### January 2020



#### Mark Your Calendar for ASU Open Door

Happy New Year and for those on campus welcome back! The 2020 spring semester is underway and ASU Open Door is just around the corner. Please join us on Feb. 22 from 1–5 p.m. for an exciting behind-the-scenes look at the most innovative university in the nation. This will be an opportunity for kids of all ages to participate in hands-on activities and explore many SMS events. For more information, please visit <a href="https://opendoor.asu.edu/">https://opendoor.asu.edu/</a>. Our activities are listed under Natural Sciences, Tempe campus!



See you on Saturday, Feb. 22, 2020 1–5 p.m. Tempe Campus

#### **Meet SMS New Faculty Members**

We would like to warmly welcome three new assistant professors who have joined SMS this spring:

#### **Laura Ackerman**

**Assistant Professor** 

Laura K. G. Ackerman is currently working on designing metal catalysts and online programs that can lead to sustainable chemistry. The Ackerman lab seeks to identify solutions to chemical problems that are practical, socially responsible, and innovative for the production of pharmaceuticals and materials.

Read more about Professor Ackerman



#### **Kyle Biegasiewicz**

**Assistant Professor** 

Kyle Biegasiewicz's current work aims to capitalize on the unique catalytic capabilities of underexplored enzyme classes to achieve rapid construction of complex molecular architectures and/or the selective installation of structural entities that are highly desired in early and late stage organic synthesis.

Read more about Professor Biegasiewicz



#### **Audrone Lapinaite**

Assistant Professor

Audrone Lapinaite's group focuses on elucidating the molecular mechanisms underlying the functional role of RNA base modifications in neurons in normal and pathological states using state-of-art structural and molecular biology approaches, including CRISPR-Cas mediated DNA and RNA targeting technologies. Her lab is also interested in characterizing and harnessing bacterial defense systems (e.g. CRISPR, restriction-modification etc.) for biotechnological and therapeutic applications.



#### Read more about Professor Lapinaite

#### **Research highlights**

## SMS scientists recognized as world's most influential researchers over the past decade

Four SMS scientists, professor Hao Yan, assistant Professor Wei Liu, emeritus Regents professor Michael O'Keeffe and associate research professor Marc Messerschmidt have just been recognized by the Web of Science as amongst the world's most highly cited researchers over the past decade.

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<u>Mapping the motion of molecules: NIH awards ASU biophysics professor more than \$2.5M</u> Professor Steve Pressé was recently awarded more than \$2.5 million from the National Institutes of Health as principal investigator for two independent awards.

#### Breathing with rocks as an energy source

ASU researchers describe key link for using microbial metabolic energy to power electrical applications.

#### Buttry lab probes electrochemical capture and release of carbon dioxide

An electrochemical DISP mechanism is simulated, providing a good fit with experimental results. The overall stoichiometry for the electrochemical capture and release of CO2 in this system is that two electrons are required to bind one equivalent of carbon dioxide.

#### Birkel lab reviews non-conventional synthesis methods

Nonconventional solid-state methods, including microwave heating and spark plasma sintering are reviewed highlighting their potential for the preparation of a plethora of inorganic compounds. Thermoelectric and magnetic materials are chosen as two examples of energy materials that are relevant for several different areas, such as waste heat recovery, energy generation, and refrigeration.

read more SMS News and Research

#### Sun Devil Giving Day - March 19, 2020

Sun Devil Giving Day 2020 is just around the corner. It will be our eighth annual day of giving, when we celebrate and encourage gifts in support of Arizona State University. Over the next two months, we here at the School of Molecular Sciences will be showing our community just what your gifts can accomplish. We look forward to your participation on March 19, 2020!

# Sun Devil<sup>®</sup> GIVING DAY

#### **SMS Scholarships - Deadline is February 15th**

We highly encourage any interested SMS students to apply for these great scholarship opportunities for the 2020-2021 academic year. Please <u>click here</u> for more information and submit your applications before February 15th.

#### **Spring 2020 SMS Career Panel - January 29th, 2020**

Start your new year right by attending the SMS Career Panel Event on January 29th from 4:00 to 5:00 PM in PSH 132.

Three special guests from TGen, Stryker, and Mesa Forensic Services will be joining us to give you valuable career-focused advice.

This will be a great opportunity for you to get "workforce-ready" and ask relevant questions about the current job market for people with science degrees. Online students can attend via Zoom <a href="https://asu.zoom.us/j/8454599738">https://asu.zoom.us/j/8454599738</a>

Please RSVP via Handshake by January 27th: <a href="https://asu.joinhand-shake.com/events/418798?ref=events-search">https://asu.joinhand-shake.com/events/418798?ref=events-search</a>

#### **SMS Career Advice Podcast - New Episode just Published**

#### **Episode 10: Science Illustrator**

PhD Candidate Anna Guerrero who currently works as a professional scientific illustrator joins Dr. Austin on this podcast. Anna holds a Bachelor's degree in microbiology and is currently pursuing her PhD at ASU, researching the history and philosophy of images in the sciences. She will share her experience as a scientific illustrator, which allowed her to merge her science background with artistic talent.

#### **Employment Opportunities**

- <u>ANALYTICAL CHEMIST</u> Versum Materials, US-AZ-Tempe (Headquarters)
- Associate Chemist Quality Control Merck & Co., Inc.,
- Associate R & D Chemist University of Mississippi

Please follow us on the <u>SMS LinkedIn</u> page for more job opportunities. Please also check <u>Chemistry Job Resource: Chemjobber</u> for more chemistry jobs.

#### Have a great Spring semester with SMS new leadership team!

We are very happy to announce that Professor Pierre Herckes has agreed to take on the role of Associate Director of SMS. Pierre will lead the Academic Affairs functions of the School and will act as advisor to the Interim Director, Professor Ian Gould.

Please feel free to send email to <u>ASUSMS@asu.edu</u> at any time with questions, concerns, or suggestions. You can visit our website at <u>sms.asu.edu</u> or connect with us by liking our Facebook page!









