



A Subdivision of the Rubber Division of the American Chemical Society

# Fall 2017

[www.ohiorubbergroup.org](http://www.ohiorubbergroup.org)

PO Box 341, Bath, OH 44210

## 2017 Events

### OHIO RUBBER GROUP

[www.ohiorubbergroup.org](http://www.ohiorubbergroup.org)

Fall Technical Meeting  
**Tuesday, September 26, 2017**  
Twinsburg Hilton Inn

### RUBBER DIVISION

[www.rubber.org](http://www.rubber.org)

192th Technical Meeting  
International Elastomer  
Conference  
October 9-12, 2017  
Huntington Convention Ctr.  
Cleveland, OH



### *A message from Tim Samples, 2017 ORG Chair*

Dear Ohio Rubber Group Members, Board and Colleagues:



I hope that everyone has had a wonderful summer and is looking forward to the upcoming Fall season with the cooler days and longer nights. 2017 has been a very productive year for us at the ORG. Both of our golf tournaments have been successful and well attended, thank you volunteers for your hard work and dedication! The two previous technical meetings this year were very well attended and great presentations from our colleagues, thank you for your time and professionalism.

The Ohio Rubber Group's Fall technical meeting is a great opportunity to learn more about the new technologies and projects still available for 2017, as well as meet with our peers to discuss some end of the year strategies and what to expect for next year. The technical meeting will be held on September 26th with registration starting at 4PM at the Hilton Twinsburg in Twinsburg, Ohio. Please try to attend, it is a great line-up of presenters. We look forward to technical presentations by:

- Pete Spanos –Arlanxeo "Keltan® EPDM for Economical Mixing and Compounding"
- Frank Pappas, Lab Manager, Kobelco "High Silica Rotors: Unexpected Applications"
- Zachary Zander, Ph.D. Candidate, College of Polymer Science, University of Akron "Functional Thermoplastic Polyurethanes for Various Applications"
- Dinner Speaker: Robyn Fralick, Head Coach, Women's Basketball, Ashland University "Building a Championship Culture"

As we near the end of 2017, we will be holding elections for positions with the ORG. If you are interested or know someone who is interested in volunteering with our group, please contact us by the end of October and we will make sure to put their name on the ballot for 2018 positions.

It has been an honor serving as the ORG 2017 Chair. I would like to extend my thanks and appreciation to all board members, committee chairs, volunteers, sponsors and advertisers who continue to give their time, expertise and money to make this a successful group! Very special thanks to Mary Puskas who is the glue that holds the ORG together. Thanks also to all the members for your continued support, without it the ORG would not be possible. I hope you have a successful and prosperous 2017, and I look forward to seeing you soon.



## 2017 Directors

### Chair - Tim Samples

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### Vice-Chair -- Peter Glasser

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### Treasurer - Mike McDonnell

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### Secretary - Adam Kronenberger

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### Area Director - Doug Ruch

Western Reserve Chemical 330-510-0107  
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## 2017 Committee Chairs

### Program - Tina Darnell

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### Membership - Jim Lipinski

### Scholarship/Education - Joel Neilsen

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### June Golf Outing - Doug Ruch

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### August Golf Outing -

#### Greg Sibley and Kevin Geron

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## News from the Rubber Division from Ed Miller, Executive Director

1. 2017 IEC: Beth Berkheimer and Melanie Avdeyev advised that we currently have 273 booths at 60,900 square feet and \$1,511,150 in booth sales (\$1,474,200 Budgeted). This compares to 2015 at this time as follows: 259 booths at 59,100 square feet and \$1,435,150 in booth sales. Note that we also have additional \$26,840 revenue (\$20,000 Budgeted) for 2017 Marketing Packages sold to Exhibitors plus 8 Meeting Rooms sold at \$48,000 (\$35,000 Budgeted). Gabby Daniel advised that we have 1,734 pre-registered for the 2017 IEC, with 317 paid technical registrations. There are also 50 for the 25-Year Club Luncheon, 165 for the 5K walk/run and 62 for the IRCO dinner.

