



# NEWSLETTER

## Oklahoma Section American Chemical Society

Volume 23 Number 4

<http://oklahoma.sites.acs.org/>

November 2017

Section Meeting  
Thursday 09 Nov 2017

### HIGH TEMPERATURE CHEMISTRY AT NASA AND EAST CENTRAL UNIVERSITY Interesting Projects for Undergraduate Research

Dwight L. Myers  
Department of Chemistry  
East Central University



An important area of chemistry is thermodynamics and materials chemistry, particularly at high temperatures. This presentation will highlight work performed at the NASA Glenn Research Center in Cleveland, Ohio, on research problems related to corrosion in combustion environments, high speed (hypersonic) flight, and space vehicle reentry. The emphasis has always been on high temperature chemistry and thermodynamics of the relevant chemical systems. Chemical sys-

*continued on page 2 with the speaker's biographical sketch. →*

Oklahoma State University  
Edmond Low Library  
Peggy Helmerich Browsing Room  
2nd Floor, East Side  
Stillwater, OK 74078

Park in lot 31



flyer + directions



OSU parking map

6:00–7:00 pm Dinner  
7:00–8:00 pm Presentation

map & info:

<http://geosys.okstate.edu/interactive-maps/campus-map.aspx>

#### Dinner Reservation Information

##### Buffet Menu Catered by the Bad Brad's Bar-B-Q

chicken enchiladas  
salsa rojas, black beans  
Mexican rice, warm tortillas  
seasonal sofrito vegetables  
garden salad, sour cream  
shredded cheese,  
pico de gallo, chips, salsa  
and churros

**Cost**  
\$15 members  
\$5 students

##### RSVP Deadline

Monday 06 Nov 5 pm  
Contact: Smita Mohanty  
[smita.mohanty@okstate.edu](mailto:smita.mohanty@okstate.edu)

*RSVP is NOT required to attend the presentation.*

### ACS Member Publications Benefits and Universal Access

The ACS Member Universal Access Program currently provides online access to any 25 articles from all *ACS Journals*, *ACS eBooks*, and *C&EN Archives*. This number will automatically increase to 50 for all current and new members on January 1, 2018. Even better, this benefit is included with your annual membership. Access is for 48 hours from initial article request. ACS ID required for log-in (see instructions below).

ACS members also enjoy expanded access to over one million articles and book chapters from the most trusted, most cited, most read publications in the chemical and related sciences.

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#### How to use your benefits:

Log-in with your **ACS ID** on the [ACS Publications](http://oklahoma.sites.acs.org/) website.

- Locate your article of interest.
- Click on the PDF or HTML link for the article.



**Note:** Any E-Passport or E-Subscription benefit (if applicable) will be applied prior to your Universal Access benefit.

To view your current publication access balance and history log-in on the ACS Publications website, go to "Your Profile", and select "Member Benefits" option. Access is for 48 hours from initial article request.

## 2017 NCW EVENT AT SMO

The NCW Event at Science Museum Oklahoma was a success. This year it was a one man show, with Michael Ferguson (UCO) entertaining well over 100 visitors including home-school groups. The "Guess the Smell" quiz table and the Gack making table were especially well received.

### OK ACS SECTION ELECTIONS

Ballot in this Newsletter

**Cast Ballots due on or before 5 PM on 09 Nov**

## Councilor's Report

### ACS Actions Against Sci-Hub and ResearchGate

Allen W. Apblett (Oklahoma Section Councilor)

The American Chemical Society, along with several scientific publishers, are taking legal actions against sites that facilitate sharing of scientific articles in violation of copyright law. The publishers are preparing to issue what could be millions of notices to the scientific networking site ResearchGate asking it to remove copyrighted material. The ACS and Elsevier have also sued ResearchGate for copyright infringement.

ResearchGate is a for-profit company that has more than 13 million members and 100 million publications, according to its website. Its funding comes from venture capital investment including investors Bill Gates, Goldman Sachs Investment Partners, and Wellcome Trust. ResearchGate also sells advertisements that appear alongside its content. However, as many as 7 million articles that appear on ResearchGate do so in violation of copyright law, publishers allege. The ACS, estimates that more than 100,000 of its articles are hosted illegally by ResearchGate.

