

THE SOCIETY OF PLASTICS ENGINEERS

FEBRUARY 2019

2018 SECTION AWARDS

PINNACLE GOLD

COMMUNICATION EXCELLENCE

MEETING LOCATION:



Fox Hollow Golf Club

59 Fox Chase Run, Branchburg, NJ 08876 Tel: 908.526.0010

GPS Address: 59 Fox Chase Run, Branchburg, NJ 08876

THURSDAY FEBRUARY 21, 2019

4:00 PMBoard Meeting5:30 PMNetworking/Dinner MeetingAll activities will be in the clubhouse.Members and guests:\$45Non-members:\$50Students:free with RSVP

RSVP by February 20 to Pete Hayles peterhayles11@gmail.com 732-569-2368

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PALISADES-NEW JERSEY SECTION MEETING

THURSDAY, FEBRUARY 21, 2019

STANDARDIZATION IN POLYMER ANALYSIS Harry Yohn, ASTM International Committee D20 on Plastics

ASTM International's Committee D20 on Plastics is globally one of the largest groups dedicated to standardization in the plastics and polymers industry. With over 1200 members representing many global corporations and over 500 standards, its impact on utilization of these materials is significant. Through continued development of test methods and specifications related to polymers and plastics, ASTM International D20 plays an important role in new research aimed at making these materials more accessible to the end user. Covering raw materials to finished products, standards can be found that influence all facets of this development. D20 structure and current activities as well as the importance of standardization in the development of materials will be discussed.

Harry Yohn, Tinius Olsen Corp.

Harry Yohn is employed by the Tinius Olsen Corporation where he has worked for the past 23 years. A Penn State graduate, he has spent the bulk of his time working for companies involved with design and manufacture of equipment for plastics testing and analysis. Harry is an active member of the standards community and has been a member of ASTM International Committee D20 on Plastics since 1990 and a US delegate for ISO since 2006. He is also a member of ASTM Committees D02 (Petroleum Products) and D13 (Textiles). Within D20 Harry serves on its Advisory Committee as Vice Chairman – Methods, and its Executive Committee as Sub-Committee Vice-Chairman of Thermal Properties. During his tenure in ASTM D20 Harry has been recognized with a number of awards including the D20 Award of Excellence and the ASTM Award of Merit carrying with it the title of Fellow of the Society.

UPCOMING IMPORTANT DATES					
Feb. 21, 2019	Section Meeting, standards & testing topics				
Mar. 18-21	ANTEC [®] Detroit, MI				
Wed., April 3	Palisades-NJ Meeting @ Rutgers				
April (tentatively Apr. 16)	3D Printing Clinic and Tour at Lehigh University				
Thurs., May 16	Awards Night				



Emery Oleochemicals is pleased to announce an expanded distributor partnership with Omya Inc. Effective January 1, 2019, Omya's North America division will provide technical service and support to new and existing customers across the United States for Emery's Green Polymer Additives (GPA) products which include lubricants, release agents, antistatic and antifogging agents, and specialty plasticizers.

"We are excited to extend our relationship with Omya, from coast to coast," said Michael Hoppe, Senior Sales Manager Specialties. "Omya's distribution business, in conjunction with its own products, provides valuable synergistic effects, especially for our customers. For GPA sales inquiries in the United States, please contact: Omyadistribution.usci@omya.com.

The company's Green Polymer Additives business will be showcasing its sustainable polymer additives portfolio at AMI's PVC Formulation 2019 Conference, taking place in Pittsburgh, PA, USA on February 26-27. Emery's technical and industry experts will be available to discuss the company's EDENOL® and LOX-IOL® brand renewable solutions, recognized for their ability to improve processing efficiencies, deliver outstanding technical performance and enhance environmental safety. In addition, Dr. Sascha Simon, Head Technical Development Center, will give a presentation entitled "Recent developments in natural-based lubricants for PVC processing" on Wednesday, February 27.

