

American Chemical Society - Pittsburgh Section Volume CVIII, No. 2 September 2021

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Mildred Perry Memorial "On the Road" Lecture

Careers in Chemistry: An Industrial Perspective

Wednesday, September 15 at 7 PM

Click <u>here</u> to be linked to the Zoom meeting!



Dr. Lan Deng PPG Industries

Dr. Lan Deng will share her experience and perspective as an industrial chemist – What are the different opportunities and career paths in a large company? What are the skills one should horn in if they're interested in a career as an industrial chemist?

Dr. Deng is the Global Technical Director of Automotive OEM Coatings at PPG, the largest coating and materials manufacturer in the world headquartered in Pittsburgh. Dr. Deng joined PPG in 2014 and assumed her current role in 2020. Her prior roles with PPG include Global Technical Platform Director for Powder Coatings, Manager of Global Science and Technology Strategy, Group Leader for Automotive Refinish Coatings. Before joining PPG, Dr. Deng worked for the Dow Chemical Company and Sherwin Williams. Deng earned her Ph.D. in Chemistry from University of California, Berkeley. She has co-authored 6 journal articles, 13 unique patents and patent applications.



Join us October 21-22 for the National Chemistry Week celebration, ChemFest!

ChemFest is a two-day National Chemistry Week celebration hosted by Carnegie Science Center and American Chemical Society. This year, ChemFest activities are set to return on-site to the Carnegie Science Center and will also be broadcast directly into classrooms!

ChemFest is scheduled to take place from 9AM-3PM on Thursday, October 21st and Friday, October 22nd and will feature in-person and virtual exhibitor activities, career panels, demonstrations, and presentations that highlights this year's theme: "Fast or Slow, Chemistry Makes It Go! (Reaction Rates)".

We are currently looking for STEM professionals actively working in chemistry or a chemical-related industry, and that are in varying stages of their careers and represent a wide array of backgrounds, to participate as exhibitors, career panel participants, and provide prerecorded virtual content during ChemFest.

If you are interested in learning more about these opportunities and would like register to participate in ChemFest, please complete the following registration form in full by **Friday**, **October 1st**: https://forms.gle/AZRXrVrZkoowLFpy9

If you have any questions regarding ChemFest, please do not hesitate to reach out to Ms. Lorren Kezmoh at Kezmohl@CarnegieScienceCenter.org or Dr. Evonne Baldauff at EBaldauf@Waynesburg.edu.







Society for Analytical Chemists of Pittsburgh Spectroscopy Society of Pittsburgh

SEPTEMBER MEETING (In-Person or Virtual) Wednesday, September 22, 2021







PLEASE NOTE THAT
DUQUESNE HAS AN IN-PERSON
MASK MANDATE IN PLACE

in Pittsburgh

5 p.m. - Social Hour in the Shepperdon Suite 6 p.m. - Dinner in the Power Center Ballroom 6:45 p.m. - Business Meeting in the Power Center Ballroom 8 p.m. - Technical Program in the Power Center Ballroom



SSP TECHNICAL PROGRAM

Dr. Rita Mihailescu, Interim Chair Department of Chemistry & Biochemistry Duquesne University

"GENOMIC RNA DIMERIZATION AND VIRAL-HOST INTERACTIONS IN SARS-COV-2"

Biography

Dr. Rita Mihailescu is the Interim Chair and Professor in the Department of Chemistry & Biochemistry at Duquesne University, Pittsburgh PA. She has received her Ph.D. in Molecular Biology and Biochemistry from Wesleyan University in 2001, her graduate work focusing on NMR spectroscopy structural studies of hemoglobin.

She did her postdoctoral work at the University of Maryland Biotechnology Institute/NIST between 2001-2003, when she became interested in RNA structure function, focusing on HIV-1. She is a member of the Duquesne faculty since 2004 and her research program is in the area of protein-nucleic acids interactions, focusing on human diseases like fragile X syndrome, amyotrophic lateral sclerosis, Alzheimer's disease, as well as viral systems like hepatitis C and SARS-CoV-2 (COVID 19). Her research has been/is funded by National Institutes of Health, National Science Foundation, and by private foundations. She is the recipient of the Ruth L. Kirschstein National Research Service Award from the National Institute of Allergy and Infectious Diseases, of the Duquesne University President's Award for Excellence in Scholarship and a two-time recipient of the BSNES Award for Excellence in Scholarship. Her teaching endeavors have been recognized by both her peers and by the students as she was honored with the Duquesne University BSNES Award for Excellence in Teaching and with the Omicron Delta Kappa National Leadership Honor Society Teacher of the Year Award.

Abstract

Despite the success of vaccines targeting the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus in curtailing the current COVID-19 pandemic, the world remains highly vulnerable to SARS-CoV-2 emerging mutants and other coronavirus outbreaks. Thus, it is essential to build a fundamental knowledge base about coronaviruses and in particular SARS-CoV-2 and of its interactions with the host. While most of the SARS-CoV-2 RNA genome is not conserved, its 3'-untranslated region harbors a highly conserved sequence named the s2m motif, which is conserved not only in coronaviruses, but also in three other viral families. The s2m motif confers a selective advantage, however, its biological function is not known. We will discuss the novel function we discovered for the s2m motif which we propose is

involved in the SARS-CoV-2 genome dimerization, as well as its interactions with the host microRNA-1307-3p. While our research addresses relevant questions from a mechanistic, basic research standpoint, it also holds the opportunity to guide future development of new antivirals that target the genomic RNA dimerization and/or RNA-RNA virus-host interactions.

