2008
Program Contact	Ronald Mitchum, 614-873-0710, ronaldmitchum@core.com
Directions	 Barley's Smokehouse & Brewpub Ale House No. 2 1130 Dublin Road Columbus, Ohio 43215 614-485-0BBQ (0227) <i>Home of Award Winning Microbrew & Barbecue!</i>



- Follow old Dublin Rd. (US 33) out of downtown Columbus.
- Barley's is on the right (north side of the road) just past Grandview Avenue.
- Please sign-in at ACS Hospitality table.

ABOUT THE TOPIC

Zymurgy: The Art and Science of Making Beer

The seminar covers both the practical aspects of brewing (how to) and the chemistry of brewing. After a brief introduction of the history of beer, the steps of the process are outlined. The first step that is required is the malting of grain. This is a complex process that even breweries do not perform themselves, leaving to specialized malting companies. The second step is mashing. This is accomplished by steeping the grain (which is crushed to allow access of the hot water to the inside, but not powdered so that intact grain husks can act as a filter) in hot water. The influence of temperature and pH on the final product is discussed. The third step is lautering (sparging). Lautering is separation of the sugar solution from the grain. Temperature, viscosity from complex carbohydrates, and fluid dynamics are important variables to control. The fourth step is the boil, which serves several purposes: 1) Sterilization, 2) extracting the bittering compounds from hops (flowers containing bitter olefinic acids that balance the sweetness of beer) and isomerizing the olefinic acids, 3) precipitation of excess protein, 4) browning reactions (Maillard - linking of amino acid and sugars) and 5) removal of excess water. The hot liquid (called wort) is cooled, and the final step (fermentation) is initiated. A discussion of important compounds in the final product is the final part of the talk. A side by side comparison of a homebrew or two with a commercial example may be possible after the talk.

ABOUT THE SPEAKER

Dr. Tracy P. Hamilton

The University of Alabama at Birmingham



Dr. Tracy Hamilton received his B.S. Degree from the University of Arkansas at Little Rock in 1980. After two years of graduate study and one year in a consulting laboratory, he worked with Peter Pulay in quantum chemistry at the University of Arkansas in Fayetteville, obtaining his Ph.D. in 1987. He then enjoyed a four-year stint doing further research in quantum chemistry with Henry F. Schaefer III at the University of Georgia. Dr. Hamilton joined the Department of Chemistry at UAB in 1991.



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SECTION MEMBERS CONDUCT MERIT BADGE COURSES

By Priscilla Ratliff

On Saturday, February 2, 2008 seven Columbus Section members, **Ed Badger, Gary Schoening, Jack Frost, Roman Loza, Anjia Hsu, Mike Gould, and Adam Scheuer**, along with nine other scientists and eighteen adult leaders presented courses for two Boy Scout Merit badges at the Ashland Inc laboratories in Dublin, Ohio. Forty-one Scouts from the Simon Kenton Council of the Boy Scouts of America participated in the event, with 33 of them or 80% completing all the requirements for both a Composite Merit Badge and a Chemistry Merit Badge that day. The program covered safety training including a discussion of Material Safety Data Sheets, metals plating, separation science, composite lay-up of model rockets and a guided tour of the Ashland laboratory facilities. Requirements for the merit badges also include reading and home work activities as well as observing the demonstrations and hands-on experiments in the laboratories. With seventy-five people in attendance the Merit Badge Day was considered extremely successful. Thanks go to **Ashland Inc** for providing the laboratory facilities, consumables used in the experiments, and lunch for all.

Welcome New Members!