To learn more about Emery's Green Polymer Additives products, visit http://greenpolymeradditives.emeryoleo.com/additives/.

plete adhesion.

Carbon Black

lization

Different because they work differently:

Ampacet Introduces Special Effects Masterbatch

Ampacet has released its new Cell-Struct line of special effects that visually interprets today's intersection of technology and organic elements in an engaging dimensional look for rigid packaging.

"Although the surface remains smooth, Cell-Struct produces a visually intriguing three-dimensional texture resembling cellular structures," says Elise Fenwick, Ampacet Insight & Innovation Manager, Americas.

Intended for blow-molded applications, such as personal care products, cosmetics, and home and household products, the line features six colors. The masterbatch is appropriate for multi-layer processing, allowing accentuation of the dimensional effects. Source: Ampacet



Flame Retardant **Concentrates & Compounds**

Code	Type	Carrier Resin	LDR	Usage For V-0
100532	O-Halogen	PE	100%	Compound
103132	O-Halogen	EVA	100%	Compound
11371	Brominated	PE	18-20%	Concentrate
401155	Brominated	PP	18-20%	Concentrate

Other flame retardant, foams and specialty additive concentrates for various resin types (HDPE, PVC, PP) are available.

Contact Joe Serbaroli at: joseph.serbaroli@ampacet.com or:

Ampacet Corp., Tarrytown, NY 800-888-4267



ADHESION PROMOTION – ETFE to Glass

THE PALISADES-NEW JERSEY SECTION OF THE SOCIETY OF PLASTICS ENGINEERS OFFERS ACADEMIC SCHOLARSHIPS

Young people are not only our pride and joy but they are also the future leaders of the world. So, they deserve our blessings and support. With that in mind, the Palisades-New Jersey Section of the Society of Plastics Engineers (SPE) is proud to offer academic scholarships to associated members who have demonstrated excellence in various fields of study. The scholarship categories and criteria are listed below. If you, or a family member, are interested in participating **please submit the required documents by April 20, 2019.**



If you are not a current member of SPE but you are interested in joining or becoming affiliated with the SPE Palisades-New Jersey Section, please contact Mike Carnese, 732-208-4333, mjcarnese@msn.com or visit http://www.4spe.org

Scholarship Name	Scholarship Award	Number Available	Academic Criteria	Society of Plastics Engineers (SPE), Palisades-New Jersey Section Criteria
ALVA WHITNEY Graduate Scholarship	\$4,000	1	Graduate Study In Any Field, Applicant must be in good academic standing	Full, Affiliate or Student SPE Member or Child or Grand- child of active Palisades-New Jersey Section Member
JACK RYAN Undergraduate Scholarship	\$4,000	1	Undergraduate Study in Any Field, Applicant must be in good academic standing	Full, Affiliate or Student SPE Member or Child or Grand- child of active Palisades-New Jersey Section Member
RICHARD BRADLEY AND STEPHEN DUERI UNDERGRADUATE SCHOLARSHIPS	\$2,000 R	2	Undergraduate study in Physical, Chemical, or Materials Science/Engineering, Applicant must be in good academic standing	Full, Affiliate or Student SPE Member or Child or Grand- child of active Palisades-New Jersey Section Member
FRANCIS MCANDREV AND SAL MONTE HIGH SCHOOL SCHOLARSHIPS	V \$2,000	2	Planned Study in any field	Graduating High School Student at time of award, Child or Grandchild of an active Palisades-New Jersey Section Member
PALISADES-NEW JERSE Discretionary Scholarships	Y Varied	TBD	Graduate or Undergraduate Study In Any Field, Applicant must be in good academic standing	Full, Affiliate or Student SPE Member or Child or Grand- child of active Palisades-New Jersey Section Member

To apply for a scholarship, please submit the documents listed below. Official transcripts must be submitted by postal mail or courier (i.e. FedEx, UPS) to the address below. Transcripts are considered confidential and will not be viewed by anyone outside of the evaluation team. Essays and membership information may be submitted by email to mark.lavach@arkema.com *Submit official transcripts to: Mark Lavach, ARKEMA INC. 900 First Avenue, King of Prussia, PA 19406* Required Documents:

- Official Transcript
- A one to two page essay describing your contributions to your chosen field of study or how the scholarship award might help you to achieve your future goals.
- Your SPE membership number or the number of the member to whom you are related (as necessary).

