



# ACS FALL 2021 RESILIENCE OF CHEMISTRY

# **ENFL**

Business Meeting Fall 2021









# Who We Are

Mission: To promote and advance energy-related research, development and

education to address the world's energy and chemical challenges.

Membership: 2117 (at Jul 21)

**Activities:** National Meeting Programs

**Networking** 

Monthly Invited Talks (MITs)
Monthly Student Seminars

**Awards** 

**Sponsorships** 

Web & Comms: https://enfl.aps.anl.gov/

https://twitter.com/ACS\_ENFL

https://www.linkedin.com/groups/3331013/

https://www.youtube.com/watch?v=F4MpS8yY9nM&sns=tw

https://www.facebook.com/groups/128851977160865/



Current Chair Alan Chaffee

J. Louise Liu



Immediate Past Chair







Programming

**Division Chairs** 

**Division Secretary** 

**Program Chairs** 

**Division Treasurer** 



2022 Program Co-Chairs Anne Co Wei Wang



2023 Program Co-Chairs Feng Jiao

The Energy and Fuels, American Chemical Society **Current Officers and Area Representatives (2021)** 

Director at large



Councilors

**Award Committee** 

Communication

Area Representatives

Trustee

Alt. Councilor: Dr. K. C. Gregar



Jinxia Fu

Alt Councillor Dr. D Dadyburjor



Membership

Sajid Bashir Liu

Trustee: Dr. M Serio



Public Policy:

Award Chair:

Chunshan Song

**Award Committee** 



Comm& Tech

Yunlong Zhang

Trustee: Dr. M. Wójtowicz



Director At-large:

Yunhang Hu

Trustee: Dr. E. Suuberg



Chair-Elect

Yuyan Shao

Planning

Lisa Houston

Program Secretary: Ay-Hyung Park



Yuyan Shao

2021 Program Co-Chairs

Dr. R Winans



Dr. E. Fox



Councilor: Dr. S. Eser



Dr. M Reynolds



Area representative: Dr. J. García-Martínez,



Area V Dr. G. Gadikota







Middle East





Dr. T. Pandiyanbi





Europe

Area VI Dr. C. Ovales

Dr. L. Zhang

Dr. M. Shibl Abdunabi Dr. L. Mai

Mexico S&C America

# **Programming: Atlanta, Fall 2021**

ENFL Symposia		
Chemistry of Materials: Honoring Yury Gogotsi	Innovative Chemistry and Materials for Electrochemical Energy Storage	
Materials Design for Energy Storage and Conversion	Materials for Energy & Environmental Sustainability	
Sustainable Subsurface Energy Science	MPPG Advancements of Energy and Fuels: Design, Application and Challenges	
Advanced materials and their diversified applications (40 <sup>th</sup> Anniversary of CACS)	Natural Gas Catalysis	
Electrochemistry-enabled Catalysis for Energy, Chemicals & Material	Organic, Perovskite and Hybrid Solar Cells	
Emerging Materials for resource-efficient production of Energy and Fuel	Resilience in Electrochemical Energy Storage	
Theory and Computation for Materials and Processes in Energy Applications	Gas & Fluids Separation, Utilization and Storage	
Fuel Characterization by Multidimensional Gas Chromatography	Natural Gas Catalysis	
Improving Resilience through Lower Carbon Transportation Fuels	Women in Energy Science & Technology	
Valorization of Petroleum Molecules into High-Value Carbon Materials		

19 symposia: 477 papers; 57 posters











# **Programming: San Diego, Spring 2022**

ENFL Symposia	
Advances in Energy and Fuels	Materials for Energy and Environmental Sustainability
ACS ENFL Distinguished Researcher Award Symp: Prof. Liang-Shih Fan	Organic, Perovskite and Hybrid Solar Cells
ACS Henry H. Storch Award in Energy Chemistry	Photocatalysis and Photoelectrocatalysis: from Synthesis, Characterization, and Theoretical Studies of Advanced Materials to Clean Energy Applications
Research Excellence Award in Electrochemical Energy Storage (EES Award)	CO <sub>2</sub> electrolysis – fundamental and applied research
Sustainable Energy Technologies: Bonding Concept with Commercialization	Energy Storage in Chemical Bonds – From Theory to Practice
Energy-efficient Chemical Separations through 21st Century Scientific Capabilities	Electrochemistry-Enabled Catalysis for Energy, Chemicals and Materials
Hydrocracking and Hydrotreating Processes and Catalysts for Upgrading Renewable Oils, Residual Oils, Lube Base Stocks, and Olefin Plant Feedstocks	Porous materials used for clean energy and fuel storage and conversion
Catalytic solvolysis of lignocellulose and its derivative	Electrolytes and Interfaces in Energy Storage
Catalysts for Emission Control	Materials and Mechanisms in Electrochemical Energy Storage
Novel integration of sustainable chemistries and renewable energy in oilfield and alternative fuel technologies	