Linda McClure advises that we have 138 Technical presentations, 23 (19 grads/4 undergrads) Student presentations and 18 (12 grads/6 undergrads) Student posters. This includes the following countries for student oral presentations and poster: U.S.-9, Brazil-2, Canada-1, Denmark-2, India-5, KR-10, Netherlands-2, Norway-1, Philippines-8, Kharagpur and West Bengal-1. The Student Colloquium Keynote Address will be given by Dr. Judit A. Puskas, 2017 Goodyear Medalist Winner. Additionally, the Career Fair currently has 12+ companies and growing.

2. Building Purchase: Here is a summary of actions - The Purchase Agreement is signed and we are in the Due Diligence 45 day period (ends October 6th). We met with Blind & Sons last week and evaluated the HVAC systems. We are awaiting an estimate to replace 2 of the 4 furnaces, 6 AC units and a hot water heater. Once we have the estimate, we will advise the owner that we would like to split that cost. We also met with the architectural agency (GPD Group in Akron) and agreed upon scope of work for renovations, permits, ADS compliance requirements and blueprints). We will need either a ramp or vertical lift in the back entrance for the Elastomer Training Center. We are working with our attorney at BDB Law on all documents, including letters to the two tenants to not renew their leases once they expire in 2018. At this time, our intent remains to purchase the building by October, complete architectural drawings and accomplish interior renovations by February (latest) 2018, move our primary headquarters and storage areas to the new building during the April-May 2018 timeframe, terminate tenants by August 2018, complete Elastomer Training Center renovations by November 2018 and move our training center to the new building by December 2018. The Finance & Budget Committee was briefed yesterday that we accepted an offer from UBS for a loan of up to \$1.3 million (pay as we use funds) which should be around 4%. With this, we do not have to take out money from our Reserves, which are making 8-10%.

3. Membership: Heather Maimone advised that we have 2,461 total members of which 687 are corporate members. We currently have 50 companies as Corporate Members!

4. Education: Christie Robinson advised that we have 9 courses listed for the 2017 IEC, with 150 people registered at this time. The courses can be found at <http://www.rubberiec.org/educational-symposium.aspx>. Additionally, the Experience Elastomers High School Student Program has 137 students and 11 teachers registered so far from the following schools: Copley- Fairlawn, Cuyahoga Falls, Hudson, Mogadore and Stow-Munroe Falls.

5. Society of Rubber Science and Technology, Japan: The Society representative has requested that we arrange a formal signing ceremony for the simple partnership agreement (see attachment) during our 2017 IEC. Their Society President and Head of International Exchange are attending. The signing ceremony will take place at the start of the Strategic Partnership Committee meeting at 3:00 p.m. in Room 19 (Exhibit Level) of the Huntington Convention Center. We are making two certificates (in nice folders) for them to sign.

## Educational Symposium-International Elastomer Conference October 10-12; Cleveland, OH

- Material Considerations for Medical Devices and Pharmaceutical Products
- Essentials of Rubber Technology
- Chemistry and Technology of Polymeric Materials Used in Medical Devices
- Silicone Rubber Chemistry and Technology
- Chemistry & Technology of Polyurethane Elastomers
- Compounding Mixing and Consistency
- Establishing a Rubber Molding Process
- Failure Analysis of Rubber & Plastics by Physical and Chemical Analysis
- Chemical Structures and Viscoelasticity of Rubber

Contact Christie Robinson, M.Ed., Training & Development Director,  
at [crobinson@rubber.org](mailto:crobinson@rubber.org) for more information.

#### Schedule

4:00 – Dinner Ticket/Membership Sales

4:30 – Technical Presentations

6:00 – Social Hour

7:00 – Dinner (Reserve by 9/21/17)

Dinner Speaker

## Ohio Rubber Group Fall Technical Meeting Tuesday, September 26, 2017

Hilton Garden Inn, 330-405-4488  
8971 Wilcox Drive, Twinsburg, Ohio



### "Keltan® EPDM for Economical Mixing and Compounding"

**Pete Spanos –Arlanxeo**

*Pete Spanos is a Technical Manager with a wide range of experience in all polymer types, formulating, part design, plant processing, and advanced test programs. He now provides technical guidance and application development to ARLANXEO (formerly LANXESS) customers. ARLANXEO is the world's largest producer of synthetic rubber.*

