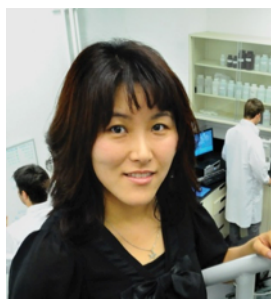




2018 Summer Newsletter

<http://web.anl.gov/PCS/ENFL/>

ENFL Letter from the Chair: A.-H. Alissa Park



Hello fellow ENFL members! On behalf of the ENFL Executive Committee I would like to thank you all for continuously supporting the division and would now like to share several 2018 highlights.

We had another successful conference, the 255th ACS National Meeting, held in New Orleans with the theme of Nexus of Food, Energy & Water. ENFL had an outstanding technical program consisting of 22 symposia and 64 oral sessions led by Dr. Jingbo Louise Liu and supported by the Programming Committee. We collaborated with other divisions (CATL, ENVR, INOR and PHYS) to co-sponsor. A special thanks to Stephen Guertin at Tulane University and Zachary Perry at Texas A&M, two PhD candidates, who organized the excellent poster session that included 64 poster presentations by students and post-doctoral researchers.

The highlight of the meeting was three award symposia: ENFL Distinguished Researcher Award – Dr. Joe D. Allison, George A. Olah Award in Hydrocarbon or Petroleum Chemistry – Dr. Oliver C. Mullins and Kathryn C. Hach Award for Entrepreneurial Success – Dr. Javier Garcia Martinez. Joe, Oliver and Javier were all recognized for their fantastic contributions to science and engineering and the ENFL division were very proud to take part in their award celebrations!

The bi-annual Business Social was held on Monday afternoon and the ENFL Division

dinner was held at Annunciation on Tuesday evening. It was great to see many old friends and meet new friends! This meeting was particularly interesting because a large number of young members joined the ENFL division and attended both the business social and the division dinner. The ENFL division will continue to grow with our young members! I would like to thank sponsors and their ENFL contacts for their generous support for the ENFL activities in 2018: Chevron (Dr. Cesar Ovalles), ExxonMobil (Dr. Mobae Afeworki), Oyama Consulting (Dr. Ted Oyama), Pete Derrick Memorial funds (Dr. Sajid Liu) and Saudi Aramco (Dr. Sehoon Chang)!

In a month, we will be assembling once again at the fall ACS meeting in Boston, MA. We have an exciting symposia line-up and social events. We hope you will find time to join us on Tuesday, August 21st at Tuscan Kitchen for an evening of fun, food and great conversation at the ENFL Division dinner. There are several dinner tickets remaining but they will go fast so get yours now. During the division dinner, we will present the 2018 Emerging Researcher Award and the Distinguished Service Award. On Monday and Tuesday, there will be a symposium in honor of Dr. Andrew Herring who will receive the Storch Award. Please join us to celebrate Dr. Herring's great contribution to Energy and Fuels Research! We are also pleased to announce the newly elected ACS Fellows: Dr. Michelle Kidder, Dr. Ripu Malhotra, Dr. Sarma Pisupati and Dr. Michael Reynolds. We congratulate all our 2018 award winners and new ACS fellows and wish them luck in their future endeavors.

The fall meeting is also the time when we provide an update on the state and status of the division by holding a joint Business Meeting

and Social for the membership with food and drink early afternoon on Monday, August 20th.

We have an excellent team of volunteers in ENFL who serve in the capacity as officers and symposium organizers, and I would like to thank all of you who volunteer and have dedicated your service to our division. Without each volunteer, the division would not be able to provide quality symposia, recognize the science of our members, or contribute to local societies to enhance scientific outreach and education. It is through everyone's great contributions that allows for the successful operation of the ENFL Division.

Please take advantage of the Newsletter and the ENFL website (<http://web.anl.gov/PCS/ENFL/index.html>) to post jobs opportunities. Also, keep an eye on the website and your email for important announcements such as due dates for award nominations, ACS registration or abstracts, etc.

Finally, I wish you all the best and hope to see you at the 2018 fall ACS meeting in Boston!

A.-H. Alissa Park

2018 Chair, ACS Energy and Fuels Division

2018 Storch Award Winner (to be presented in the Fall ACS Boston meeting)

Andy Herring



Prof. Herring's interests are generally in materials or catalysis to enable renewable energy, energy efficiency, or energy storage. In his early career he was interested in biomass pyrolysis, bio-diesel, hydrocarbon catalysis and photoelectrochemical water splitting. He is currently studying low and intermediate temperature fuel cells an effort that began 23 years ago. Dr. Herring is developing anion exchange membranes for electrolysis and fuel cells, and proton exchange membranes for increased durability or higher fuel cell operating temperatures and for ion selective redox flow batteries. He has complimentary projects in electrocatalysis, ion exchange membranes, and membrane electrode assembly testing for both anion and proton exchange membrane electrochemical energy conversion devices.

