



Vol. 83 (4) April 2007

# ISOTOPICS

The Cleveland Section of the American Chemical Society

## On Deck:

**Wednesday, May 30**

*Morley Award Winner*

**Dr. Richard Eisenberg**  
*The University of Rochester*

John Carroll University

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**Cleveland Section Web Site:**  
[http://www.csuohio.edu/cleveland\\_acs/](http://www.csuohio.edu/cleveland_acs/)

## April Meeting Notice

### Education/Awards Night

Wednesday, April 18, 2007

Cleveland Skating Club

4:30 pm	Executive Committee Meeting
6:00 pm	Social Half Hour
6:30 pm	Dinner
7:30 pm	After Dinner Talk
8:30 pm	Informal Discussion

### Spectroscopy for Kids (with Mr. Roy G. Biv and Dr. Vib Gyor)

*Dr. Kenneth Street, NASA Glenn Research Center*

The distinguished Roy G. Biv is a spectroscopist – can you say spectroscopituitsst? A spectroscopist deals with the many types of interactions between light and matter. While in his (her) job, these interactions involve complex instruments and often rely on advanced mathematics, physics, and chemistry. However, many of these interactions occur around us every day and are readily observed by us on a daily basis.

In the presentation, we will go from Kindergarten through high school level demonstrations that can be customized for any particular audience level. We will learn interesting acronyms like how to remember the colors of the rainbow and in correct order! We will disperse white light and learn why green is green and red is red. Mr. Biv will then present his famous exhibit of Spectroscopy Art! In closing, Dr. Vib Gyor (Mr. Biv's evil nemesis) will show other exciting things like fluorescence, phosphorescence, and electrify the audience with atomic spectroscopy in a light bulb. There will be a laser safety lecture (must have a safety demo in every good lecture). Vib will also tie light in a knot and make things disappear before your very eyes.

This show is available to local schools, public libraries and virtually anyone interested in teaching the kids something educational that deals with light. **And it's free!** The program is easily modified for both younger and older audiences from kindergarten through high school level chemistry and physics. For additional information, please contact Ken Street at (216) 433-5032 or [kenneth.w.street@nasa.gov](mailto:kenneth.w.street@nasa.gov).

**DINNER RESERVATIONS REQUIRED:** Please RSVP by contacting Dr. Lily Ng, by phone at 216-687-2467 or by e-mail at [l.ng@csuohio.edu](mailto:l.ng@csuohio.edu) by **5 pm on Friday, April 13**. (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. Vegetarian meal requests should be directed to Dr. Lily Ng.

## Directions to Cleveland Skating Club

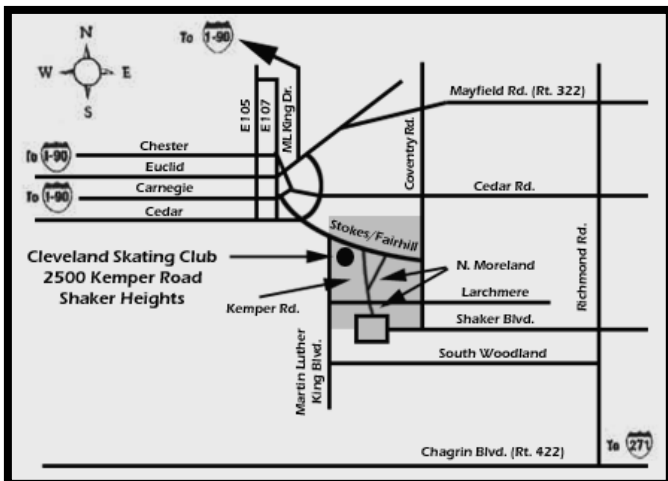
### **From Downtown, West, and Southwest:**

From I-90 east, take Chester or Carnegie to Stokes Boulevard. Turn right on Stokes Blvd. Continue on Stokes Blvd. (Stokes Blvd. becomes Fairhill), past Martin Luther King Blvd. (past light on 124<sup>th</sup>) to the three overhead lights at Kemper. Turn right on Kemper. Cleveland Skating Club is on right hand side, 200 yards from Fairhill.

