



## **2022 ENFL Spring Newsletter**

Welcome to the ENFL 2022 Spring Newsletter! In this letter, you will find a welcome message from the chair; announcements of a kickoff business meeting, monthly virtual seminars, awards winners and election results; call for award nominations, abstract submissions for conferences, and speakers for seminars; as well as some concluding remarks by the immediate past chair.

### **Message from the Chair**



Dear ENFL Colleagues,

Wish you all have a great new year start of 2022 in this difficult pandemic time! There will likely still be challenges ahead and I believe we will find a way to get through all these together!

In 2022, we will continue to take advantage of in-person, virtual, and hybrid models, which we have explored in the past two years, wherever / whenever possible to build and maintain our community across the division under this evolving "new normal." Our Monthly Invited Talks (MITs),

which have expanded to include talks of students and postdoctoral researchers, will continue to provide us an opportunity to meet regularly together. Virtual meetings (or hybrid meetings including a virtual platform) have their own shortcomings; however, they do provide flexibility and opportunities to engage colleagues who are otherwise limited by geographical / financial constraints and international restrictions. We will continue to have our division newsletters which provide updates about the division and you can also find us on social media.

I look forward to working with you all in 2022. I welcome and appreciate any ideas that can help our division to grow and to better serve the energy and fuels fields.

Yuyan Shao 2022 ENFL Chair

## **Spring Kickoff Meeting**

A kickoff meeting and happy hour are scheduled on Zoom on Jan 24, 2022. During this meeting, ENFL officers and committee members will meet and welcome new officers and members, discuss topics including plans for the upcoming ACS spring and fall national meetings, deadlines for various events and activities. All ENFL members are welcomed to join this meeting. This is a great opportunity to learn about the organization, our people, and many events and activities organized by ENFL, as well as networking with professionals and experts in our community from home during the pandemic time.

**Zoom**: <u>https://us06web.zoom.us/j/82418459329?</u> <u>pwd=aXo1dUt2UUU4dVNJMIJNbzIFaTVjZz09</u> **Time**: 7:00-8:00pm (EST, or 4:00-5:00pm PST) on Monday, January 24, 2022

## Monthly Invited Talks (MITs)

ENFL organizes the virtual MIT seminar series on the 4<sup>th</sup> Friday of each month, at 7:00-8:00pm of the speaker's time zone. The same zoom link for MIT and 3S talks will be used for your convenience.

Zoom: https://zoom.us/meeting/register/tJwrd-CsqDsqHNXp5SABSz\_YOa\_XZnQvFQVL

# Functional solvents and materials for CO<sub>2</sub> separation from confined spaces and air

**Speaker**: Prof. **Burcu Gurkan** (Case Western Reserve University) **Time:** 7:00 - 8:00 pm EST, Friday, January 28, 2022

**Biography**: Prof. Burcu Gurkan is the Nord Distinguished Associate Professor in Chemical and Biomolecular Engineering at Case Western Reserve University. Her research focuses on deep eutectic

solvents and ionic liquids for applications in separations, energy conversion and storage. She completed her PhD from the University of Notre Dame in 2011 and postdoctoral trainings at the Massachusetts Institute of Technology (2011-13) and The University of Akron (2014-15). She is the recipient of NASA Early Career Faculty and NSF CAREER awards. In relation to these awards, her team develops materials for CO<sub>2</sub> separations and studies the role of hydrogen-bonded electrolytes in CO<sub>2</sub> electroreduction reaction. She is a thrust leader in BEES (Breakthrough Electrolytes for Energy Storage) – a DOE Energy Frontier Research Center. In this role, she leads a highly collaborative research effort that aims to understand solvation, transport, electrode-electrolyte interfacial structure, and electron transfer reactions in deep eutectic solvents. Please find the abstract of her talk by clicking <u>here</u>.

Please stay tuned for the February MIT talk on "**Electrifying separation processes through molecular design of redox-active interfaces**" by Prof. **Xiao Su** from the Chemical and Biomolecular Engineering Department at the University of Illinois Urbana-Champaign. For the abstract of this talk, please click <u>here</u>.

If you missed some past talks, please visit <u>ACS ENFL</u> YouTube channel to watch the recorded talks. Please contact Dr. Jingbo Louise Liu at <u>jingbo.liu@tamuk.edu</u> if you are interested in presenting or have suggestions for speakers and/or topics.

## **Student Seminar Series (3S)**

ENFL organizes monthly Student Seminar Series (3S) on the 2<sup>nd</sup> Friday of each month, with two talks in each session. Selected speakers will be invited to give talks and awarded for excellence in research and contributions to the energy and fuels fields. Please encourage your graduate and undergraduate students, and postdoctoral researchers to



present their research. This will provide them opportunities to network with peers, experts from academia or industries in the professional community. Please contact Dr. J. Louise Liu at <u>jingbo.liu@tamuk.edu</u> for suggesting speakers, or for presenting your work.

<u>Mr. J. Eaton</u> and Mr. S. Li will deliver their talks on Friday, February 11 at 7:00 - 8:30pm EST on <u>zoom</u>.

## 2022 ACS Spring Meeting



2022 ACS Spring meeting will be held during March 20-24 at the San Diego Convention Center and online, in a hybrid mode. Registration is now open. Please register and join the global chemistry community to discover the latest research and catch up with your friends. Registration is open and please click <u>here</u> for pricing, agenda, and technical programs by ENFL.

#### **Award Announcements**

The following ENFL awards and ACS national awards have been announced. Congratulations to all of them!

