



Engineering Properties and Structure Division Newsletter

December 2016

CHAIRPERSON'S REPORT



Dear EPSDIV Members,

As I am writing this report, the year of 2016 is about to come to its end. I'm thrilled to serve you as the Chair of the SPE Engineering Properties and Structure Division this year, and I believe 2016 has been a great year for SPE, for EPSDIV, and hopefully for all of you too.

We had another successful ANTEC in May 2016 in Indianapolis, thanks to the job well done by our Technical Program Co-Chairs, **Edwin Yang** of Pioneer Scientific Solutions, LLC and **Amaia Montoya-Goni** of the Dow Chemical Company. EPSDIV had 5 sessions at ANTEC 2016, including 12 invited talks and 20 submitted presentations. Those presentations covered a large variety of topics, from composites to packaging, from scratch resistance to thermal degradation,

which offered a great venue for professional development, technical exchange and even business networking in the plastics community. Of course, the program wouldn't be successful without the support from our corporate sponsors. We had 11 companies that sponsored our division this year, and all of you deserved a big THANK YOU from me. At ANTEC 2016, EPSDIV and EPSDIV board members were recognized with several distinguished awards. Thanks to the contribution from all of you, EPSDIV won the Gold Pinnacle Award again. Also, **Brian Grady** and **Hoang Pham** received the prestigious HSM award, and **Babli Kapur** and **Luyi Sun** were inducted as SPE Fellows. As a tradition, the Board of Directors had annual face-to-face meeting in Indianapolis as well. We elected new officers, closed old business, made new plans, and most importantly, brainstormed how we could provide better services to our members.

While we have just summarized the ANTEC activities this year, the paper submission deadline of ANTEC 2017 is approaching as well. If you haven't done so, January 13, 2017 will be your last day to submit a technical paper. Next year, we will have two veterans serving as the Technical Program Co-Chairs, **Jason Lyons** of Arkema and **Brian Grady** of

University of Oklahoma. They are now working hard to put together an excellent program for the gathering in Anaheim, CA in May 2017. So, please take a moment to read the **TPC report on page 3** and consider submitting a paper before the deadline. You can also choose to get involved by volunteering to review papers, moderate sessions, judge best papers or by many other ways. Just let us know!

Christmas and New Year's Day are right around the corner. We hope you can take a break, enjoy the time with friends and family, and get recharged for an exciting new year.

Happy holidays!

- **Daniel Liu**

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COUNCILOR'S REPORT

2016 in reflection

As 2016 comes to an end, a word of thanks to the EPSDIV members, and the greater member's community, who through their generous donation of time and expertise, are responsible for the success and longevity of the Society of Plastics Engineers (SPE). The dedicated efforts to serve, educate, and promote science and technology has resulted in a Society which will celebrate its 75th anniversary next year.

During 2016, in keeping with the times, the SPE transformation efforts have continued.

At the corporate level, a new SPE governance model was developed centered on a smaller, more accountable group of people with the responsibility and authority to govern SPE.

Also, during the course of 2016 there were several excellent idea exchanges, via the Chain, on how to transform the annual ANTEC conference.

At the August 2016 Councilors meeting in Quebec, I proposed the following to supplement and underscore the on-going dialog.

Start by revisiting ANTEC/SPE strengths:

- Historical presence
- Plastics (science, engineering, marketing) knowledge diversity: breadth and depth
- Ability to address the needs of the entire value chain
- Unique bridge between academia and industry
- Global reach – across associations and countries

Re-build core strength: science and technology information sharing via podium presentations & posters. For example,

- Simplify the process – today written paper and presentation are required
- Apply more rigor to the selection process; focus on quality, not quantity
- Conference agenda grouped according to topics – for easy attendee access
- Emphasis on new developments and emerging trends/technologies
- Best of TopCon
- Invited academia/industry leader sessions

Offer technical skill-set development (tool-box expansion) activities.

For example,

- Training across the value chain (Resin/ Processing-Conversion/Property testing/OEM/ Molded Article-Packaging Design/etc): 101 sessions, tutorials, trouble-shooting
- How to give an effective presentation (e.g., Toastmasters)
- How to write robust patents

Conduct organized networking opportunities.

For example,

- Career fair
- Address needs of both ends of the career spectrum: start (technical tips for starting employees) and end (going on to new ways to serve the community)
- Forum for consulting
- Value chain member interaction

Design ANTEC with one or more theme activities based on plastics education, promotion, facilitation. For example,

- Team up with other associations
- NPE “field trips”
- STEM activities

Time for SPE organization and network building activities.

- Allocated time for Division, SIG administrative/ organization activities as opposed to rushed lunch sessions
- More efficient use of resources and networking opportunities – synergistic division social hours vs. individual, concurrent social hours

2016 was the year of ideation. I look forward to 2017 as the year to convert the many proposed ideas to actionable activities.

My best wishes for a safe and happy holiday season.

Babli Kapur



ANTEC-2017 TPC REPORT

With the help of Brady Grady and several dedicated members of our Division, an exciting technical program is taking shape for ANTEC 2017. The deadline for submissions is rapidly approaching so please take this time to get your papers in before the deadline. In preparation for 2017, EPSPDIV decided to update the areas for solicitation in an attempt to remain current to provide better membership value to people such as yourself. In Anaheim, we anticipate newly developed sessions focusing on:

1. Polymer Aerogels
2. Sustainability and Recyclability (Joint Session)
3. Polymer Nanocomposites
4. Fibers and Nonwovens
5. Additive Manufacturing (Joint Session)
6. Special Session for Sam Kenig
7. Special Session for Bob Weiss

Along with our traditional sessions on:

- Materials Processing
- Polymer Stability, Durability and Degradation
- Packaging Applications
- Structure and Properties of Polymers

Only with your help and through your technical contributions will ANTEC 2017 be considered a success. Brian and I would like to thank you in advance for all that you do to advance the structure/property relationship of polymeric materials. See you in sunny California!

ANTEC 2017 TPC Chairs:

Jason Lyons (Arkema)

Brian Grady (University of Oklahoma)



DEADLINE for paper submissions: January 13, 2017

[Click](#) Here to submit a paper



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Funds from the program are used to support the EPSDIV mission in two key areas:

◆ **Technical conference program quality**

Such as, sponsorship of awards for outstanding papers, expenses and honoraria for invited speakers, and seed money for RETECs and other EPSDIV sponsored symposia.

◆ **Plastics education**

Such as, sponsorship of awards for outstanding student papers, student travel grants, scholarships and short courses.



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