Andy Herring has a B.Sc. Hons in Chemistry and a Ph.D. in Inorganic and Structural Chemistry with Prof Bernard L. Shaw, FRS, from the University of Leeds, UK. After postdoctoral appointments at Caltech and NREL he joined the Colorado School of Mines (CSM) as a research associate. After 23 years at CSM, Prof. Herring is now a tenured full Professor in the department of Chemical and Biological Engineering. He was elected as a fellow of the American Chemical Society in 2016, where he served as the division chair of the Fuel (now Energy and Fuels) Division. He is currently

chair of the Energy Technology Division of the Electrochemical Society.

ACS Fellows Class of 2018

The ACS Fellows Program was created by the ACS Board of Directors in December 2008, to recognize members of the ACS for outstanding achievements in and contributions to science, the profession and the Society. 51 ACS fellows were awarded, four of the new fellows were ENFL members selected for the class of 2018: Dr. Michelle K. Kidder, Dr. Ripu Malhotra, Dr. Sarma Pisupati and Dr. Michael Reynolds. A ceremony at the Sheraton Boston Hotel, Monday Aug 20th at 2pm will be held to honor the new class of fellows.



Dr. Michelle K. Kidder

Oak Ridge National Lab, Oak Ridge, TN.



Dr. Ripudaman Malhotra

SRI International



Dr. Sarma Pisupati

Pennsylvania State University



Dr. Michael Reynolds

Shell Exploration and Production

Emerging Researcher Awards:

Guihua Yu (University of Texas Austin) and Alissa Park (Columbia University) are selected for the 2018 ENFL Emerging Researcher Award. They are recognized for their outstanding research records and excellent contributions to the ENFL Division.

Distinguished Service Award:

Michelle K. Kidder, from Oak Ridge National Laboratory, was selected as the recipient of The Distinguished Service Award. The award is limited to individuals who have been members of the division for at least 10 years and who have had, in the opinion of the selection committee, a significant and continued impact on the advancement of energy and fuels chemistry through research, teaching, service or a combination of the three over an extended period of time.

R.A. Glenn Awards :

The Division has selected two winners for the R.A. Glenn Best Paper Award from presentations at the 255th ACS National Meeting

in New Orleans, LA. The Glenn award is given to the most innovative and interesting paper presented at each ACS national meeting. The award was established in 1956, by the Division of Fuel Chemistry, in cooperation with Bituminous Coal Research, Inc. In 1972, the award was named in honor of Richard A. Glenn, who served as Assistant Director of Research at Bituminous Coal Research, Inc. and as Chairman of the Fuel Chemistry Division in 1960 and has been awarded since. Our awardees from the ACS New Orleans spring meeting sessions were **Stephen A. Miller**: from the University of Florida, in Gainesville, Florida; “Biofuel and biorenewables from the carinata biomill” and **Michal Leskes** of the Weizmann Institute of Science in Rehovot, Israel; “Probing bulk materials properties and the electrode-electrolyte interface with novel solid-state NMR methodology.” The winners will be receiving an honorarium at the Awards Dinner in Boston, Tuesday evening.

Student Award Session:

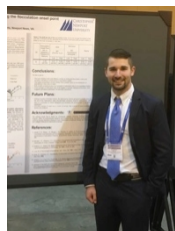
NEW: ENFL developed a Student Poster Award session that kicked off in the Fall 2017, Washington, D. C. to recognize undergraduate and graduate student research. Applicants present their poster and two winners are given a \$500 travel stipend each. Current undergrad and graduate students are eligible, contact Michelle K. Kidder for details on the Boston ACS session (applications are being accepted now until August 13th, 2018). kidderm@ornl.gov. The poster presentation will take place during the ENFL **Business Social, Monday August 20th, at 11:30 am, in the Convention Center, room 052B.**

Spring 2018 Poster Award Winners

Rangana Jayawickramage, graduate student



@U of Texas at Dallas
“PAN-Lignin polymer blends as carbon fiber precursors for high performance supercapacitors”



Harrison Siegal, undergraduate student @ Christopher

Newport University “Determination of the most effective asphaltene inhibitor at affecting the flocculation onset point in a medium crude oil”

Joint Award for Publication Symposium

The fourth annual Energy and Fuels Joint Award for Excellence in Publication was awarded to author Fateme Rezai, assistant professor at Missouri University Science and Technology, for her paper titled “SOx/NOx Removal from Flue Gas Streams by Solid Adsorbents: A Review of Current Challenges and Future Directions”. A symposium in honor of her dedication will be held in Boston at the Renaissance Boston Waterfront hotel, on Tuesday afternoon.

