

Vol. 30, No. 8

South Florida Section American Chemical Society

October 2020

Virtual Section Meeting

Friday, October 16, 4:00 PM

Via Zoom Meeting <u>https://american-chemical-society.zoom.com/j/94224015387</u>

Nilesh Dhumal, PhD

Department of Chemistry & Physics Florida Gulf Coast University, Ft. Myers

Addressing a Controversy on CO₂ Absorption in Ionic Liquids

The capture of CO_2 emissions is a potential means to slow global climate change. Ionic liquids (ILs) are strong candidate materials for such applications because of their high CO_2 solubility. Past work using simulations suggests that the mechanism for CO_2 absorption involves a carbene intermediate. Using ab initio molecular dynamics, we find CO_2 absorbs through a concerted pathway that does not involve a carbene.

Nilesh Dhumal is an Assistant Professor of Chemistry and coordinator of a high-performance computational facility at Florida Gulf Coast University, Fort Myers. Dhumal's research interests revolve around areas of scientific and societal importance such as energy and environment-related issues. Examples include (ILs) solvation of metal-organic framework (MOFs) in ionic liquids for capturing CO_2 and modeling of polymer electrolytes composed for lithium batteries and understanding of macroscopic properties such as dielectric relaxation and ionic conductivity of ILs mixture. Dhumal's group uses different simulation methods like classical molecular dynamics (MD), ab initio MD and quantum mechanics for modeling of interesting systems with applications in the field of biology, energy, and materials. Dhumal has several active projects with close collaboration with experimental groups in fields of science and engineering.

SoFL-ACS Bylaws Revisions

National ACS requires local sections to update their bylaws every few years to bring them into compliance with the national ACS constitution and bylaws. The SoFL-ACS bylaws were last updated in 2015. Consequently, the Executive Committee has approved minor updates in wording and two substantive changes to the SoFL-ACS bylaws: 1) Addition of the *Younger Chemists* committee to the list of standing committees. 2) The terms of office of the Secretary and the Treasurer shall be for two (2) years beginning on alternating years. The revised bylaws with the noted changes have been posted on the section website: <u>www.soflacs.org</u>. On the November ballot you will be asked to approve the revised bylaws.



Congratulations to:

Zaida C. Morales-Martinez for being selected as an ACS Fellow in recognition of her:

Contributions to the science/profession: Recognized for being a driving force for excellence in chemical education for undergraduate and graduate students and

for her mentoring and promotion of diversity in the sciences. *Contributions to the ACS community:* Recognized for Local, Regional and National contributions for over 40+ years and for her involvement in the establishment and mentoring of the ACS Scholars Program for 25 years.

Congratulations also to Zaida for re-election to the ACS Council Policy Committee (CPC) at the fall 2020 Council meeting, and for 30 years as an ACS Councilor. Also to Dr. Milagros (Milly) Delgado for 25 years as an ACS Councilor from the SoFL-ACS section.



And to these award-winning South Florida ACS student chapters at Barry University, Florida

student chapters at Barry University, Florida International University-BBC, Florida International University-MMC, Florida Gulf Coast University, and Nova Southeastern University.

Call for Nominations for 2021 SoFL-ACS Officers

Nominations and self-nominations are requested for the following executive officers: Chair-Elect; Secretary; Treasurer. Send nominations by Nov. 1 to: <u>gfisher@barry.edu</u>





Due to COVID-19 restrictions, SoFL-ACS will not be presenting in-person events at local science museums as in the past. Instead, local university/college student chapters will produce their own NCW videos of chem demos and activities that will then be posted on the SoFL-ACS website: www.soflacs.org and made available to local science museums.

2020 NCW Illustrated Poem Contest

Sticking with Chemistry

The South Florida Local Section is sponsoring an illustrated poem contest for students in K through 12th grade.

Contest Deadline: Sunday, October 25th (Submissions are online - see below)

Prizes: Certificates and prizes to first place winners in each category

Contact: Milagros Delgado, delgadom@fiu.edu

Submissions:

Submit Here

Select: South Florida Local Section from drop down menu

Winners of the **South Florida Local Section's** Illustrated Poem Contest will advance to the National ACS Illustrated Poem Contest for a chance to win prizes and to be featured on the ACS website! Join the many talented winners from SoFL-ACS.

Write and illustrate a poem using the NCW theme, "Sticking with Chemistry." Your poem must be <u>no more</u> than 40 words and in the following styles to be considered:

HAIKU - LIMERICK - ODE - ABC POEM - FREE VERSE - END RHYME - BLANK VERSE

Possible topics related to the theme include:

Glue Sli	ime -	Tape	Adhesives
Geckos Po	olymers /	Adhesion	Cohesion

Entries will be judged based upon:

- Artistic Merit use of color, quality of drawing, design, and layout
- Relevance to and incorporation of the NCW theme
- Poem Message fun, motivational, inspiring about yearly theme
- Originality Creativity unique, clever and/or creative design
- Neatness free of spelling and grammatical errors

2020 SoFL-ACS Officers

 Chair – Jesse Bernstein, 440-821-4623, Jbern0309@gmail.com
 Councilor – Zaida Morales-Martinez, 305-386-3206, moralesz@fiu.edu

 Past Chair – Orlando Acevedo, 305-284-5662, orlando.acevedo@miami.edu
 Councilor – Zaida Morales-Martinez, 305-386-3206, moralesz@fiu.edu

 Chair-Elect – John Reilly, 239-590-1881, johnreilly@fgcu.edu
 Alternate Councilor – Lisa Milenkovic, 754-321-2119, lisa.milenkovic@

 Treasurer – David Riusech, 305-964-3477, driusech@aol.com
 browardschools.com

 Councilor – George Fisher, 954-870-8458; gfisher@barry.edu
 Alternate Councilor – Vic Shanbhag, 954-262-3931, shanbhag@nova.edu

CIRCULATION: Send post office form 3579 to Circulation Dept. SoFlacs, c/o George Fisher, 309 NW 21 Ct., Wilton Manors,, FL 33311. SoFL-ACS web site: http://www.soflacs.org National ACS web site: http://www.acs.org

Soflacs, the publication of the South Florida Section, American Chemical Society, is published periodically. EDITOR and BUSINESS MANAGER: George Fisher, Department of Chemistry, Barry University, 11300 N.E. 2nd Ave., Miami Shores, FL 33161, (305) 899-3430, FAX (305) 899-3479; e-mail: gfisher@barry.edu