By George Noethlich

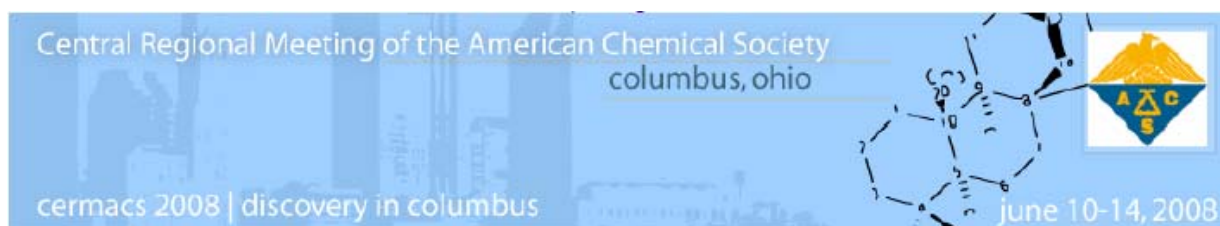
Please join us in welcoming the following new members who have joined the Section recently. The Columbus Section cordially invites new members to our monthly meetings. The Section will pay for new members' meals the first time they attend a meeting.

ALEX WOO
ANNE-SOPHIE M WAVREILLE
BERNARD T FRENCH
BRIAN JONES
CHARLES NIDER
DAISABURO MATSUURA
ERIC S REESE
HAOJIE ZHENG
IK BUM KIM
JAMIE D GRAHAM
JESSICA A ZOLLER
JOHN ONTIVEROS
JOSHUA A ASHLEY
KRISHNA M BOBBA
M IBBA
MOLLA M ENDESHAW
RANDAL DANIEL KING
RUARAIHD D MCINTOSH
SUSAN K BROWN
WARD HOWARD LUTZ
WINSTON GO

ANDREW S PETIT
ANTHONY S SARBAUGH
BRENDA SUE VONDERWELL
CARLA M COUNCELLER
CHRISTINE E LEMON
DAWN DEOJAY
ERIN N SHARP
HASSAN AIT HADDOU
JAMES FUCHS
JASON R RADER
JIASHENG CAO
JONATHAN E CLARK
JUSTIN G MCMULLEN
KRISTIE L NICOLSI
MARTINA BERTSCH
MONTE J EDWARDS
ROBERT J BYRON
SANDEEP KUMAR
THOMAS JOSEPH WEATHERBY
WELJUN WANG
YANYAN HAO

ANIRBAN DAS
BECCA WEINSTEIN
BRENDA WRAY
CHAD E WISSINGER
CONRAD WILLIAM DEFIEBRE
DEIRDRE ZWILLING
FRANK M PALMISANO
HONG TIAN
JAMES R SAWYER
JEN-CHIEH WU
JOHN FARRELL SMITH
JOSE A CABRAL
KENNETH STRAUSBAUGH
LARRY GWIN
MATTHEW P DEMATTEO
OZAN KARALTI
ROGER L BRUECKNER
SRIKANTH SHIVAKUMAR
VIVEKANAND SHETE
WILLIAM R MCGOVERN
YOUNG-WON CHIN





2008 CENTRAL REGIONAL ACS MEETING (CERMACS 2008) COMES TO COLUMBUS

The 2008 meeting of the Central Region of the American Chemical Society will be held June 10-14, 2008 in Columbus, sponsored by The Ohio State University Chemistry Department and the Columbus Section of ACS. Please mark your calendars and contact **Jimmy Cowan**, cowan@chemistry.ohio-state.edu, if you would like to help organize the meeting. Additional information about the meeting can be found online at www.cermacs2008.org/site/

CALL FOR PAPERS: 2008 CENTRAL REGIONAL ACS MEETING

The 40th Central Regional Meeting (CERMACS 2008) will be held June 10-14, in Columbus, OH. The abstracts program is now open for submission of papers. **Deadline for submission of abstracts is April 1, 2008.** Please access the meeting website, www.cermacs2008.org/, to submit abstracts and to monitor meeting updates.

CERMACS 2008 will convene at the Hyatt Regency, Downtown Columbus, next to the Columbus Convention Center, and will be hosted by the ACS Columbus Section. The venue is conveniently located in the restored section of Downtown Columbus, with easy access to the Arena District and the Short North areas, which feature a variety of unique restaurants and shops. The Hyatt Regency location also offers easy access to sites of interest, including The Ohio State University, The Columbus Museum of Art, and easy walking to The Ohio Theatre, parks, and weekend street festivals. For complete information, visit www.experiencecolumbus.com.

