

# THE Central Arkansas



## CHEMIST

The Newsletter of the Central Arkansas Local Section of the American Chemical Society

February, 2003

### General Meeting

Monday, February 3

Location: Center for Toxicology and  
Environmental Health, L.L.C.

5:00 p.m. Dinner with Speaker  
Benihana Steakhouse Restaurant  
(North Little Rock, Riverfront  
Hilton)

7:30 p.m. Program  
Dr. Stanley Gross  
"Crisis in Perception of Chemical  
Health Risks"

**To obtain driving directions, visit  
[membership.acs.org/c/centralarkansas](http://membership.acs.org/c/centralarkansas)**

For our February meeting, we welcome Dr. Stanley Gross from the United States Environmental Protection Agency.

### CRISIS IN PERCEPTION OF CHEMICAL HEALTH RISKS

Today a large number of commercial chemicals are used in technologically advanced countries. The use of chemicals has been developed since antiquity and has been responsible for tremendous improvement in health and the quality of life. In the past century, many laws have been passed which

regulate these chemicals. However, there is a major public concern that the thousands of chemicals used in society are causing us major harm, including cancer, birth defects and genetic alterations. This concern was recently expressed by a hard hitting commentary by the journalist, Bill Moyers, during a recent program on public television.

This talk focuses on the nature of the concerns that many have for the chemicals that support our lives. It reflects on the process that federal regulations require to help provide safe uses of chemicals -- for occupational safety, safe pharmaceuticals, environmental contaminants and the control of other commercially important chemicals.

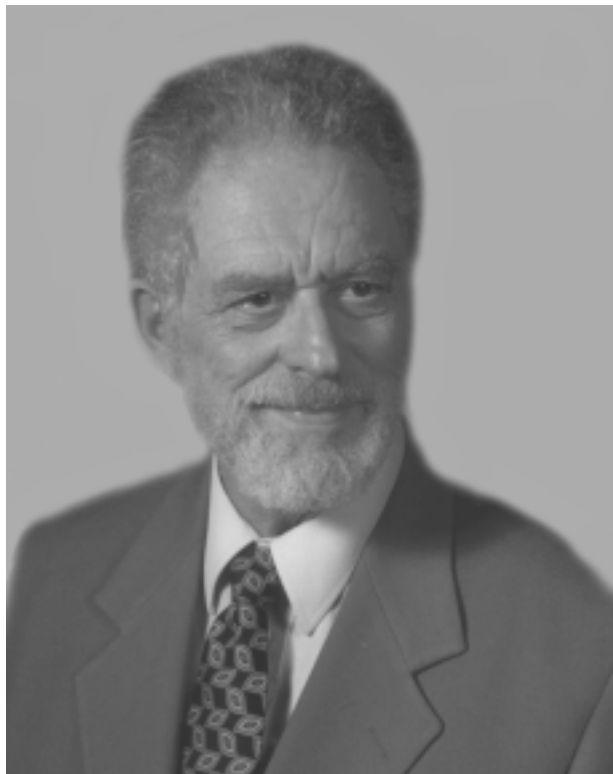
This talk focuses on the fact that much of the toxicity testing is done at high concentrations, in animal models and *in vitro* laboratory studies that have no direct relationship to the effects of chemicals used under normal low-level conditions. Many adverse effects attributed to these chemicals are based on accidental and mis-use applications. These incidents are used by the media to misrepresent the information concerning acceptable low-level exposures for normal use conditions.

A number of precautions are recommended in assessing mis-information by the media and scientist hype about chemicals.

### Speaker's Biographical Sketch

Dr. Gross is a senior regulatory toxicologist/industrial hygienist in the Office of Pesticide Programs (OPP) of the U.S. Environmental Protection Agency (EPA) in Washington, DC. He has 50 years experience in

science with formal training in chemistry, biochemistry, toxicology and medicine.



Dr. Gross has been in the government for 23 years, 19 years as a pesticide toxicologist in the Office of Pesticide Programs, where he served as an inhalation toxicology specialist for OPP, EPA, the Inter-Agency Regulatory Liaisons Group (IRLG) and the International Organization Economic Cooperation and Development (OECD).

Dr. Gross has certifications in toxicology from the American Board of Toxicology and American Board of Industrial Hygiene (AIHA) and is also board certified by the American College of Forensic Examiners. Dr. Gross has served on various national and international committees -- EPA, IRLG, and AIHA's Toxicology and International Affairs Committees. He also chaired the AIHA Subcommittee on Multiple Chemical Sensitivities (MCS).

He has over 60 publication, book chapters, and presentations on research in the human body burden of trace metals (primarily lead and cadmium); automated information systems; pesticide toxicity; and, regulatory inhalation toxicity testing requirements.

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## Looking Ahead

March 10 "Sensors for Space  
Exploration"  
Ed Wilson, Harding University

April 15 Awards Banquet, UALR

Ever at a loss as to what's going on in the section?  
Simply visit the section's website:

<http://membership.acs.org/c/centralarkansas>

You'll find the section's meeting schedule, announcements, and information about services provided by the section, along with other useful links.

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## Local Section News

The Central Arkansas Local Section held its officer elections for 2003 from November 25 to December 9. The results were as follows.

Chair-Elect: Cheryl Lichti  
Secretary: Marty Perry  
Treasurer: Marian Douglas  
Councilor: Ed Wilson  
Alternate Councilor: Marty Perry

Chair for 2003: Cindy Moran.