### "High Silica Rotors: Unexpected Applications"

**Frank Pappas, Lab Manager, Kobelco**

*While tire companies move toward **higher** amounts of silica filler in recipes, equipment manufacturers are making improvements to better handle these high loadings during the mixing process. Tangential rotors are effective only up to a certain level of silica, at which point an intermeshing rotor would be more efficient. To maintain the material output of the tangential rotor while getting the properties of the intermeshing rotor, a new hybrid Tangential, the 5THR rotor, was developed. While this rotor was specifically designed for high silica master batch, new studies are showing that it can also be used for other applications.*

### "Functional Thermoplastic Polyurethanes for Various Applications"

**Zachary Zander, Ph.D. Candidate, College of Polymer Science, University of Akron**

*While working under the guidance of Dr. Matthew Becker, Zachary's research has been focused on incorporating sites for functionalization, or functional domains, into a range of polymer systems to promote specific interactions and/or properties. A subset of his work includes the development of functionalized thermoplastic polyurethanes for applications in the soft TPU and catheter markets. So far, he has published two papers and has two patents pending based on technologies developed in the Becker lab, and is currently collaborating with Cook Medical to develop a scalable TPU technology that will help combat catheter-associated infections.*



**Robyn Fralick, Head Coach, Women's Basketball, Ashland University**

### "Building a Championship Culture"

Robyn Fralick led the Eagles to their second NCAA Division II national championship in the last five seasons in 2016-17, guiding AU to the first 37-0 record in D-II women's basketball history. Fralick is the 2016-17 Women's Basketball Coaches Association Division II Coach of the Year, and has won both the Great Lakes Intercollegiate Athletic Conference and Columbus Dispatch Ohio Coach of the Year awards each of her first two seasons as head coach. Fralick is 68-2 (.971) entering her third season leading the AU program.

Fralick is in her third season as Ashland University's head women's basketball coach, and 10th season overall at AU. Taking over the reigns of the Eagles, Fralick has guided one of the top Division II programs over the last six seasons to continued high heights.

The 2016-17 season saw Fralick guide Ashland to the first 37-0 record in the history of Division II women's basketball, and the program's second national championship. Ashland scored the most points in a season in D-II women's hoops history at 3,456.

After the season, Fralick was named Coach of the Year by the Women's Basketball Coaches Association (WBCA), NCAA Division II Basketball Bulletin, Great Lakes Intercollegiate Athletic Conference and the Columbus Dispatch for the state of Ohio.

In 2015-16, Ashland went 31-2, hosted the NCAA Division II Midwest Regional tournament, and won the GLIAC Tournament, GLIAC regular season and GLIAC South Division championships. AU finished the season ranked No. 7 in the USA TODAY Sports Division II Top



## Spring Technical Meeting 4/4/17

### *MANY THANKS TO THE PRESENTERS*



#### **“New Horizons of Filled Rubber Reinforcement from Molecular Dynamics Simulation”**

**Scott Smith, PhD Candidate,  
University of Akron, Dept. of Polymer Engineering  
2017 Ohio Rubber Group Scholarship Recipient**



#### **“Bio-based Plasticizers in Rubbers”**

**Jiaxi Li (Jesse), PhD Candidate,  
University of Akron, Dept. of Polymer Engineering  
2017 Ohio Rubber Group Scholarship Recipient**



#### **“Mixing in the 21st Century”**

**Peter Glasser, Regional Manager,  
HF Mixing Group, Farrel Corp.**







## 2017 Hospitality Sponsors

Thank you for your support!

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## ORG Golf Outing at Yankee Run 6/20/17

*Perfect weather, 109 golfers, a delicious barbeque banquet and yet another record take at the scholarship betting hole added up to a great day. Chair Doug Ruch and co-chair Jason Huff thank all the volunteers, the Yankee Run staff, Terrible Tom's barbeque, the sponsors, and the golfers for making this yet another very successful outing.*



## 2017 Yankee Run Sponsors Thank You!

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