CERMACS 2008 will open Tuesday afternoon with a reception and Sci-Mix at COSI, the hands-on science center, www.cosi.org. Attendees will be able to tour the center. Details will be available on the CERMACS website.

Technical programming will include sessions on advances in green chemistry; homogeneous catalysis; membrane-active peptides and lipid recognition; protein engineering and design; theoretical modeling of solvation: methods and applications; chemistry of supramolecules and assemblies; biomolecular solid-state NMR spectroscopy; nanoscale materials chemistry; alternative energy technologies: chemistry, chemical engineering and environment; and plastics and polymers.

Also planned are programs in the areas of high school and college chemistry: including the NSF Research Experiences to Enhance Learning (REEL) Program; Women in Science Symposium; Forum on Underrepresented Minorities in Chemistry; and Regional Awards Banquet and Recognition Event.

Workshops being planned include: ACS Leadership Training Program on Innovation and on Involving Volunteers; ACS Career Services; and workshops related to Laboratory Safety.

An exposition of scientific products and services is planned and vendors are invited to participate. Interested persons should contact cermacs2008@chemistry.ohio-state.edu for details, or visit the exposition link at <http://www.cermacs2008.org/>.

For further information, please contact us:

Program: **Claudia Turro**, turro@chemistry.ohio-state.edu, 614-292-6708

Exposition: **Sherry Hemmingsen**, sherry.hemmingsen@varianinc.com, 614-264-4660



2008 COLUMBUS SECTION OFFICERS AND COMMITTEE CHAIRS

Compiled by Maria Rosenthal

Executive Committee	Chair	Ronald Mitchum	ronaldmitchum@core.com	
	Chair-Elect	Priscilla Ratliff	pratliff@earthlink.net	
	Immediate Past Chair	John Long	jrlong@gfschemicals.com	
	Secretary	Carl Merhar	cmerhar@cas.org	
	Treasurer	Rosemary Loza	rloza@columbus.rr.com	
	Treasurer-Elect	Andrea Arnett	andreaannarnett@yahoo.com	
Councilors		Theresa Huston	thuston@cas.org	
		Maria Rosenthal	mrosenthal@cas.org	
		Jeff Trent	jtrent@cscs.edu	
Alternate Councilors		Anton Heyns	aheyns@cas.org	
		Don Songstad	dsongstad@cas.org	
		Virginia Songstad	songstadva@aol.com	
Committee Chairs	ACS Communications	Maria Rosenthal	mrosenthal@cas.org	
	Archives	Steven Rosenthal	srosenthal@cas.org	
	Bylaws and Statutory Agent	Steven Rosenthal	srosenthal@cas.org	
	Chemistry Olympiad	Cynthia Hummel	chummel@worthington.k12.oh.us	
	Columbus Section Award	Lewis Hogarth	hogarthl@ohiodominican.edu	
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	Editor, <i>The Chemical Record</i>	George Greene	george.greene@abbott.com	
	Electronic Communications	John Todd	jtodd@cas.org	
	Reservations	Steven Watkins	swatkins@cas.org	
	Webmaster	Stephen A. Renner	srenner@cas.org sarenner@columbus.rr.com	
	Web Design/Update	Jianyong Zhu	jianyong_zhu@yahoo.com	
	Education		Ted Klupinski	tpklist-chem@yahoo.com
			Karen Irving	irving.8@osu.edu
	Fifty-Year Member Coordinator	Wendy Reichenbach	wreichenbach@cas.org	
	Finance	Fred Costaschuk	fredcostas@yahoo.com	
	High School Chemistry Teachers Group	Jeff Bracken	bracken5@columbus.rr.com	
	Hospitality	Gordon Renkes	grenkes@chemistry.ohio-state.edu	
	Intersociety Activities	Jerry Boone	614-891-4126	
	Kids and Chemistry	Jeff Trent	jtrent@cscs.edu	
	Mentoring/Minority Affairs	Open Position		
	Membership	George Noethlich	gnoethlich@wowway.com	
	National Chemistry Week	John Blaha	jblaha@cscs.edu	
	Nominations	Julia Moniaci	jmoniaci@kforce.com	
	Patterson-Crane Award	Open Position		
	Project SEED	Open Position		
	CERMACS 2008			
Regional Meeting General Chair	Jimmy Cowan	cowan@chemistry.ohio-state.edu		