ChemLuminary Awards Night:

The 20th annual ACS ChemLuminary Awards celebration will be held in Boston on August 21, from 8pm (poster session 8-10 pm) until midnight at the Boston Park Plaza, Grand Ballroom A/B. Awards recognize local, technical, regional and international chapters for efforts and work in promoting chemistry and the chemical sciences during 2017. ENFL has been nominated for two awards: Most Unique Project as Funded by a Division IPG, and Outstanding Leadership Development Program.

Innovative Program Grant (IPG)

ENFL secures 2018 IPG grant, proposed by Paul Robinson: Public Outreach with Energy-Related Presentations. The project goal is to educate the general public, students and working professionals on critical energy-related issues. For more info, or to be a volunteer, please contact Paul, pr.robinson@yahoo.com

Elections

Our annual elections will be held in November. The slate of nominees will be presented to the Division at our business meeting in Boston. The list of open positions are secretary, chair elect, councilor, alternate councilor, and director at large. If you are interested in serving, please contact Past Chair Michael Reynolds mike.reynolds@shell.com

Important Dates: 2018

- August 19th-23rd 256th National ACS Boston meeting
- ENFL Symposium Organizer Breakfast: For organizers only! Monday Aug 20th @ 7am, Renaissance Boston Waterfront
- Business Social: Monday Aug 20, 11:30-1:30, Convention Center room 052B -all invited with light refreshments and student award poster presentation
- ENFL Dinner: Tuesday, Aug 21nd, The Tuscan Kitchen @ 6pm, pre-sale tickets at the ENFL table, and online.
- Deadlines for Spring 2019 ACS meeting:
Please submit your abstract at www.acs.org; MAPS opens in August 2018 for submission

Please submit any newsletter items to Newsletter editor, Michelle K. Kidder, at email kidderm@ornl.gov

ACS DIVISION OF ENERGY & FUELS

2018 OFFICERS

Chair

Alissa Park (2018)
Columbia University
Dept. of Chemical Engineering
918 SW Mudd Hall, Mailcode:4711
New York, NY 10027
212-854-8989
ap2622@columbia.edu

Immediate Past-Chair

Michael A. Reynolds (2018)
Shell Exploration and Production Co.
150 N Dairy Ashford St.
Houston, TX 77079
832-337-1034
mike.reynolds@shell.com

Chair-Elect

David Heldebrant
Pacific Northwest National Laboratory
Applied Materials and Performance
PO Box 999
Richland, WA 99352
509.372.6359
David.Heldebrant@pnnl.gov

Secretary

Bevin Parks (2017-2018)
Afton Chemical
500 Spring Street
Richmond, VA 23114
804.347.9868
bevin.parks@aftonchemical.com

Treasurer

Jinxia Fu (2018-2020)
Hawaii Natural Energy Institute
jinxiafu@hawaii.edu

Directors At Large

Alan Chaffee (2016-2018)
Monash University
School of Chemistry
Building 23N, Clayton Campus
Clayton, 3800 Australia
+61 3 9905 4626
Alan.Chaffee@monash.edu

Yun Hang Hu (2017-2019)
Michigan Technological University
Materials Science and Engineering
502 M&M Building
Houghton, MI 49931-1295
906-487-2261, FAX 906-487-2934
yunhangh@mtu.edu

Councilors

Joe Allison (2018-2020)
5715 Aspen Ave.
Bartlesville, OK 74006
918.397.0290
joedallison@cablone.net

Elise Fox (2015-2017)
Savannah River National Laboratory

Materials Science & Technology
999-2W
Aiken, SC 29808
803-507-8560
elise.fox@srl.doe.gov

Semih Eser (2016-2018)
Pennsylvania State University
101 Hosler Bldg.
University Park, PA 16802-5000
814-863-1392
seser@psu.edu

Lisa Houston (2017-2019)
PAC, LP
8824 Fallbrook Drive
Houston, TX 77064
281.940.1356
281.580.0339 (fax)
lisa.houston@pacpl.com

Alternate Councilors

Umit S. Ozkan (2015-2017)
Ohio State University
Chemical Engineering Department
151 W. Woodruff Ave.
Columbus, OH 43210-1110
614.292.6623
614.292.3769 (fax)
ozkan.1@osu.edu

Kathleen Carrado Gregar (2016-2018)
Center for Nanoscale Materials
Argonne National Laboratory
CNM 440
9700 S. Cass Ave.
Lemont, IL 60439
630.252.7968
630-252-6866 fax
kcarrado@anl.gov

Michelle Kidder (2017-2019)
Oak Ridge National Laboratory
1 Bethel Valley Rd.
Bldg. 4100, MS 6197
Oak Ridge, TN 37831
865-241-2159
kidderm@ornl.gov