### **From the East and Southeast:**

Take I-271 to the Chagrin Boulevard exit. Go west on Chagrin to Richmond Road. Go right (north) on Richmond Road to Shaker Boulevard. Go left (west) on Shaker Boulevard to Shaker Square (5.0 miles). Go north from Shaker Square, one block on N. Moreland. Make the half-left turn onto Kemper (passing the BP station on your left). Cleveland Skating Club is 500 yards north on Kemper on your left.

A map and directions can also be found at:  
[www.clevelandskatingclub.org/directions.htm](http://www.clevelandskatingclub.org/directions.htm)



## Speaker Bio

Dr. Kenneth Street received his undergraduate degree in chemistry from the University of Connecticut in 1970. He has also received graduate degrees in analytical chemistry from Cleveland State University in 1973 and a Ph.D. from Wayne State University in 1977. After a postdoctoral position at the University of Cincinnati he held positions at Loyola University of Chicago and Kent State University. Since 1989

he has worked at NASA Glenn Research Center as the Chief of the Chemical Sampling and Analysis Laboratory and currently is a senior scientist in the Tribology and Surface Sciences branch where he performs research on lubricants and runs a micro spectroscopy laboratory. He has authored over 60 technical publications and has presented over 100 papers at scientific meetings. He served for over a decade on the Editorial Board of Analytical Letters and has reviewed manuscripts for many major journals. Ken has received numerous awards from NASA. He currently serves as an officer in the Cleveland Section of the American Chemical Society, The Society for Applied Spectroscopy, and Sigma Xi, The Scientific Research Society. In his spare time he masquerades as Dr. Roy G. Biv and/or Vib Gyor teaching spectroscopy to kids!

## 2007 Morley Medal Recipient

**Congratulations to  
Professor Richard Eisenberg  
Tracy H. Harris Professor of Chemistry  
The University of Rochester**

Dr. Eisenberg has an outstanding record of technical accomplishments in inorganic and organometallic chemistry, in particular his work on mechanistic studies in catalysis and in the photoluminescence of square planar complexes of platinum group elements. In addition he has contributed to the education of chemists through his efforts to build up the inorganic chemistry program at the University of Rochester and has served the chemical community through work in many organizations including: NSF, the Gordon Conferences in Organometallic Chemistry, Chair of the ACS's Inorganic Chemistry Division, and served as Editor-in-Chief of the ACS journal *Inorganic Chemistry*.

**The Morley Lecture is scheduled for May 30, 2007, at John Carroll University. Please mark your calendars and join us for the presentation ceremony.**

## **National Chemistry Week**

National Volunteer Week is April 15-21, so this is a good time to say "**Thanks!**" to all our past volunteers who made NCW 2006 a huge success. It's also a good time to ask for NEW and returning volunteers to join in the planning for NCW 2007, which has a national theme of "The Many Faces of Chemistry". The first planning meeting will be in late April or early May. We will be giving awards to our 2006 contest winners at the April Education/Award Night meeting, so stop on by to ask how you can join in our fun. Don't assume you are too busy; we have volunteer opportunities that only need two hours of your time. Contact Kat Wollyung at [katkat@neo.rr.com](mailto:katkat@neo.rr.com) for more information, and check out our NCW link on the Cleveland ACS website to see our events from last year.

## **Non-Tenure Track Opening - Summer 2007 - Organic Chemistry**

Case Western Reserve University has an immediate opening for a person to teach our sophomore organic chemistry lecture courses (CHEM 223/224) during the summer of 2007. The two summer sessions run continuously from June 4 through August 3. The position requires a Ph.D. and evidence of teaching competence. The position title will be Lecturer or Visiting Professor, commensurate with experience. Applications will be reviewed as soon as they are completed and until the position is filled. Please send CV and have three letters of recommendation sent to Professor John Stuehr (e-mail: [jes6@case.edu](mailto:jes6@case.edu)), Associate Chair, Department of Chemistry, Case Western Reserve University, Cleveland, OH 44106. EO/AA employer.