The deadline for submissions April 20, 2019.

Awards will be announced in early May 2019 and will be distributed at the final Palisades-New Jersey Section Meeting.

SECTION AWARD NEWS

ASTM Names Award in Honor of Bob MacFarlane

As many of you know, Robert MacFarlane Jr, passed away in June of 2018. Bob, or MacF, had a long and distinguished career in the polymer industry. An expert in polymer compounding, he started his career with the US Rubber Corporation in 1955 and also held positions with Exxon Mobil Research and Honeywell, where he retired as Manager of Quality Assurance in 1993. After retiring from his industrial career, Bob formed THO services, a consulting firm in which he served as principal. During the course of his career he grew keenly interested in quality and standards and served with distinction on the plastics committees of ASTM and ISO.

Bob was well known and influential in ASTM International's Committee D20 on Plastics where he served as Chairman of its Subcommittee on Thermoplastics for 23 years and as Vice-Chairman of the Committee's Materials Sub-Committees. Along the way he was recognized with many awards in D20, including its Outstanding Achievement Award, and its Award of Excellence. Bob was also recognized with ASTM International's Award of Merit and appointment as Fellow of the Society. In addition to his Officer roles on the Committee D20, Bob also served as the group's unofficial Parliamentarian, providing council for many group members. There were few in D20 who at some point Bob did not offer assistance to. He will be greatly missed for his intellect, compassion, warmth, wit, and sense of fun.

By unanimous vote of the D20 Executive Committee, the Committee's Award of Excellence will be renamed the D20 Committee Robert MacFarlane Award of Excellence in recognition of his guidance, member support and unwavering pursuit of quality through the standardization process.

Mark Lavach Wins Best Technical Presentation for Vinyltec[®] 2017

Vinyltec[®] is the leading global conference specifically devoted to the development of vinyl technology. Held over a 3 day period, this conference features tutorials and presentations given



by leading vinyl technologists and attracts nearly 300 attendees. At Vinyltec[®] 2018 it was announced that Arkema's presentation on *"The Impact of Powder Flow on Rigid PVC Processing"* was awarded Best Technical Presentation for Vinyltec[®] 2017. The presentation, given by Mark Lavach, was the result of a cross-functional project between members of Arkema's Analytical and Systems Research Group (ASR), and the PVC Additives Team of Arkema Coating Resins (ACR-PA). Team Members included Mark Lavach (ASR), Laura Nebel (ASR), Sara Reynaud (ASR), Richard Racan (ACR-PA), Daryle Stockwell (ACR-PA) and Kevin Yocca (ACR-PA). The work showed how differences in formulation design influence a rigid vinyl compound's powder rheology which in turn influences melt processing. This work represents the first phase in a study that looks to show how variations in powder rheology ultimately impact the mechanical properties of rigid PVC articles.

INTRODUCING THE FINKLE CONSULTANCY, LLC

Art Finkle, who has been a member of SPE for more than thirty years and has devoted countless hours as a Director of the Palisades-New Jersey's Finance Committee, recently retired from BASF. Art has launched The Finkle Consultancy, LLC to help companies find answers to challenging processing problems using his 44 years of industry experience. The SPEC Sheet talked to Art about his career and his future plans.

Art began selling chemicals and chemistry in 1974, and with a mechanical and electrical engineering background, he was able to come up with unique solutions for many of his customers. For example, he designed a drum unloader and valving system so that a customer could more efficiently unload a very viscous rubber chemical. In many instances, because he knows how to run extruders and understands the mechanical, electrical, and chemical aspects of processing, he was able to help companies solve processing problems.