- Distinguished Researcher Award
  - Prof. Liang-Shih Fan (Ohio State University)
- Research Excellence Award in Electrochemical Energy Storage Award
  - Dr. Jun Lu (Argonne National Lab)
- Emerging Researcher Award
  - Dr. Wei Wang (Pacific Northwest Nat Lab)
- R.A. Glenn Award
  - Spring: Dr. Daniel J Gaspar (Pacific Northwest Nat Lab)
  - Fall: Prof. Michael Janik (Pennsylvania State University)
- Distinguished Service Award
  - Dr. Kristi Fjare (Phillips 66)
  - Dr. Joe Allison (Phillips 66)
- Henry H. Storch Award in Energy Chemistry
  - Robert L. McCormick (Nat Renewable Energy Lab)
- George A. Olah Award in Hydrocarbon or Petroleum Chemistry
  - T. Brent Gunnoe (University of Virginia)

### **Call for Nominations**

- <u>2022 ENFL R. A. Glenn Award</u>: Nominations can be submitted by symposium organizers to chair-elect Jun Lu (junlu@anl.gov) from abstracts submitted to their ENFL symposia.
- <u>ACS fellow</u>: please submit nominations to Lisa Houston (lisahoustonacs@gmail.com) or Chunshan Song (chunshansong@cuhk.edu.hk).

## **New Officers**

The annual election has been conducted and the following new ENFL officers have been elected. Congratulations!

- Chair-Elect (2022): Jun Lu
- Treasurer 2022-2023: Jinxia Fu
- Councilors (2022-2024) J. Louise Liu

- Alternate Councilors (2022-2024): Alissa Park
- Director-at-Large (2022-2024): Michelle Kidder

#### **Future Conferences**

# The 26<sup>th</sup> Annual Green Chemistry & Engineering Conference

The ACS Green Chemistry Institute invites you to answer the Green Chemistry & Engineering Conference's Call for Abstracts. Programing covers the breadth and depth of sustainable and green chemistry & engineering, with special attention to the theme "Thinking in Systems: Designing for Sustainable Use". Review the symposia now and submit your abstract between January 3 - February



14, 2022. The 26<sup>th</sup> Annual Green Chemistry & Engineering Conference will be held in person in Reston, Virginia, June 6-8, 2022.

#### The 22<sup>nd</sup> International Conference on Petroleum Phase Behavior and Fouling

Petrophase 2022 will be held in person during June 12-16, 2022 in Bucaramanga, Colombia. Abstract submission is open in January 15 and the deadline is February 25, 2020. For more information, please find at <u>here</u>.



#### ACS Fall 2022

ACS Fall 2022 will be held in Chicago, IL and online during August 21-25 with the theme on "Sustainability in a Changing World." Abstract submission is now open and the deadline is March 14, 2022. To submit abstracts, please click <u>here</u>.



#### Call for Symposium Proposals at 2023 Spring ACS

2023 Spring National ACS Meeting will be held in Indianapolis, IN, USA during during March 26-30, 2023. The theme "Crossroads of Chemistry" will be at the core of programming. Please contact ENFL 2023 program co-chairs Prof. Feng Jiao

(jiao@udel.edu) and Prof. Yingwen Cheng (<u>ycheng@niu.edu</u>) if you are interested in organizing symposia sponsored or co-sponsored by the ENFL division. For the guidelines and a template, please click <u>here</u>.

#### A Reflection and Thank-You for 2021

What a year 2021 was to serve as Chair! When I agreed to stand as a candidate, I had no idea what would be in store.

Where I reside (Melbourne, Australia), it turned out to be a year of "lock-downs" during which travel was not permitted, almost at all. Worldwide, many borders were closed for long periods of time. We have all missed the opportunities for learning, exchange of ideas, deep discussions, occasional debates, the networking and the comradery that develop through face-to-face participation in scientific meetings. We had no choice but to advance alternative



ways of interacting – and, so, we fumbled our way through, eventually building familiarity with virtual and, then, hybrid meetings!

Thank goodness for Zoom and similar platforms! We are now all conversant with this approach to our National Meetings as well as our Division's MITs, committee meetings and even net-working activities, not to mention our every-day lives. We have learned that virtual meetings have some big advantages - such as enabling participation across national boundaries and time zones, circumventing visa delays and side-stepping travel where it is problematic or beyond the budget. So virtual/hybrid meetings will be with us for the long term I am sure. Still, I have grown weary of virtual meetings, especially in the ungodly hours of the night and am yearning for a move back to live interaction soon.

ENFL has a great team of officers. Although I was unable to shake hands with a single one of them over the entire year, I want to thank them most sincerely for their enthusiasm, efforts and steadfast support during this challenging year. It was these individuals who teamed together to facilitate comprehensive programming of our national meetings, to embed MITs as means of maintaining our connectivity during the pandemic, to create new awards that will recognize outstanding contributions by our members on an on-going basis, to seek funding for new program initiatives, and to further improve our approaches to communication across the Division and beyond.

I thank the Division for the privilege I have held during 2021. For 2022, I commend you to our new Chair, Dr Yuyan Shao, who I know will lead us well.

Alan Chaffee

Chair (2021), ENFL Division Professor, School of Chemistry Monash University, Victoria 3800, Australia

#### **Volunteers and New Members Welcomed**

ENFL is looking for volunteers to help with Division activities and business. These will only take 5-10 hours/month and will provide leadership and functional skills as well as excellent networking opportunities with Division leaders and members. Please email us at <u>enfldivision@gmail.com</u> if you are interested.

Please check our website <u>https://enfl.aps.anl.gov/</u>, follow <u>ACS Division of Energy & Fuels</u> (<u>ENFL</u>) group site on LinkedIn and @ACS\_ENFL on Tweeter, and subscribe the <u>ACS</u> <u>ENFL</u> YouTube channel for more updates and news. If you have comments or questions, please email us at <u>ENFLDivision@gmail.com</u>.

