



Vol. 82 (3) March 2006

ISOTOPICS

The Cleveland Section of the American Chemical Society

On Deck:

Wednesday, April 19

Awards Night

Jesse Bernstein

Hawken School

*Discrepant Events and Other
Chemical Demonstrations*

NASA Glenn Research Center

Open only to US citizens – All attendees
must register by 5 pm April 12

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http://www.csuohio.edu/cleveland_acs/

March Meeting Notice

Meeting-in-Miniature

Wednesday, March 15, 2006

Cleveland State University

Main Classroom Building and University Center Atrium

3:00 pm	Technical Sessions (Main Classroom Bldg)
5:00 pm	Plenary Address – Thomas Holme (Main Classroom 101)
6:00 pm	Social Hour and Poster Session
7:00 pm	Dinner (University Center Atrium) followed by the Awards Presentation

Chemistry Education Research:

Measurement of Learning in Chemistry

Thomas Holme, ACS Examinations Institute

As has been true historically for the chemical sciences, the ability to make better measurements of how students learn chemistry will play a critical role in the development of chemistry education over the next decade or more. Chemical education research has begun to elucidate how learning occurs and the ACS Exams Institute, located at UW-Milwaukee, is now working to devise assessment materials that will better inform educators about the learning that takes place in their courses. This talk will highlight both the research that points to the importance of new measurements and the early stages of development for new materials that will (a) be more efficient and accurate in their measurement of student knowledge; (b) be more flexible about content knowledge to be measured; or (c) measure types of learning that previously could not be measured with accuracy.

DINNER RESERVATIONS REQUIRED: Please RSVP by contacting Zedeara Diaz, by phone at 216-368-3621 or by e-mail at zcd@case.edu by **5:00 PM on Friday, March 10**. (For phone reservations, please clearly spell your last name and leave a return phone number.) Cost of the dinner is \$20 for members & guests and \$10 for students. Checks made out to "Cleveland ACS" are greatly appreciated. Menu includes: hot buffet featuring lemon chicken and lasagna bianco.

In order to provide an accurate count to the catering company, student speakers who are staying for their free dinner MUST make a dinner reservation as outlined above.

Directions to Cleveland State University

From the South: Follow I-77 north to the East 22nd/East 14th Street exit (#162B) to East 22nd Street. Turn left onto East 22nd Street and drive several blocks to Euclid Avenue. Continue straight across Euclid to park in the CSU parking structure. The University Center is located on the north side of Euclid, on the corner of East 21st. The Main Classroom Building is located on the corner of Euclid and East 22nd Streets.

From the East: Follow I-90 west to the Chester Avenue/CSU exit (#173B). Turn left onto East 24th Street and left at the light onto Chester. Take Chester to East 30th Street, turn right. After one block turn right onto Euclid Avenue and proceed west across the bridge. Turn right at East 22nd to park in the CSU parking structure. The University Center is located on the north side of Euclid, on the corner of East 21st. The Main Classroom Building is located on the corner of Euclid and East 22nd Streets.

From the West: Follow I-90 east to the East 22nd Street exit (#172C). Turn left onto East 22nd Street; drive several blocks to Euclid Avenue. Continue straight across Euclid to park in the CSU parking structure. The University Center is located on the north side of Euclid, on the corner of East 21st. The Main Classroom Building is located on the corner of Euclid and East 22nd Streets.

Maps and Additional Directions can be found at:
<http://www.csuohio.edu/clevemap.html>
http://www.csuohio.edu/campus_map_tour/index.html

Speaker Biography

Thomas Holme received a B.S. in Chemistry and Physics from Loras College in Dubuque, IA in 1983 and a PhD in Chemistry from Rice University in 1987. In 1990 he was Fulbright Scholar in Lusaka, Zambia. He has been Director of General Chemistry at UWM since 1994 and was promoted to Full Professor in 2002. He has also been the faculty advisor to the Student Affiliate group at UWM during that time. Tom has research interests in computational chemistry with current projects emphasizing the reactions of boranes in physiological systems. He is also active in curriculum development and teaching practices,

publishing regularly in The Journal of Chemical Education and other education related venues. He is currently serving as the Director of the ACS Division of Chemical Education Examinations Institute, a position he assumed in July 2002. His interest in assessment began in 1996 when he served as the chair of the committee that wrote the standardized exam for Chemistry in Context for the Institute. His chemistry outreach efforts were recognized by the American Chemical Society in 1999 when he received the Helen Free Award for Public Outreach. Tom is listed in Who's Who in America, Who's Who in Science and Engineering and Who's Who in American Education.

Meeting-in-Miniature – March 15, 2006 FINAL CALL FOR PAPERS

The annual Meeting-in-Miniature will be held on March 15, 2006 at Cleveland State University. The afternoon session will consist of oral presentations. A poster session will be presented during the social hour before dinner. Abstracts for presentations and posters (please indicate which) can be submitted by *email only* to Dr. David W. Ball, program chair, at d.ball@csuohio.edu. Submissions will be accepted after the original deadline of February 28, 2006. Please submit abstract as a **Microsoft Word document** as we cannot guarantee that any other format can be properly translated. Monetary awards for best undergraduate and graduate student oral presentations will be given, so encourage your students to participate. Questions about paper and poster submissions can be directed to Dr. David W. Ball at d.ball@csuohio.edu or 216-687-2456.

Candidates Needed for 2007 Cleveland Section Offices

The Cleveland Section is seeking candidates to run on the fall election slate for the following offices: Chair-Elect, Treasurer, Director, Councilor, Alternate Councilor, Trustee, and Secretary. Elected officers would begin service in January 2007. Interested parties should contact Ken Street as soon as possible at kenneth.w.street@nasa.gov or 216-433-5032.