He began his career at Hooker Chemicals and Plastics, selling their specialty chemical line. He also worked for M&T Chemicals (which eventually became part of Atochem, now Arkema) as Global Business Manager of Decorative Plating. Subsequently he worked for BF Goodrich Specialty Polymers and Chemicals group, selling emulsion polymers for paints, coatings, adhesives and textiles. After a few years at what is now the largest rubber compounder - Hexcel Polymers, Art was recruited in 2003 by BASF, which needed his unique knowledge of the candy industry (chewing gum) and rubber mix chemistry. He was instrumental as BASF reestablished its polyisobutylene (PIB) business presence in the US. "Chewing gum used to use only butyl rubber as a component, but because PIB can be made in lower molecular weight it led to the advent of softer chewing gum," he explains. "You could break a tooth on Bazooka bubble gum - but not anymore."

PIB is also used in adhesives, where it has an advantage over other adhesives because it is relatively inert and doesn't crosslink. PIB is used as the adhesives for automotive films where it protects new paint on cars. PIB has the advantage over emulsion-based chemistries because it will can easily be removed from the paint without leaving any residue, even if left on cars for months in hot conditions, explains Art. PIB is also useful in adhesives for medical patches (e.g., patches that are applied to the skin to deliver pain relievers or other drugs). *"Topical delivery using patches is a growing area because of advantages such as consistent delivery and the ability to be more patient friendly than injections or oral delivery," he explains. As one of his projects, Art developed a system that replaced solvent coating for this application. <i>"Extruders work best with pellets or beads, but PIB comes in large blocks of rubber—so it* can be a challenge to feed an extruder and make critical and consistent coatings," explains Art. His knowledge and experience enabled him to develop out-of-the-box systems to fix processing issues.

SPE has long been a part of Art's career. He joined SPE at the direction of Bob Ringwood (an M&T Classic), who was one of the founders of the then Palisades Section of SPE in the early 1980's, while at M&T. He served for a time as treasurer and continues today as a Director of the Palisades-New Jersey finance committee, which is in charge of running the endowment fund that provides student scholarships. *"Stephen Duerr is the brains of the committee and faithfully fills out the extensive tax forms that our government demands every year which allows us to operate,"* notes Art. Since Steve is retired and lives in North Carolina, Art represents the Finance Committee at local section meetings. All who have benefited from the Section's scholarships appreciate this Committee's dedicated service!

Art is also a history buff, and he points out that one of the special things about being involved with SPE has been the opportunity to meet so many people who performed ground-breaking work in polymer chemistry and enabled inventions that we take for granted today. *"For example, Elliot Weinberg did amazing work in tin chemistry, and AI Whitney was the guru who enabled the development of magnetic tape (the precursor of media tape). Lot of people in New Jersey and in the Palisades Section did amazing stuff. They are not famous, but they are the ones who made PVC work. They figured out how to make vinyl siding that doesn't degrade, is weatherable and flame retardant, and is able to withstand cold without shattering during installation, for example."*

With his wide background in all kinds of chemistries—including acrylics, nitriles, rubber mixing, and specialty chemistries—Art is offering his experience as a consultant in solving problems and processing difficult chemistries. *"I believe that in certain situations emulsions don't work well, and I have been successful in showing customers how to design and run plants that have superior properties to emulsion chemistry, with and without using solvents,"* he explains. *"Over the past 44 years I've always said, 'If I can be of further assistance, please don't hesitate to contact me,' and that still holds true today. Send me an email or call and let's see if I can help."*

You can reach The Finkle Consultancy, LLC, by email: arthurm.finkle@gmail.com or by phone: (203) 572-8923.

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Check out our Facebook page https://www.facebook.com/PalisadesSectionSPE And our Website www.SPE-PNJ.org

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VOLUNTEERS NEEDED

Volunteers Needed for Board of Directors

If you're interested in being considered for a position on the board of directors, or know someone that you'd wish to nominate, please contact:

Jack Dispenza (or info@spe-pnj.org) by February 20.