



## AMERICAN CHEMICAL SOCIETY

### PERMIAN BASIN SECTION

Newsletter

*Volume 11, Number 1*

*April, 2018*



### Letter from the Chair

The year started off with an unexpected big freeze that wreaked havoc on the plants that thought spring was here. Glad things had thawed out finally and hope all of you did not have any detrimental effects. At the 255<sup>th</sup> ACS National Meeting & Exposition in New Orleans, LA, March 18 – 22, 2018, our ACS student chapters received awards from the ACS Committee on Education for the chapters' activities during the 2016-17 academic year. Midland College ACS student chapter received an Outstanding Award and Angelo State University chapter received a Commendable Award. The University of Texas of the Permian Basin ACS student chapter received an Honorable Mention. Both Midland College and Angelo State University chapters received a Green Chemistry Award for outreach activities.

Several ACS members presented at the New Orleans meeting:

- Member presentation – Dr. Yanfeng Yue from Sul Ross University: “Synthesis and applications of hierarchically structured metal–organic frameworks”
- Research student posters
  - Melissa Wood: “Development of a nitrate/nitrite determination in salt water using an azo dye method to study the effects of titanium dioxide nanoparticles in the nitrogen cycle of Favites Pentagona Coral environment” (advisor: Milka Montes, UTPB)
  - Elizabeth Rugutt: “Green synthesis of a cross-linked polymerized hydrogel containing NDHGA-capped gold nanoparticles for skin lesion treatment” (advisor: Milka Montes, UTPB)
  - David A Maldonado: “Validating the presence and exploring the role of a silver hydroxide intermediate in the production of silver nanoparticles” (advisor: Milka Montes, UTPB)
  - Nickolas Hernandez: “Novel characterization of silver nanoparticles utilizing a laser system” (advisor: Kyle Beran, UTPB)
  - Levi Ramirez: “Scattered photon intensity as a tool to calibrate the size of Au and TiO<sub>2</sub> nanoparticles” (advisor: Kyle Beran, UTPB)
- Student Chapter poster – Zaid Isa: “Green chemistry and outstanding chapter award winning activities of Midland College Chemistry Club” (advisor: Dr. Pat Nandakumar, Midland College)

The local section has other projects in the incubator and will keep you informed as they develop. Feel free to contact me if you have any suggestions or ideas for programs.

Dr. Kathryn Louie  
klouie@suddenlink.net

## Councilor Corner

Highlights from the 2018 Spring ACS National meeting:

1. Committee on Meetings and Expositions (M&E) reported a total New Orleans meeting attendance of **16,585** as of Monday, March 19.
2. The Council voted to set the member dues for 2019 at the fully escalated rate of \$175. This rate was established pursuant to an inflation-adjustment formula in the ACS Constitution and Bylaws.
3. By electronic ballot, the Council selected **Luis A. Echegoyen and Thomas R. Gilbert as candidates for 2019 President-Elect**. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall National Election.
4. The Committee on Nominations and Elections announced the following: Selection of the following **candidates for Directors-at-Large for 2019-2021** terms: **Frank D. Blum, Lee H. Latimer, Ingrid Montes, and Angela W. Peters**. The election of two Directors-at-Large from among those candidates and any selected via petition will be conducted in the fall. Ballots will be distributed to the Council on October 1, 2018.

A detailed report may be found on the website <http://permianbasin.sites.acs.org/>

## Upcoming National and Regional Meetings and Programs

### 256<sup>th</sup> ACS National Meeting & Exposition – Fall 2018

Boston, MA

August 19-23, 2018

**Theme: Nanoscience, Nanotechnology & Beyond**

### 74<sup>th</sup> Annual SWRM

Little Rock, Arkansas

November 7-10, 2018

Theme: The Natural State of Chemistry



## Permian Basin News

Congratulations are in order for the members of the Permian Basin Section who have reached 50 years of service!

Mr. James Howard Britton  
Dr. Avinash K. Rangra

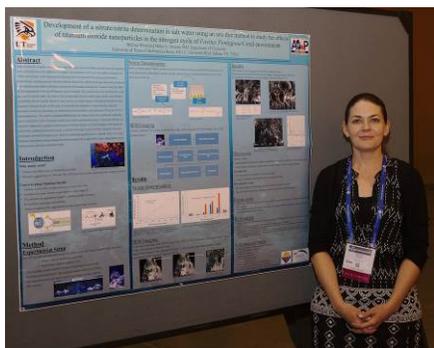
NOTE: News about you makes this publication interesting for our members. Please take a few minutes to jot down what you are doing.

- 1) Speeches, papers, symposia, invited talks
- 2) Publications, patents, grants awarded
- 3) New positions, appointments, promotions, awards, honors, retirements, postdoctoral research
- 4) Offices held in professional societies
- 5) Avocational achievements, miscellaneous

## ACS Student Chapter News

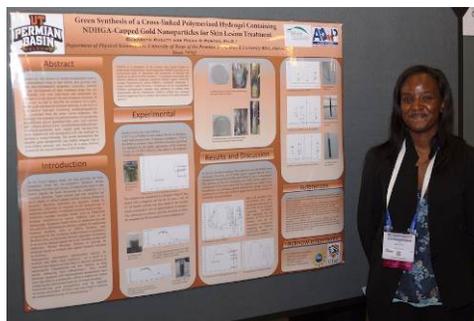
During the 2018 Spring ACS National Meeting in New Orleans, LA, several students for the local section present posters.