"We have invested heavily in curation and publication processes to get validated, trusted material in a form that scientists can access," says James Milne, ACS's senior vice president for publishing, speaking on behalf of a group of publishers called the Coalition for Responsible Sharing. "We cannot allow ResearchGate to commercialize that material without contributing to the creation enterprise." ResearchGate also alters articles for its business purposes and fails to update them when corrections or retractions are issued, the coalition says.

After two years of trying to work with ResearchGate, the International Association of Scientific Technical and Medical Publishers, of which ACS and Elsevier are members, issued a final proposal to the company on Sept. 16. The agreement would have allowed ResearchGate users to continue uploading documents as they do now. After material was uploaded, an automated system would check to see if the article was licensed to share publicly or privately. To me, this seems like a reasonable system. However, ResearchGate declined the proposal leading the Coalition for Responsible Sharing to issue a press release stating that publishers now have "no other choice" but to issue takedown notices and sue the company. Since ResearchGate is located in Germany, the lawsuits were filed in Europe.

ACS-copyrighted material also appears illegally on internet pirate site Sci-Hub, and ACS appears likely to succeed in a suit against the site, according to a preliminary finding released by a U.S. district court in Alexandria, VA. Magistrate Judge John F. Anderson agreed with ACS that Sci-Hub violated ACS's copyright and trademark protections when it provided free access to stolen journal articles. Anderson recommended that the court take several actions requested by ACS, including ordering internet service providers with a legal relationship with Sci-Hub, such as domain name registries or web hosting services that Sci-Hub pays, to cease facilitating access to Sci-Hub websites. The filing is a recom-

*continued next column →*

*(Speaker—continued from front page)*

tems examined include the silicon-oxygen-hydrogen, chromium-oxygen-hydrogen, and aluminum-oxygen-hydrogen systems. The data are of use in evaluating possible Thermal Barrier Coating (TBC) and Environmental Barrier Coating (EBC) materials for turbine blades in jet engines. Improved fuel efficiency requires higher temperatures of operation, which in turn, requires materials capable of withstanding higher temperatures through many cycles of operation. These and other projects performed at NASA Glenn Research Center have provided the inspiration and starting point for several undergraduate research projects at East Central University. The connections between work at a government laboratory and undergraduate research will be discussed.

#### Dwight L. Myers Biographical Sketch

Dr. Dwight Myers was born in Kansas City, Kansas, and attended Kansas City, Kansas Community College, receiving an Associate's Degree in 1975. He then attended Wichita State University in Wichita, Kansas, receiving a B.S. (1977), and M.S. (1983), both in Chemistry. He also worked two years for Vulcan Materials Company in Wichita. He taught at Friends University for 11 years, taking a sabbatical during which he completed a Ph.D. (1991) at Wichita State in Physical Chemistry. Dr. Myers came to Oklahoma in August of 1993, as an Assistant Professor of Chemistry at East Central University in Ada. He is currently Professor and Department Chair of Chemistry at ECU. His research interests are in the areas of thermodynamics and materials chemistry, particularly high temperature chemistry. During his time at East Central University, Dr. Myers has endeavored to introduce as many students as possible to undergraduate research. His experience in undergraduate research at Wichita State University was invaluable in shaping his graduate and professional life. Numerous students have conducted undergraduate research with him at ECU. Their results have been presented at regional ACS Meetings, at Oklahoma Academy of Science Technical Meetings, and Oklahoma Research Day. Since 1999, he has worked at the NASA Glenn Research Center in Cleveland, Ohio, for ten summers on research problems related to corrosion in combustion environments, high speed (hypersonic) flight, and space vehicle reentry. He has tried to bring some of this exciting research back to East Central University, to provide undergraduate researchers with interesting chemistry projects.

*(councilor's report, continued)*

mendation to Judge Leonie M. Brinkema, who will issue a final ruling, likely within the next few months.

The last time the ACS became embroiled in a lawsuit over copyright and intellectual property, the society lost big-time and had to pay millions in damages to the offending party. This time, at least in the case of ResearchGate, diplomacy was tried. Hopefully things will go better this time.



## CHEMISTRY OLYMPIAD

### 2018 Calendar

- March 1–31 — Local Section Competitions
- April 17–23 — National Exam (exact date TBA)
- Jun 5–20 — Study Camp
- July 19–29 — 50th IChO Bratislava, Slovakia and Prague, Czech Republic

Contact Reza Latifi for more information  
[reza.latifi@okstate.edu](mailto:reza.latifi@okstate.edu) 405.744.4330

*If your school has not participated before please contact Reza so he knows that you are interested and has good contact information.*

## DO YOU HAVE ANY MEMORABILIA FROM THE OKLAHOMA SECTION?

Old Newsletters, Pentasectional Programs, Section meeting announcements, issues of *The Vapor Pressure*, etc.