2006 Irene H. Heller Award – Final CALL FOR NOMINATIONS

The Cleveland Section of the American Chemical Society annually sponsors an award to recognize an outstanding high school chemistry teacher in the Cleveland Section. The award consists of an honorarium of \$1,000 and a framed certificate. The award is named for Irene Heller of North Olmsted High School in recognition of her contributions as an outstanding high school chemistry teacher and her service to the Cleveland Section. Nominations for the award should be presented to Betty Dabrowski, Magnificat High School, 20770 Hilliard Blvd., Rocky River, OH 44116-3397 by **March 14, 2006**. The nominations should consist of information on the candidate's education, professional experience and activities, awards and honors, offices held and specifics on significant contributions. The letter of nomination should highlight these significant contributions. A detailed Curriculum Vita of the candidate may also be included. Seconding letters are suggested. Nominations should be sponsored by at least one member of the Cleveland Section. The Cleveland Section is geographically confined to the counties of Cuyahoga, Geauga, Lorain, Medina, Huron, and Erie. Nominators of candidates who work outside of these counties may contact the Cleveland Section or the American Chemical Society for more information about High School Chemistry Teacher Awards. Electronic nominations using Word files emailed to edabrows@ix.netcom.com or edabrowski@magnificaths.org will be greatly appreciated. The award will be presented at the April 19, 2006 meeting of the Cleveland Section.

Habitat for Humanity – October 2006

The October 2006 National Chemistry Week theme is "Your Home: It's All Built on Chemistry". Our committee is considering coordinating a Habitat for Humanity event and looks forward to bringing chemists, friends, and family together for a good cause – as well as raising awareness of the importance of chemistry. Before we can commit to organizing a project however, we would like to determine the amount of interest from our ACS members. Please contact Kat Wollyung at katkat@neo.rr.com if you (a)

have experience working with/for HFH and can help organize an event or just give Kat tips on how to do so, or (b) are interested in volunteering for an event on either Sat, Oct. 14th, 21st, or 28th or Nov 4th. For more information about the Greater Cleveland HFH, please visit their local website at <http://www.gchfh.org/Volunteer/Groups.htm>.

SPECIAL NOTICE – ACS Central Regional Meeting

The ACS Central Regional Meeting will be held in Cleveland in 2009. We are currently forming the organization team to carry forward the meeting. The General Meeting Chair is Professor Daniel Scherson of CWRU and the Program Chair is Kenneth Street of NASA. Both Dan and Ken need co-chairs as a next step in the planning process. Other positions will be advertised after the co-chair positions are filled. Anyone interested in applying for the positions of General Meeting co-chair or Program co-chair are encouraged to apply to Dr. Dan Scherson, by (a) post: Department of Chemistry, 10900 Euclid Avenue, Cleveland, OH 44106-7078, (b) phone: 216-368-5186, or (c) email: dxs16@po.cwru.edu.

*Let's make this another exemplary meeting
sponsored by the Cleveland Section!*

Chemistry Olympiad – 2006, 2nd Call

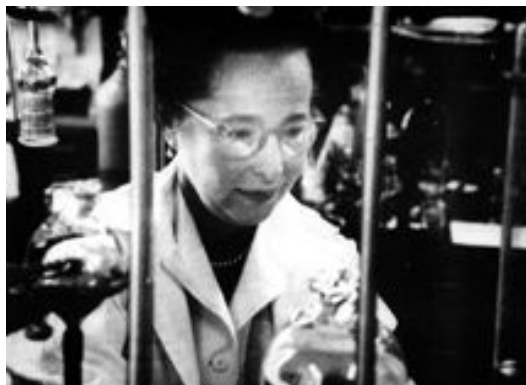
Attention All High School Teachers and Students –
We are pleased to announce our participation in the 2006 U.S. National Chemistry Olympiad (USNCO). This is a multi-tiered competition designed to stimulate and promote achievement in high school chemistry. Students competing in the USNCO are eligible to be selected as members of the United States team for the International Chemistry Olympiad (IChO). The 2006 international event will be held in the Republic of Korea. To prepare for the national event, Cleveland section will conduct the 2006 Preliminary Examination, as recommended by the USNCO, **March 17, 9:00 am to 12:00 pm** at Cleveland State University. Based on their success on the preliminary examination, specified numbers of the top students will be invited to take the USNCO national exam at Cleveland State

University. Following the national examination in late April, twenty of the top chemistry students nationwide are selected to attend a study camp. A team of four finalists and two alternates will be selected to represent the U.S. Would you like your high school chemistry students to participate in the Chemistry Olympiad in 2006? To find additional information regarding USNCO (& to see past tests) please visit the ACS webpage at <http://www.chemistry.org/portal/a/c/s/1/acdisplay.html?DOC=education/student/olympiad.html> OR contact Dr. Reiko Simmons at r.simmons@csuohio.edu.

Name This Scientist

Correctly identify this scientist and you may win a free dinner at a local section meeting. Entries should be submitted to Heather Hargett (hargeth@ccf.org) by 5 pm **March 15**. Alternatively, entries may be submitted via post to the Cleveland Section of the ACS, P.O. Box 681, Amherst, OH 44001 and must be postmarked by **March 15**. A winner will be chosen at random from the correct entries. The winner shall receive a

complimentary dinner at the April meeting. One entry per person, please.



Last month's scientist of the month was Erwin Schrödinger. His great discovery, the fundamental idea of wave mechanics, was made in 1926. For this work, Erwin shared the 1933 Nobel Prize in Physics with Paul Dirac. Chemistry students of all ages have been asking "is it a wave or is it a particle?" ever since. Congratulations to George Benedikt for being selected as last month's winning entry.

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