

At the Interface of Science and Engineering



AMERICAN CHEMICAL SOCIETY

SS&T NEWSLETTER

February 2017, Kathryn Taylor-Pashow, Editor

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**Chair's Message**

*by Cory Hawkins*

Dear members of the Separations Science and Technology Subdivision,

It is my pleasure to welcome new and sustaining members of SS&T. My hope is that your year is off to a productive start and that SS&T can play a role your endeavors. I would like to thank Past Chair Peter Zalupski for his leadership in the last few years. Welcome to our new Vice Chair-Elect Mark Dietz, Vice Chair Jerry King, Secretary Kathryn Taylor-Pashow and Member-at-large Glenn Fugate, and thank you to all our volunteers for their continued service. For thirty years, volunteers have pursued the subdivision mission to increase communication between scientists and technologists working in different areas of separations.

Separations technology is unique and critical for its prevalence in industry. The advancement of reliable technologies requires efforts from basic and applied research to industrial applications. As a reflection of those needs, there are more than 2000 SS&T members representing a broad coalition of separation scientists and engineers, from a wide variety of backgrounds, working in academic, national laboratory, and industrial settings. Such diversity is one of our greatest assets.

Organization of the Spring National Meeting in San Francisco is complete. Our SS&T subdivision business meeting is Saturday, 01 April from noon to 1 pm in the San Francisco Marriott Union Square Russian Hill Room. All interested members are welcome. The I&EC technical program will run from Sunday morning through Thursday afternoon and is highlighted by two symposia contributed by SS&T.

(1) I&EC Division Early Career Fellow Symposium: Honoring Dr. Leigh Martin, organized by Glenn Fugate Wednesday, 8 am – 11 am and 2 pm – 5 pm, at the Grand Hyatt San Francisco, Curran.

(2) The Symposium entitled “Ionic Liquids in Separations and Analysis”, organized by Cory Hawkins and Mark Dietz, Sunday, 1 pm – 5:20 pm, at the Grand Hyatt San Francisco, Fillmore C.

As abstract submission for the Fall 2017 National Meeting in Washington DC has begun (I&EC deadline: 10 April), I would like to direct your attention to a symposium, which may be suitable for your contribution. It is entitled “Structural and Supramolecular Aspects of Ion Separations”, is being organized by Carter Abney and Ross Ellis, and is open to all contributors through the I&EC Division. *See flyer at the end of this newsletter.*

Looking forward, our key focus areas involve membership (recruitment and retention), expansion of technical programming, and development of educational outreach programs. To fulfill these areas we ask for your assistance. Your participation, however, does not depend on your attendance at national

meetings. In fact, local section, regional meetings, and your workplace are important spaces in which to engage the community and find others interested in the field of separations. With regard to programming, we have a plan to establish a symposium lineup 2-3 years in advance that will be facilitated by the introduction of a broader range of topics and a commitment to organize symposia around those topics. Ideas for new symposia to highlight the innovation occurring in separations are always welcome. Jerry King is the Chair of the Program Committee. I encourage you to contact him or any other officers if you would like to organize a symposium in the coming years.

### **Past Chair's Message**

by Peter Zalupski

Dear fellow members of the SST Subdivision,

Another year has sped by while all of us manage our professions and I hope all of you were able to call 2016 a successful one. As I'm dwelling on this newsletter message no better words come to mind than those I've written nearly a year ago: *"I believe SS&T is an excellent channel to communicate with other scientists who study / develop / commercialize separations. Isolation and purification of ingredients from complex matrices are necessary to maintain every detail of our global society, and many new separations challenges appear on the horizon of modernized world. It is good to recognize the importance of our work to the ongoing progress noticeable in everyday life. The SS&T Subdivision offers one opportunity to take pride in our daily research endeavors."* This time around I hope you will allow me to challenge you to actively participate in our recruiting and programming activities. Please welcome Prof. Cory Hawkins as our new Chair, and do think about contributing ideas, plans, symposia to him, as it will make his tenure that much more productive. Please accept my best wishes for 2017.

### **Upcoming Conferences**

253<sup>rd</sup> American Chemical Society National Meeting & Exposition  
April 2-6, 2017  
San Francisco, CA  
*Program Theme: Advanced Materials, Technologies, Systems & Processes*

41<sup>st</sup> Actinide Separations Conference  
May 23-25, 2017  
Argonne National Laboratory  
Argonne, IL

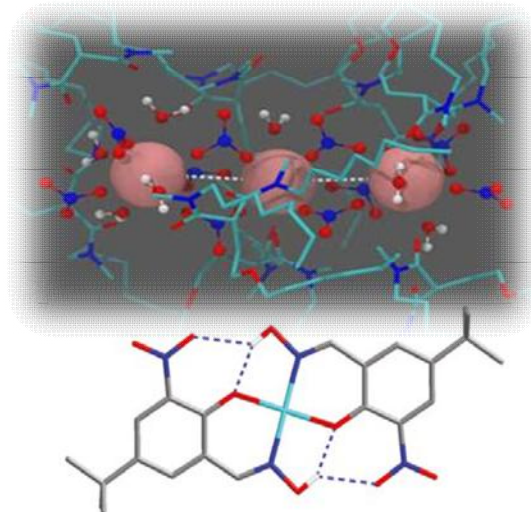
28<sup>th</sup> Rare Earth Research Conference  
June 18-22, 2017  
Ames, IA

254<sup>th</sup> American Chemical Society National Meeting & Exposition  
August 20-24, 2017  
Washington, D.C.  
*Program Theme: Chemistry's Impact on the Global Economy*

The 21st International Solvent Extraction Conference (ISEC)  
November 5-9, 2017  
Miyazaki, Japan  
Conference website: [www.solventextraction.gr.jp/isec2017](http://www.solventextraction.gr.jp/isec2017)

## Structural and Supramolecular Aspects of Ion Separations (I&EC Division)

August 20-24 2017  
Washington DC, USA



**Ion separation** is crucial for water treatment, metal refining, environmental remediation and nuclear power generation. Improving the efficiencies and economics of these processes requires a **fundamental understanding** of chemical opportunities and challenges.

The development of new and better ion separation systems is reliant on our understanding of the underpinning **chemical structure**. The focus of this symposium is on how chemical structure can be controlled to develop

new ion separation technologies that address the most pressing challenges in industrial applications.

The key issues that will be addressed in this broad symposium include (but are not limited to): [industrial challenges for ion separation technology, solvent extraction and ion exchange, membranes, ion coordination, solvation, ion recognition, self-assembly, solvation and crystallization.](#)

**Submit abstracts by April 10, through [ACS MAPS](#), in I&EC Division.**

### Organizers

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