2008 COLUMBUS SECTION OFFICERS AND COMMITTEE CHAIRS

Compiled by Maria Rosenthal

Silver Circle	Tom Weeks	tomweeks@aol.com
State and Local Government Affairs	Manfred Luttinger	luttinger@battelle.org
State Science Day Coordinator	Robert Kroshefsky	bobkro@urec.net
Tellers Committee	Norman Rearick	normrearick@earthlink.net
Younger Chemists Committee Chair	Andrea Arnett	andreaannarnett@yahoo.com
	Julia Moniaci	jmoniaci@kforce.com

The Executive Committee comprises the Chair, Chair-Elect, Immediate Past Chair, Secretary, Treasurer, Treasurer-Elect, Councilors (3), and Alternate Councilors (3). A quorum, required in order to transact business, constitutes seven of the committee members.

THE 12TH ANNUAL GREEN CHEMISTRY & ENGINEERING CONFERENCE

From the ACS Website

Don't miss your chance to be part of the premier event of the year for chemists and engineers interested in green and sustainable innovation! The 12th Annual Green Chemistry & Engineering Conference will feature presentations across the range of topics in the field, with session tracks including analytical methods and technologies, bio-based materials and processes, catalysis, education and outreach, environmental decision making and metrics, new materials, process design, renewable chemical feedstocks, renewable fuels, solvents and solvent systems, and synthesis.

This year's conference will be held June 24-26, 2008 at the Capital Hilton, in Washington, DC. The conference is organized each year by the American Chemical Society Green Chemistry Institute with the active involvement of the U.S. Environmental Protection Agency and other federal government agencies, industry, academia, and other professional societies.

Abstract submission has closed. For more information about the program, please contact greenchemistry2008@acs.org. Keynote Speakers are now confirmed:

- Tuesday, June 24 - Dr. Skip Volante, Vice President, Process Research, Merck & Co. Inc.
- Wednesday, June 25 - Dr. Theo Colborn, President, The Endocrine Disruption Exchange (TEDX)
- Thursday, June 26 - Dr. Steven Chu, Director of the Lawrence Berkeley National Laboratory

Luncheon Speaker:

- Wednesday, June 25 - Dr. Bill Banholzer, Chief Technology Officer, The Dow Chemical Company

Please visit the meeting's [website](#) for additional details.

COLUMBUS SECTION ACS CALENDAR OF EVENTS

2008	Month	Date	Day	Location	Event
2008	March	15	Fri		Deadline for reservations for March, 2008 Section Meeting.
2008	March	20	Thu	TBA	Monthly Section Meeting: Dr. Tracy Hamilton , ACS Tour Speaker, <i>Zymurgy: Art and Science of Making Beer</i> .
2008	April	6-10	Sun – Thu	New Orleans	Spring 2008 ACS National Meeting and Exposition. See ACS website, www.acs.org , for details.
2008	April	11-13	Fri – Sun	University of Toledo	Ohio Academy of Science annual meeting; see www.ohiosci.org for details.
2008	April	22	Tue	Here, There, Everywhere!	Chemists Celebrate Earth Day. Stay tuned for announcements of local activities.
2008	April	29	Tue	TBA	Monthly Section Meeting
2008	May	10	Sat	French Field House and St. John Arena, OSU	State Science Day. Volunteers are DESPERATELY needed to serve as judges; contact Bob Kroshefsky, bobkro@urec.net .
2008	May	20	Tue	Ohio Dominican University	Monthly Section Meeting and Columbus Section Award presentation



