



# PITTSBURGH SOCIETY FOR COATINGS TECHNOLOGY

## JANUARY 9, 2017



<http://paintsociety.org/>



<http://paint.org/>

[psct1927@gmail.com](mailto:psct1927@gmail.com)

Joint meeting with the Chemical Association of Pittsburgh. Proceeds will be shared between the Scholarship Programs of both groups.



### RESERVATIONS:

Contact: Dan Bickford by Thursday, JAN. 5 at [psct1927@gmail.com](mailto:psct1927@gmail.com)  
Or Call: 814-242-6966  
Or Sign Up Via PayPal: [www.paintsociety.org](http://www.paintsociety.org)

- TOPIC:** Making the Switch to 2-Component Waterborne Polyurethane Coatings
- SPEAKER:** Mike Jeffries, Field Technical Service Manager in the Coatings, Adhesives and Specialties Division of Covestro
- LOCATION:** **COVESTRO'S FREDDIE'S CAFE**  
**100 Bayer Road, Bldg #6 Pittsburgh, 15205**
- TIME:**

Board Meeting	4:00 pm
Social Hour	5:00 pm
Presentation / Speaker	6:00 pm
Dinner / Meeting	7:00 pm
- COST:** \$35 with reservation • \$40 at door • \$15 retired



### TOPIC Making the Switch to 2-Component Waterborne Polyurethane Coatings

For many years solvent based polyurethane coatings have been used in very demanding applications where coating performance, such as gloss and color retention, as well as crosslink density are have been a major drivers. However with continued demands to lower VOC and odor, many formulators have been looking to water based options to meet these needs. In most cases these coatings have not been able to perform as well as their solvent based cousins.

Recent advances in polyurethane raw materials now allow formulators to make coatings that in many cases perform as well as solvent based polyurethane options. This paper will discuss the chemistry of these new water based raw materials and areas where they have been successfully used. We will also discuss some of the challenges the formulator and applicator will face when "Making the Switch to 2-Component Water Based Polyurethanes".

### MIKE JEFFRIES Field Technical Service Manager in the Coatings, Adhesives & Specialties Division of Covestro

Mike began his career at Covestro (formerly Bayer MaterialScience) in 1989 working in the Quality Assurance Laboratory. In 1992 he moved into Research. There he worked on the scale up of the various polyisocyanates, polyisocyanate prepolymers, polyaspartics and polyurethane dispersions into production. In 1998 he specifically began working on the development on new isocyanate resins for use in the coatings industry. Michael has been awarded twelve patents and has several applications pending. Mike holds a BS from the University of Pittsburgh. He is currently a Field Technical Service Manager in the Coatings, Adhesives and Specialties Division of Covestro.



## PRESIDENTS MESSAGE



**Kenneth Cutler**  
**PSCT President**  
**2016-2017**

**Dear PSCT Members,**

As we head into the New Year, it's often a time to reflect on the previous year and make plans for a prosperous new year. I'd like to take this opportunity to thank all the members who made 2016 such a great year! I'm proud of all the PSCT was able to accomplish including continuing to promote the coatings technology industry, promoting educational goals, and providing interesting experiences for our members. As we look towards 2017, I'd like to remind everyone that we only progress through the efforts of our members. Please consider how you can contribute to making 2017 even better than 2016!

I would like to thank Jim Wasik, the other PSCT board members, and the Pittsburgh Glass Center for an outstanding event last month. If you attended, I hope you had an outstanding time at the event. If you weren't able to make it to this event, our next social outing will be the May Event. More details on the May Event will be coming shortly. Stay tuned to the newsletter so you don't miss out!

As a reminder, if you know someone who will be applying for the Hiram P. Ball Memorial Scholarship and STEM grant, you should be badgering them to get started on the application. As a proud parent myself, I realize they probably will still wait until the last minute, but it's worth a try! The application deadline is March 15th, 2017.

Our next meeting on January 9th will be hosted by Covestro at Freddie's Café starting at 5 pm with a social hour. The speaker, Mike Jeffries, will present at 6 pm with a talk entitled "Making the Switch to Water Based Polyurethane" and be followed by dinner. This will be a joint event with the Chemical Association of Pittsburgh. I hope to see all of you at our first meeting of 2017!

## PAINT POT

**TIM CHEN** of BYK was picked for November's Paint Pot and was awarded \$25. The Pot will reset back to \$25 for this month's drawing. Remember, in order to be eligible to win, you must be an active member and must be present at the meeting when drawn.

## CALL FOR SPEAKERS

We are still looking for a speaker for the April 10th, 2017 meeting. If you are interested in presenting please contact Ken Cutler at [kcutler@kop-coat.com](mailto:kcutler@kop-coat.com).