Randall E. Winans (2016-2018)
Argonne National Laboratory
9700 S. Cass Avenue, Bldg 433
Argonne, IL 60439-4803
(630) 252-7479
rewinans@anl.gov

Awards Chair and Webmaster

Randall E. Winans
Argonne National Laboratory
9700 S. Cass Avenue, Bldg 433
Argonne, IL 60439-4803
(630) 252-7479
rewinans@anl.gov

Membership

Jonathan P. Mathews
Pennsylvania State University
Energy and Mineral Eng. Dept.
126 Hosler Bldg.
University Park, PA 16802-5000
814-863-6213
jpm10@psu.edu

Newsletter Editor

Michelle Kidder
Oak Ridge National Laboratory
1 Bethel Valley Rd.
Bldg. 4100, MS 6197
Oak Ridge, TN 37831
865-241-2159
kidderm@ornl.gov

Long-Range Planning

Lisa Houston
PAC, LP
8824 Fallbrook Drive
Houston, TX 77064
281.940.1356
lisa.houston@pacpl.com

Historian

Open

Public Policy

Paul Robinson
pr.robinson@yahoo.com

Program Secretary

Ranjit Koodali (2015-2017)
University of South Dakota
Dept. of Chemistry
414 E. Clark Street
Vermillion, SD 57069
605-677-6189
Ranjit.Koodali@usd.edu

Program Chair, 2018

Jingbo (Louise) Liu
The Department of Chemistry
MSC 161, 700 University Blvd
Texas A&M University-Kingsville (TAMU-K)
Kingsville, TX, 78363, USA
361.593.2919
jingbo.liu@chem.tamu.edu

Program Chair, 2019

Hongfei Lin
Washington State University
Wegner Hall 109
Pullman, WA 99164
(509) 335-1341
Hongfei.lin@wsu.edu

Programming Committee

André Boehman
University of Michigan
Dept. of Mechanical Engineering
2007 AL- W.E. Lay Auto Lab
Ann Arbor, MI 48109

361.593.2919
jingbo.liu@chem.tamu.edu

Program Chair, 2019

Hongfei Lin
Washington State University
Wegner Hall 109
Pullman, WA 99164
(509) 335-1341
Hongfei.lin@wsu.edu

Programming Committee

André Boehman
University of Michigan
Dept. of Mechanical Engineering
2007 AL- W.E. Lay Auto Lab
Ann Arbor, MI 48109
734.764.6995
boehman@umich.edu

Umit S. Ozkan
Ohio State University
Chem Engr Dept
140 W 19th Ave
Columbus, OH 43210-1110
614.292.6623
614.292.3769 (fax)
ozkan.1@osu.edu

Yunlong Zhang
ExxonMobil Research and Engineering
1545 Route 22 East
Annandale, NJ, 08801
Tel: 908-335-2792
yunlong.zhang@exxonmobil.com

Michael A. Reynolds
Shell Oil and CRI Int'l.
3333 Highway 6
Houston, TX 77082

281.544.7286
mike.reynolds@shell.com

David Heldebrant
Pacific Northwest National Laboratory
Applied Materials and Performance
PO Box 999
Richland, WA 99352
509.372.6359
David.Heldebrant@pnnl.gov

Area I Representative

Open

Area II Representative

Open

Area III Representative

Jonathan McConnachie
ExxonMobil Research Eng
1545 US Highway 22 E
Annandale, NJ 08801-3096
908.730.2380
jonathan.m.mcconnachie@exxonmobil.com

Area IV Representative

Jingbo (Louise) Liu
The Department of Chemistry
MSC 161, 700 University Blvd
Texas A&M University-Kingsville (TAMU-K)
Kingsville, TX, 78363, USA
361.593.2919
jingbo.liu@chem.tamu.edu

Area V Representative

Christopher L. Marshall
Chemical Sciences and Engineering Division
Argonne National Laboratory
9700 South Cass Avenue, CSE/241
Argonne, IL 60439-4837

630.252.4310
marshall@anl.gov

Area VI Representative

César Ovalles
Petroleum & Material Characterization Unit
Chevron Energy Technology Company
100 Chevron Way, Suite 50-1279
Richmond CA 94802, U.S.A.
510. 242. 2991
covalles@chevron.com

Mexico, Central America and South America Representative

Open

Europe and North Africa Representative

Javier Garcia-Martinez
University of Alicante
Dept. of Inorganic Chemistry
Alicante, SPAIN E-03690
j.garcia@ua.es

Pacific Rim and Australia Representative

Open

Trustees

Michael Serio
(860)528-9806 (105)
mserio@afrc.com

Eric Suuberg
(401)863-1420
Eric_Suuberg@Brown.EDU

Marek Wójtowicz
(860)528-9806 (142)
marek@afrc.com