COLUMBUS SECTION ACS CALENDAR OF EVENTS

2008	June	10-14	Mon -- Fri	Hyatt Regency Hotel, Columbus	 <p>CERM 2008 Central Regional ACS Meeting, sponsored by Columbus Section and The Ohio State University. Contact Jimmy Cowan, cowan@chemistry.ohio-state.edu for more information</p>
2008	June	24-26	Tue -- Thu	Washington, DC	12th Annual Green Chemistry & Engineering Conference
2008	August	17-21	Sun -- Thu	Philadelphia	Fall 2008 ACS National Meeting and Exposition. See ACS website, www.acs.org , for details.
2008	October	19-25	Sat -- Sun	Here, There, Everywhere!	National Chemistry Week. <i>Having a Ball with Chemistry (The Chemistry of Sports.)</i>

HELP WANTED

Data Analysis Technologies, Inc. is seeking applicants for the following positions:

- Chemist:** Seeking an experienced analytical chemist to be a team member in our Dioxin Analysis Area. High Resolution MS experience a plus.
- Chemist:** Must have at least 2 years prior laboratory experience. Inorganic ICP/AA experience a plus. BS/BA degree in chemistry or allied field.
- Inside Sales Associate:** The position is for an inside sales associate. Previous sales and marketing experience servicing a client base is a plus.

Resumes to: datlab@infinet.com or Data Analysis Technologies, Inc., P.O. Box 3131, Dublin, OH 43016

DAT is an Equal Employment Opportunity/Affirmative Action/Immigration Reform and Control Act/Americans with Disabilities Act Employer.

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ABOUT ACS

The American Chemical Society is a self-governed individual membership organization that comprises more than 158,000 members at all degree levels and in all fields of chemistry. The organization provides a broad range of opportunities for peer interaction and career development, regardless of professional or scientific interests. The programs and activities conducted by ACS today are the products of a tradition of excellence in meeting member needs that dates from the Society's founding in 1876.

ABOUT THE CHEMICAL RECORD

The Chemical Record, official newsletter of the Columbus Section of the American Chemical Society, Inc., is published monthly, February-May and September-December (eight issues per year.) Opinions expressed by editors or contributors do not necessarily represent the official position of the Columbus Section or of the editorial staff. We welcome your contributions to your *Chemical Record*. Please submit them via postal or electronic mail to George Greene, PO Box 360941, Columbus, Ohio 43236-0941, george.greene@abbott.com. Electronic mail contributions should be in MS Word file attachments (preferred) or plain-text messages. When preparing electronic documents, please remember that you are no longer using the old Remington typewriter so you do not need to add a carriage return at the end of each line. *Thank you very much!*

CHANGE OF ADDRESS

Changes in postal or e-mail address should be reported to the Membership Chair, **George Noethlich**, 2740 Bella Via Avenue, Columbus OH 43231-2305, e-mail gnoethlich@wowway.com. George will forward the change-of-address information to ACS Headquarters.

ADVERTISING RATES

Advertising rates for *The Chemical Record* are as follows (per single insertion): Full Page, \$250; Half-page, \$150; Quarter Page, \$120; Eighth Page: \$60; Business Card, \$50. Discounts: 5% for four insertions or 10% for eight insertions during a calendar year. There is no charge for "help wanted" ads.

SECTION E-MAIL ROUTING

Please send items for distribution to the Section e-mail list to **Stephen Renner** (srenner@cas.org) and **Maria Rosenthal** (mrosentha@cas.org). Maria and Stephen will perform any necessary formatting then they will forward the message to **John Todd**, Electronic Communications Coordinator, for distribution. If you would like to be added to the e-mail distribution list, please contact John Todd (jtodd@cas.org)



THE CHEMICAL RECORD

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