

# May 2021 Newsletter

In this month's newsletter, we provide a report from the ACS Spring National Meeting, awards, award nominations, the Fall Meeting symposia, May Monthly Invited Talk, and the latest on a new video project where we capture our ENFL heroes.

# **ACS Spring Meeting Report**

ENFL programming at the Spring National meeting was a success with 348 papers and posters presented in the following well-attended Symposia:

- Macromolecular Chemistry in Energy and Fuels: Design, Application, and Challenges
- Engineered Materials Chemistry at the Oil/Gas/Water Interfaces: From Ions to Macromolecules
- Advances in Materials Synthesis & Characterization of Li-ion, Na-ion & Multi-Valent Batteries
- Innovative Chemistry and Materials for Electrochemical Energy Storage
- Electrochemistry-enabled Catalysis for Energy, Chemicals, and Materials
- Advances in Hydrocracking and Hydrotreating Symposium
- Recent Advancements in Lignin Valorization Strategies for Fuels and Chemicals
- Catalytic and Non-catalytic Upgrading of Heavy Oils and Vegetable Oils: Hydrodesulfurization, Hydrodenitrogenation, Hydrodeoxygenation, and Oxidative Desulfurization
- Chemistry of Fuel Properties, Combustion, and Fuel-Engine Interactions
- Engineered Interfaces for Energy and Fuels
- C1 Catalysis
- Advances in Renewable Energy and Fuels

### Awards



#### **Storch Award**

The <u>ACS Henry H Storch Award in Energy</u> <u>Chemistry</u> Symposium was held in honor of Harry W. Deckman of ExxonMobil at the Spring National Meeting. Harry received this ACS National Award for his discoveries in physics, physical chemistry, and materials science in alternative energy applications as well as numerous other areas including hydrocarbon processing and separations, upstream

technology, and reducing CO<sub>2</sub> emissions. The symposium speakers spoke on all these aspects of Harry's work.

### 2021 Distinguished Researcher Award

Dr. L.-S. Fan, Distinguished University Professor and C. John Easton Professor in Engineering in the Department of Chemical and Biomolecular Engineering at The Ohio State University, is recognized for his expertise in particle science and technology, multiphase reaction engineering, and energy and environmental systems. He is an inventor of a number of industrially viable clean fossil conversion processes which control sulfur, nitrogen oxide and carbon dioxide emissions and convert carbonaceous fuels to hydrogen, chemicals or liquid fuels. He also invented the electrical capacitance volume tomography for 3-dimensional, real time multiphase flow imaging that is currently being used in academia and industry worldwide. A symposium will be held in his honor at the upcoming National meeting.





#### Glenn Award

The R. A. Glenn Award is presented for the most innovative and interesting paper presented at each ACS national meeting. The Fall 2020 Glenn Award was awarded to Randall (Randy) E. Winans of Argonne National Lab for his paper and presentation on "*Enhancing unconventional reservoir ultimate recoveries with in-situ nano-catalysts*". Randy was recognized at the Spring meeting and will receive a plaque and a \$500 award.

#### **Student Poster Award Competition**

ENFL continues to sponsor a Student Poster Award Competition (SPAC) at each National meeting. The competition features undergraduate and graduate students presenting on topics relevant to Energy & Fuels.

Six awards - \$500 for 1st prize, \$400 for two 2nd prize awards and \$300 for the three 3rd prize awards - were given based on the abstract, letter of recommendation and virtual poster presentation. We also recognzied three Honorable Mentions. Congratulations to all !

If interested in participating in the Fall 2021 Student Award Competition, email us at <u>enfldivision@gmail.com</u>.



### Nominate a Deserving Candidate for an Award!

The following awards are open for nominations:

- Research Excellence Award in Electrochemical Storage (NEW) Now June 1
- 2022 Distinguished Researcher Award Now Sept 15
- 2022 Henry H. Storch Award in Energy Chemistry July 1 November 1

More details on award criteria and how to enter can be found on our <u>Awards</u> page or email us at <u>enfldivision@gmail.com</u> for more information.

### Monthly Invited Talk

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

Development of advanced aqueous organic redox flow batteries



Date: Friday, May 28th, 7-8 pm ET

**Speaker:** *Dr. Wei Wang* is the director of the Energy Storage Materials Initiative, a multi-million-dollar and multi-year project at Pacific Northwest National Laboratory (PNNL) to fundamentally transform the energy material R&D through a physics-informed data-driven approach. He also serves as the chief scientist and technical lead on stationary energy storage R&D at PNNL with a primary focus on the development of advanced redox flow battery technologies and electrolyte solvation chemistry study.

Complete information for this MIT can be found <u>here</u>.

# Heroes of Energy & Fuels

ENFL has launched a new initiative to capture video interviews with our members with outstanding scientific contributions to energy and fuels chemistry, Our first interview is with Dr. Mieczyslaw (Mietek) M. Boduszynski speaking about his career, and sharing his wisdoms with young researchers on how he addressed major challenges.

The video can be viewed in its entirety on the ENFL <u>Youtube channel</u>. Subscribe today!



# **Upcoming Meetings**



Petrophase 2021, the 21st International Conference on Petroleum Phase Behavior and Fouling, will be held virtually **June 7-9, 2021.** Petrophase is the major international conference for scientists and engineers to share cutting-edge research on petroleum science and its application to real-world operations, and to discuss

challenges and solutions in the rapidly evolving petroleum and energy industry. The line up includes a full slate of technical keynotes, presentations, and posters from leading scientists from 18 countries. Early registration has been extended to May 25th. Registration and agenda information can be found at the conference <u>website</u>.

The ACS Fall Meeting will be held August 22-26 in Atlanta, GA as a hybrid meeting. The theme of the meeting will be **Resilence of Chemistry**. Join us for the following Symposia:

- ACS Award in the Chemistry of Materials Symposium in Honor of Prof. Yury Gogotsi
- Accelerated Materials Design for Energy Storage and Conversion
- Advancements in Sustainable Subsurface Energy Science
- Chemistry Resilience: Advanced materials and their diversified applications CACS 40th Anniversary Symposium
- Electrochemistry-enable catalysis for energy, chemicals, and materials
- Engineered Chemical Systems and Emerging Materials Chemistries for Resourceefficient Production of Energy and Fuel
- Frontier of Theory and Computation for Materials and Processes in Energy Applications
- Fuel Characterization by Multidimensional Gas Chromatography
- Gas and Fluids Separations, Utilization and Storage
- Improving energy resilience through lower carbon transportation fuels
- Innovative Chemistry and Materials for Electrochemical Energy Storage

- International Symposium on Mesoporous Zeolites
- Materials for Energy and Environmental Sustainability
- MPPG Advancements of Energy and Fuels: Design, Application, and Challenges
- Natural gas catalysis
- Resilience in Electrochemical Energy Conversion and Storage: Materials and Devices Durability, Stability, Reliability, and Safety
- Thermal/Photo/Electrochemical Catalytic Process for Clean Energy
- Valorization of petroleum molecules into high-value carbon materials
- Women in Energy Science and Technology

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