2019 is the centennial of the Oklahoma Section. We will also be hosting the Pentasectional Meeting in 2019. The 64th Pentasectional Meeting will be our centennial celebration.

Please contact Lloyd Bumm if you have memorabilia to share. [bumm@ou.edu](mailto:bumm@ou.edu)

## • Mark Your Calendars • National Chemistry Week 2018 Oct 21–27

Theme: *Chemistry is Out of This World*

## SOLICITING NOMINATIONS

### Oklahoma Section Awards for Undergraduate Students

- The *Roger Baldwin Graduate Student Award* provides \$500 for students entering graduate school in chemistry or a chemistry related field. The application deadline is May 1st every year.
- The *Terrill Smith Travel Award* is a grant of up to \$600 for travel to present a paper or poster at a national or regional ACS meeting. The application deadline is 4 weeks prior to the meeting start date.

For more information and forms please visit the web site:

<http://oklahoma.sites.acs.org/undergraduateawards.htm>

—Chuck Rice (Awards Committee)



## Oklahoma Chemist Award 2018 Call for Nominations

Five (5) copies of a single nomination should be sent no later than **12 February 2018** to:

Dr. K. Darrell Berlin  
 Chair, Oklahoma Chemist Awards Committee  
 Department of Chemistry  
 Oklahoma State University  
 Stillwater, OK 74078  
 (405) 744-5950  
[kenneth.d.berlin@okstate.edu](mailto:kenneth.d.berlin@okstate.edu)

### Criteria and Guidelines for the Preparation of the Nomination and for Selection of the Recipient

1. A nomination letter for the candidate by a colleague, friend, etc.
2. A complete, up-to-date resume of the candidate.
3. A two-page "highlight" of the candidate's major accomplishments.
4. Five (5) letters of support for the nominee.
  - a) Two (2) letters from colleagues at the candidate's place of employment.
  - b) Three (3) letters from outside the candidate's place of employment.
 Letters from individuals with expertise in the candidate's field are especially welcomed.
5. Special information on the candidate is also solicited, especially as to how the candidate has advanced chemistry in the state of Oklahoma.
6. Candidates may be involved in research or in chemical education within the state.

## 63RD ANNUAL PENTASECTIONAL MEETING

Friday & Saturday 20–21 Apr 2018

**Tulsa University**

**Tulsa, OK**

*Hosted by the Tulsa Section*

### 2017 Oklahoma ACS Section Officers and

#### Standing Committee Chairs

Smita Mohanty	Chair
Allen Applett	Chair Elect
John Michael Ferguson	Immediate Past Chair
Lloyd A. Bumm	Secretary + interim Newsletter ed.
Jason Wickham	Treasurer
Allen Applett	Councilor + Nominations Com.
Nicholas F. Materer	Alternate Councilor
Charles V. Rice	Awards Com.
Reza Latifi	Chemistry Olympiad Com.
John Michael Ferguson	National Chemistry Week Com.
Cheryl Frech	Public Relations
Nicholas F. Materer	Web Master



L. A. Bumm  
Oklahoma Section of the ACS  
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Norman, OK 73019-2061

Nonprofit Organization  
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Norman, OK  
Permit No. 88



OK ACS web  
QR code

## Oklahoma ACS Calendar of Events.

Visit the Oklahoma ACS WWW site for the latest information.

<http://oklahoma.sites.acs.org/>

### CALENDAR OF EVENTS

#### 2017 Dates & Speakers

**Nov 09 (Thu)** OSU

Dwight L. Myers, Department of Chemistry, East Central Univ, Ada, OK  
*High Temperature Chemistry at NASA and East Central University:*  
*Interesting Projects for Undergraduate Research*

#### 2018 Dates & Speakers

**Apr 21 (Sat)** 63rd Pentasectional Meeting

Univ. Tulsa, Tulsa, OK

**Oct (21–23)** MWRM 2018

Ames, IA

**Oct (21–27)** National Chemistry Week

*Chemistry is Out of This World*

**Oct (Sat)** NCW Event at Science Museum Oklahoma

**Nov (07–10)** SWRM 2018

Little Rock, AR

**2019** Oklahoma Section Centennial