MEETING RESERVATIONS: For both in-person and virtual reservations, please complete the appropriate form by CLICKING HERE BY NO LATER THAN Wednesday, September 15, 2021. In-person entree choices include Beef Brisket or Ratatouille w/Roasted Red Pepper Coulis. Please let us know if you have any dietary restrictions. Dinner will cost \$10 (\$5 for undergraduate students). Checks can be made payable to either SACP or SSP, depending on your membership. Please note the dinner policy included in your document links regarding cancellations.

<u>PARKING:</u> Duquesne University Parking Garage entrance is on Forbes Avenue. Upon entering the garage, you will need to get a parking ticket and drive to upper floors. The Power Center can be accessed from the 8th Floor of the Forbes Garage. Bring your parking ticket to the dinner or meeting for a valedation sticker. Please contact Duquesne University, if any difficulties should arise. If there is a special event, please note that you are there for an SSP or SACP meeting to get a parking ticket.

For any questions or problems, please contact Colleen, the Society Coordinator, at 412-825-3220 (Ext. 215).



Call for Nominations

Pittsburgh Section of the ACS Pittsburgh Award



The Pittsburgh Award was established in 1932 by the Pittsburgh Section of ACS to recognize outstanding leadership in chemical affairs in the local and larger professional community. This Award symbolizes the honor and appreciation accorded to those who have rendered distinguished service to the field of chemistry. The Award consists of a plaque presented annually at a section dinner. Members of the Pittsburgh Section, or in exceptional cases, nonmembers, who have done work worthy of recognition toward increasing chemical knowledge, promoting the chemical industry, benefiting humanity, or advancing the Pittsburgh Section, are eligible for consideration.

https://pittsburghacs.org/wp-content/uploads/2021/05/Pittsburgh-Award-Kim-Woznack-2021.pdf

The Distinguished Service Award

The Distinguished Service Award was established in 2007 by the Pittsburgh Section of the ACS to expand and replace the predecessor Chairman's Award of the section. Both recognize outstanding volunteer service to the Section. The Award, consisting of a plaque, is presented annually at a Section dinner, which is open to the public. Members of the Pittsburgh Section, past or present, who have provided outstanding service in advancing the Pittsburgh Section, are eligible for consideration.

http://www.pittsburghacs.org/wp-content/uploads/2017/08/Dist-Service-Award-Nom-Form-Generic.pdf

Nominations for both awards are solicited from the membership of the Pittsburgh Section. Please include your contact information, the nominee's contact information, any supporting letters, and the nominee's CV. More information about the awards, including information on past winners can be found on the ACS website:

https://pittsburghacs.org/awards/

Please send all nominations (or questions about nomination process) to Pittsburgh Section Chair-Elect, Kim Woznack, woznack@calu.edu. Nominations are due no later than **Friday, October 1, 2021**.



To advance the broader chemistry enterprise and its practitioners for the benefit of Pittsburgh region and its people.

2021 Virtual Meeting Registration Grant Program Application

Conference Funding to attend virtual ACS meetings (local and national)

Undergraduates, graduates, and post-doctoral researchers are invited to apply for conference funding to attend upcoming virtual ACS meetings for the 2021 year. We anticipate up to 30 grants can be awarded and we are looking to support our local members. The goal of the funding is to defray the cost of registration for regional and national ACS meetings to enable more students to make presentations and learn about the broader field of study to which they belong. Please complete an application and submit to Kevin Noonan (noonan@andrew.cmu.edu) and Heather Juzwa (hljuzwa@shimadzu.com) via email. Applications will be accepted on a rolling cycle and considered throughout the entire 2021 year until all the funds have been disbursed.

Name of Applicant:		
Name of Institution:		
Undergraduate Student /Year		
Graduate Student / Year		
Mailing Address to Receive Payment if Awa	arded:	
Email:	Phone:	
PI:		
ACS Membership No.*:		



ACS Meeting:	CS Meeting: Meeting Date:		
Project Title:			
Paper Presentation	Poster Presentation		
*Please attach a copy of your project abst	ract to the application.		
Has your project been accepted*?	Yes No		
*Attach documentation regarding accep	stance if received at point of application.		
Will this be your first presentation a	t an ACS meeting? Yes No		
Other funding sources (if any):			
Has the applicant received a trav	el grant from the ACS Pittsburgh Section in the past? Yes No		
If your application was selected, th your meeting experience.	e Pittsburgh Section of the ACS would like at least one photo of		
I am willing to submit at least one	e photo of my meeting experience: Yes No		
In under 1000 words, please write should fund your registration?	a personal paragraph or justification for why the Travel Grant Committee		



Signature:		
Date:		

2021 Pittsburgh Section Officers

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Kevin Noonan

noonan@andrew.cmu.edu

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Volunteers Needed!

We recently updated our website and are looking for someone to help with maintenance! If you are interested in volunteering, please contact Heather Juzwa at hlipuzwa@shimadzu.com!

The Crucible Deadline

The deadline for items submitted to The Crucible is the 25th of the month prior to publication. For example, all items for the May 2021 issue must be to the editor by April 25th, 2021.

The Crucible

The Crucible is published monthly, August through May. All statements and opinions expressed herein are those of the editors or contributors and do not necessarily reflect the position of the Pittsburgh Section.

Design Editor: Alysia Mandato, crucible@pittsburghacs.org



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Society for Analytical Chemists of Pittsburgh

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3.5" x 2"	\$50	\$45	\$25	\$20

ACS Member-Get-a-Member

Recruit a new member to the American Chemical Society and receive a free 2021 Periodic Table of the Elements blanket!

See here for more information

ACS Regional Awards – Apply Today!

More information can be found here