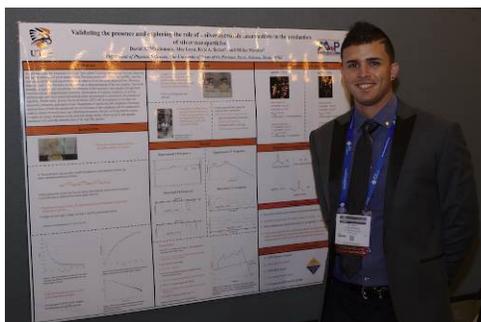
Research posters presented:



**Melissa Wood** – Development of a nitrate/nitrite determination in salt water using an azo dye method to study the effects of titanium dioxide nanoparticles in the nitrogen cycle of Favites Pentagona Coral environment

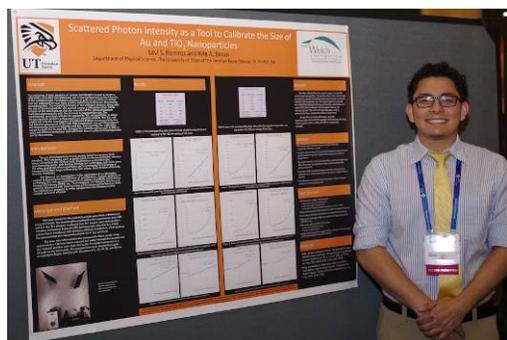
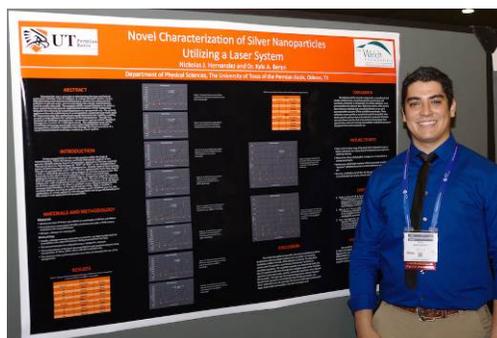
**Elizabeth Rugutt** – Green synthesis of a cross-linked polymerized hydrogel containing NDHGA-capped gold nanoparticles for skin lesion treatment





**David A. Maldonado** – Validating the presence and exploring the role of a silver hydroxide intermediate in the production of silver nanoparticles

**Nickolas Hernandez** – Novel characterization of silver nanoparticles utilizing a laser system



**Levi Ramirez** – Scattered photon intensity as a tool to calibrate the size of Au and TiO<sub>2</sub> nanoparticles

Chapter posters were presented during Sci-Mix

**Zaid Isa** – Green chemistry and outstanding chapter award winning activities of Midland College Chemistry Club





UTPB: Students and faculty from UTPB enjoying each other's company at the 255th National Meeting of the ACS.

The Angelo State University student chapter participated in a Math and Science Night at Fort Concho Elementary on March 22. They did a few demonstrations, including Elephant Toothpaste, the Blue Bottle and Traffic Light color-change experiments, and a Crushing Can demo which used air pressure to crush an aluminum can filled with steam. At their last meeting, they made Liquid Nitrogen Ice Cream, which turned out very well.



### A Chemical Thought

In 1980, at the phenomenal cost of \$10,000, a bismuth sample was transmuted into one-billionth of a cent's worth of gold by means of a particle accelerator at the Lawrence Laboratory of the University of California at Berkeley. The 'value' of the experiment is underlined in Frederick Soddy's ironic remark some sixty years before [1917, see G. B. Kauffman, 'The Role of Gold in Alchemy,' *Gold Bulletin*, 18 (1985): 118]:

If man ever achieves this further control over Nature, it is quite certain that the last thing he would want to do would be to turn lead or mercury into gold — for the sake of gold. The energy that would be liberated, if the control of these sub-atomic processes were possible as in the control of ordinary chemical changes, such as combustion, would far exceed in importance and value the gold.

William H. Brock, *The Norton History of Chemistry* (1992)

## Chemists Just Want To Have pHun

I tried to come up with a joke about the noble gases, but all of the good ones argon.  
(Try that one on a non-chemist, and you'll get No Reaction.)

## Permian Basin ACS Local Section Officers 2018

<b>Chair: Dr. Kathryn Louie</b> Angelo State University phone: (325) 942-2181 e-mail: <a href="mailto:klouie@suddenlink.net">klouie@suddenlink.net</a>	<b>Treasurer: Dr. Kyle Beran</b> University of Texas of the Permian Basin phone: (432) 552-2238 e-mail: <a href="mailto:beran_k@utpb.edu">beran_k@utpb.edu</a>
<b>Secretary: Mr. Kevin Boudreaux</b> Angelo State University phone: (325) 486-6623 e-mail: <a href="mailto:kevin.boudreaux@angelo.edu">kevin.boudreaux@angelo.edu</a>	<b>Chair-Elect: Dr. John Osterhout</b> Angelo State University phone: (325) 486-2181 e-mail: <a href="mailto:John.Osterhout@angelo.edu">John.Osterhout@angelo.edu</a>
<b>Councilor: Dr. Kathryn Louie</b> Angelo State University phone: (325) 942-2181 e-mail: <a href="mailto:klouie@suddenlink.net">klouie@suddenlink.net</a>	<b>Alternate Councilor: Dr. John Osterhout</b> Angelo State University phone: (325) 486-2181 e-mail: <a href="mailto:John.Osterhout@angelo.edu">John.Osterhout@angelo.edu</a>
<b>Past Chair: Dr. Pat Nandakumar</b> Midland College phone: (432) 685-6738 e-mail: <a href="mailto:pnandakumar@midland.edu">pnandakumar@midland.edu</a>	

If you have news about local activities, student activities, new employees, new members, good (or bad) science/chemistry jokes, or any other events related to the local section that you want to be included in the newsletter, please send the information to [Kevin.Boudreaux@angelo.edu](mailto:Kevin.Boudreaux@angelo.edu).