## **Contact Information – An Important Reminder**

In addition to distributing *Isotopics* by post, the Cleveland Section newsletter is routinely available online at [http://www.csuohio.edu/cleveland\\_acs/](http://www.csuohio.edu/cleveland_acs/) and is e-mailed to our members. The master lists of postal and e-mail addresses are updated monthly using the national ACS registry. Please take a moment to confirm and/or update your

information on the national site (<https://www.chemistry.org/portal/a/c/s/1/home.html>). Also, email filters may prevent our newsletter from reaching your inbox. If you have an email address registered on the national site and have not been getting our electronic communications, check your filter or spam setting. A guide to changing these settings is posted on the Cleveland Section website. Your IT department or Internet service provider may also be able to help. If you experience any problems accessing *Isotopics* by any of these methods, please contact the editor at [daniel.s.tyson@nasa.gov](mailto:daniel.s.tyson@nasa.gov) or 216-433-3187.

## **Expanding *Isotopics***

In an effort to better meet the interests of the various segments of the local section's members, *Isotopics* is working to expand its content. The general areas of interest are education, industry, and community outreach. More specific topics may include:

- Local news and events
  - Universities - grants/awards/honors to local faculty and students
  - Business/industry
  - Professional
  - ACS Local Section news – Committee reports, announcements
- National ACS news and events of local interest (not in C&EN)
- Educational Programs (elem., high, college)
- Community outreach (local events, coming attractions)

We are looking for volunteers to be content providers. We would like to get a pool of 10 to 20 members to be *Isotopics* writers or correspondents. Volunteers would be asked to contribute once or twice a year on a local topic. It is likely that many potential articles are already available in the form of chemistry department announcements, company press releases, award notifications, etc. and can simply be forwarded to *Isotopics*. We are also looking for short essays on a wide spectrum of chemistry related issues, or views and opinions on local education or business events or gatherings.

If you are interested in helping Isotopics to expand its horizons, please contact either John Pendery or Dan Tyson.

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### **51<sup>st</sup> Annual SAS/ACS/AVS May Conference**

Wednesday, May 23<sup>rd</sup> at John Carroll Univ.  
*Free registration & lunch for all students*  
*Cash Awards for best student talks*

#### **Invited Speakers:**

Jerry Mearini, *TeraPhysics*  
High Powered Miniature Backward Wave  
Oscillator and the Potential Impact to THz  
Spectroscopy

Geoffery Landis, *NASA-Glenn*  
Three Years on Mars: the Voyage of Spirit  
and Opportunity

#### **Additional Presentations:**

Laser-Induced Breakdown Spectroscopy  
High Quality Spectra and Improved Spatial  
Resolution: ATR Imaging  
NMR of Natural products  
Environmental Analysis of Ground, Waste and  
Drinking Water by Single Quadrupole GC-MS  
Isolation of Capsaicinoids from Chili Peppers  
Non-hydrolytic Sol-Gel Processing of Transition  
Metal Sulfides  
Applications of ICP-MS  
Whose Oil is it? –Supplier Identification by NMR  
Spectroscopy and Photochemistry of Metaloxide  
Nanostructures  
A High Field NMR-Based Approach to Identify  
Bioactive Compounds in Black Raspberry  
Crystallization Studies of AA'W3O12  
Compounds  
Spectroscopy and Photochemistry of  
Phthalocyanines on Quantum Dots

Spectroscopic Study of the Energy Transfer from  
Quantum Dots to PDT Agents  
Characterization of Poly(styrene-co-allyl alcohol)  
by Multidimensional NMR  
Controlling the Particle Size of Negative Thermal  
Expansion Materials  
The New PHI 5000 VersaProbe XPS Microprobe  
Thermoelectrics: A New Solar Energy Modality?

**Please contact Brian Perry**  
(brian\_perry@lord.com, 814-868-3611, ext 3582)  
if you are interested in presenting.

**Please contact Sara Freeman**  
(freeman@ferro.com, 216-750-6655) if you  
interested in attending the May Conference.

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