Submission Deadline: Oct 11, 2021

https://www.acs.org/content/acs/en/meetings/acs-meetings/abstract-submission.html











## Awards:

#### **Annual Awards:**

ACS HH Storch Award in Energy Chemistry

**ENFL Distinguished Research Award** 

**ENFL Distinguished Service Award** 

**ENFL Emerging Researcher Award** 

ENFL Research Excellence Award in Electrochemical Energy Storage NEW (2021)

ENFL Mid-Career Award – **NEW (2022)** 

ENFL Postdoctoral Researcher Awards – PENDING (2022)

#### Meeting based awards:

RA Glenn Award for Best Paper in ENFL Symposia Student Presentation Award Competition (SPAC)







#### Awards:

#### Annual Awards (2021):

ACS HH Storch Award in Energy Chemistry – Dr Harry W Deckman, Exxon-Mobil

ENFL Distinguished Research Award – Prof Liang-Shih Fan, Ohio State Uni

ENFL Distinguished Service Award – **Dr Joe Allison**, Phillips66; **Dr Kristi Fjare**, Phillips66

ENFL Emerging Researcher Award - Dr Wei Wang, Pacific NW Nat Lab

ENFL Research Excellence Award in Electrochemical Energy Storage - Dr Jun Lu, Argonne Nat Lab

**ENFL Mid-Career Award – NEW (commencing 2022)** 

ENFL Postdoctoral Researcher Awards – PENDING (commencing 2022)

#### Meeting based awards:

RA Glenn Award for Best Paper in ENFL Symposia – **Dr Dan Gaspar**, Pacific NW Nat Lab (Spring) "Screening and identification of diesel bio-blendstocks to improve performance and reduce emissions" Student Presentation Award Competition (SPAC) – next slide

#### Other Distinctions:

ACS Fellows: Javier Garcia-Martinez, Uni Alicanté; Stanislaus Wong, Stony Brook

ACS Award for Chemistry of Materials: Yury Gogotsi, Drexel Uni











# **Student Presentation Award Competition**

Fall 2021

**First Prize: Erwei Huang, Stonybrook** 

Kunyu Wang, Texas A&M

**Second Prize:** Shubo Fei, Uni Tokyo

**Third Prize:** Anuj S Joshi, Ohio State Uni







## **Officer Elections**

#### Nominations to date

Chair – Elect (2022): Stanislaus Wong

Jun Lu

Treasurer (2022-2023): Jinxia Fu

Councillor (2022-2024): Louise Liu

Dady Dadyburjor

Alt. Councillor (2022-2024): Alissa Park

**Umit Ozkan** 

Dir-at-Large (2022-2024)\*: Michelle Kidder

Michael Reynolds





## **Monthly Invited Talks**

Date & Speaker	Title
Jan 2021 Dr Michael Janik, Penn State Uni	Development of electrocatalytic materials guided by computational chemistry: fuel cells & electrolysis
Feb 2021 Dr Chang Geun Yoo, SUNY Syracuse	Sustainable & renewable deep eutectic solvents for biomass utilisation
Mar 2021 Dr Ripudaman Malhotra, SRI Int	Challenge of meeting global energy needs while averting the catastrophic effects of climate change
May 2021 Dr Wei Wang, PNNL	Development of advanced aqueous organic redox flow batteries
June 2021 Dr Chunshan Song, Univ Hong Kong	CO <sub>2</sub> capture and conversion to carbon-neutral chemicals and fuels
July 2021 Dr Yunlong Zhang, Exxon-Mobil	Applications of non contact-AFM in petroleum characterization
Sept 2021	Panel Discussion: Women's leadership in energy and fuels
Oct 2021	Panel Discussion: Promises and challenges of energy and fuels
Nov 2021 Dr Amy Marschilok, Stonybrook	Electrochemically stored energy
Dec 2021 Andre Boehman	TBA

Past talks available on youtube:

https://www.youtube.com/channel/UCLM99WXyxYwoDwwceLl09qA











## **Monthly Student Seminars**

2<sup>nd</sup> Friday of the Month 7:00 - 8:30 pm, ET

**Commencing Sept 10** 

#### 700m link:

https://www.google.com/url?q=https%3A%2F%2Fus06web.zoom.us%2Fw%2F98609460061%3Ftk%3DJlobQ VeLHswwvrWKN5lU8wgE9Laba18LHnV6iC EgkQ.DQIAAAAW9ZTzXRYtVzJtYWtfVFJVcU5GUjY4dFhiam9RAAA 7408334000&usg=AOvVaw0UX0xNCwcvisiauSzXunOn











# Questions Comments Networking