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## National News

### Chemjobs Launches Feb. 10, 2003

*Chemical & Engineering News* Classifieds & Careers Online (Chemjobs) will launch on February 10, 2003. This new "one-stop career shop" combines the features of Jobspectrum.org—for example, resume posting—with the C&EN online classified ads to provide career resources for both job-seekers and employers. ACS members will be able to view the most recent C&EN classified ads

that appeared in the print version of the magazine; non-members will be able to view them after two weeks. Chemjobs will be the prime site for “quality jobs and quality chemists” to find each other. Chemjobs will also have an archive of useful career resource information and articles from C&EN and a direct link to ACS Department of Career Services. Stay tuned and log on Feb. 10: <http://www.cen-chemjobs.org>

## 2003-2004 ACS ProSpectives Conferences

ACS ProSpectives is a series of small conferences for industry scientists that examine a field's consequential topics through presentations by its foremost researchers. For more information, go to [www.acsprospectives.org](http://www.acsprospectives.org), or call 202-872-6286.

### 2003 Conferences

Process Chemistry in the Pharmaceutical Industry  
Kumar Gadamasetti, X-MINE; Mike Martinelli, Eli Lilly  
Condado Plaza Hotel, San Juan, Puerto Rico  
February 2-5, 2003

Polymorphism in Crystals: Fundamentals, Prediction, and Industrial Practice  
*Robin Rogers*, The University of Alabama; *Allan Myerson*, Illinois Institute of Technology; *Susan Reutzel-Edens*, Eli Lilly; *Roger J. Davey*, UMIST (United Kingdom)  
Saddlebrook Resort, Tampa, Florida  
February 23-26, 2003

Leading experts in polymorph characterization and prediction will present the state-of-the-art in the often-misunderstood field of crystalline polymorphism, with an emphasis on industrial applications and practice.  
Catalysis in Modern Organic Synthesis  
*Stephen Buchwald*, MIT; *Gregory Fu*, MIT; *Eric Jacobsen*, Harvard  
Cambridge Marriott, Cambridge, MA  
March 2-5, 2003

Catalytic methodologies for organic synthesis, with a special emphasis on technologies with applications in pharmaceutical science.  
ADMET in the 21st Century: A Comprehensive Review of the Technology and Strategic Applications  
*Rod Cole*, Millennium Pharmaceuticals; *Tim Olah*, Bristol-Myers Squibb  
Don Cesar Hotel, St. Petersburg, FL  
May 4-6, 2003

Combinatorial Chemistry  
Anthony Czarnik, Sensors for Medicine and Science, Inc; Michael Organ, York University, Toronto  
Lansdowne Conference Center  
September 21-24, 2003

Integrating Proteomics into Systems Biology  
*Ruth Van Bogelen*, Pfizer; *Eric Neumann*, Beyond Genomics  
Lansdowne Conference Center  
November 9-12, 2003

### 2004 Conference

Bioinformatics (tentative)  
*Greg Stephanopoulos*, MIT; *Adam Arkin*, Berkeley; *John Quackenbush*, The Institute for Genomic Research  
Date and Place to be determined

## “Jeopardy” from chemistry.org – Part II

Feature: Molecule of the Week (MOTW)

**Jeopardy Answer #1:** This MOTW, a simple sugar, is the primary source of energy for all living creatures and is featured in a chemistry.org article on a new diagnostic technology for insulin-dependent diabetics.

*Jeopardy Question #1: What is Glucose?*

**Jeopardy Answer #2:** This MOTW is an artificial tanning agent used in sunless tanning preparations. It can be prepared from glycerol by the bacterium *Acetobacter*.

*Jeopardy Question #2: What is Dihydroxyacetone?*

**Jeopardy Answer #3:** The synthesis of this MOTW, an organometallic iron complex, has become a very popular experiment for inorganic laboratory courses. It is used as a fuel additive and a catalyst, but it also has current and potential biomedical, nanotechnology, and electronics applications.

*Jeopardy Question #3: What is **Ferrocene**?*

**Jeopardy Answer #4:** This MOTW is a macrocyclic lactone antibiotic produced by a microorganism found in Easter Island's soil. This remarkable molecule was approved by the FDA for use as an immunosuppressant in 1999, and was recently used to trigger protein splicing.

*Jeopardy Question #4: What is **Rapamycin**?*

To learn more about these molecules or any archived Molecule of the Week, visit [chemistry.org](http://chemistry.org) (<http://chemistry.org>). If you have questions or suggestions concerning the Molecule of the Week feature, please e-mail us at [webmaster@acs.org](mailto:webmaster@acs.org) or contact us at [chemistry.org](http://chemistry.org), American Chemical Society, 1155 16<sup>th</sup> Street, NW, Washington, DC 20036; Phone: 202-872-4600; Fax: 202-776-8258

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## Perspective

*I don't measure a man's success by how high he climbs but how high he bounces when he hits bottom. --Gen. George S. Patton*



If you have an article or job posting that you would like to have considered for publication in our newsletter, send it to [perrym@obu.edu](mailto:perrym@obu.edu) for review.

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The *Central Arkansas Chemist* is published as needed by the Central Arkansas Local Section of the American Chemical Society. Section Chair, Cindy Moran, Arkansas State Crime Laboratory, 501-227-5747, [cindy.moran@ascl.state.ar.us](mailto:cindy.moran@ascl.state.ar.us); Chair-Elect, Cheryl Lichti, University of Arkansas for Medical Sciences, 501-526-5978, [lichticheryl@uams.edu](mailto:lichticheryl@uams.edu). Address all correspondence to the Section Secretary, Marty Perry, Ouachita Baptist University, 870-245-5217, [perrym@obu.edu](mailto:perrym@obu.edu). Newsletter contributions should be sent directly to the Section Secretary in electronic form. The Central Arkansas Local Section Web site is <http://membership.acs.org/c/centralarkansas>

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