## WEBSITE

Please visit <http://paintsociety.org> and view the website, including the current newsletter, President's message, upcoming events and more. Don't forget you can RSVP and pay for the upcoming dinner meeting and events from the home page of the website. You can also renew your membership directly online, it's not too late.

## ADVERTISEMENT REMINDER

We would like to thank all of the suppliers who have advertised with us in the past and hope we can count on your continued support. If companies want their advertisement displayed in the PSCT monthly newsletter, please contact Dan Bickford at [psct1927@gmail.com](mailto:psct1927@gmail.com).

## SCHOLARSHIP UPDATE

The new scholarship application has been completed. Please see the updated application in this newsletter or on our website, [www.paintsociety.org](http://www.paintsociety.org).

## 2017 MEETING DATES

January 9	Freddie's Café at Covestro
February 13	Walnut Grill - Fox Chapel, PA
March 13	TBD
April 10	TBD
April 24	MAY EVENT:

***Pittsburgh Pirates vs World Series Champion Chicago Cubs***





## DECEMBER EVENT HIGHLIGHTS

Thirty PSCT members and guests had a great time at the Pittsburgh Glass Center on December 6, 2016. After a short meet and greet over pierogis, slider sandwiches, chruschiki, kolachki, beer and wine, the group watched the skilled artist at the Glass Center blow, shape and finish a spectacular glass bowl. Following the demonstration, the group split into the 'Hot' and 'Kiln' shops.

The 'Kiln Shop' group of 13 occupied their time creating fanciful glass tiles, hanging ornaments or sun catchers to hang in a window. Choosing a design of their own or something they brought with them, they cut, glued, placed bits of glass to make, snowflakes, Christmas trees, dragonflies, flowers, and a bevy of other ideas. The finished 'art work' were placed in the kiln to be heated to over 1,000 F to allow the

glass to fuse each piece in place. It was an intense and busy time, but everyone had a real hands-on experience

The 'Hot Shop' group created glass paperweights with the assistance of the PGC artists. The PGC attendants gathered the glass from a 2000 F vat of molten clear glass and added individualized color. The PSCT individual then twisted, pulled and shaped the semi-solid glass into their desired pattern. Some chose simple swirls of color, others twisted and pulled the glass into convoluted patterns. A second 'gather' of clear glass was shaped using metal and wooden tools. The final piece was placed in the annealing kiln to slowly bring the paperweight down from 1000F to room temperature over 2 days. Each paperweight is unlike any other and can never be duplicated. Each person had the experience of working hands-on with blistering hot glass.

How do we top this next year?







## UPCOMING CONFERENCES & EVENTS:



### SSPC 2017 featuring GreenCoat JANUARY 30 - FEBRUARY 2, 2017

Sponsored by SSPC

<http://www.sspc.org/sspc-events/events-home>

Tampa Convention Center / Tampa, FL United States

The conference offers four days of technical presentations, covering everything from inspection and testing, through surface preparation and into the selection of coatings and application. Great opportunity to meet coatings experts and manufacturers in the exhibit hall and see the latest coatings and equipment. Learn how to use the latest equipment and see the new methods and processes.

### 44th Annual Waterborne Symposium

**FEBRUARY 19 - 24, 2017**

**New Orleans Marriott**

Sponsored by the School of Polymers and  
High Performance Materials

The University of Southern Mississippi

Welcome to the 44th International Waterborne, High-Solids and Powder Coatings Symposium for 2017.

We want to first thank you for your participation at our event and your support of our program at the School of Polymers & High Performance Materials at The University of Southern Mississippi. It is our goal to train the finest polymer scientists and engineers and to be the elite resource for highly qualified employees in these fields.

Website: [www.waterbornesymposium.com/](http://www.waterbornesymposium.com/)

## SMART COATINGS 2017

FEBRUARY 22-24, 2017 - ORLANDO, FLORIDA, USA

### SMART COATINGS 2017

**FEBRUARY 22 - 24, 2017**

**Orlando, FL**

Smart materials continue to be an innovative area in research and technology. This annual symposium provides a global platform for leading scientists, technologist, and industry professionals to actively interact and share their ground-breaking research achievements.

<https://www.smartcoatings.org/program.html>

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- Electro-active Polymers and Coatings
- Thermo- and Photochromic Materials
- Superhydrophobic/Hydrophilic Materials
- Self-assembling and LBL Coatings
- Bioactive Polymers and Coatings
- Dendrimers and Nano-particles
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Submit abstract to: [admin@smartcoatings.org](mailto:admin@smartcoatings.org)



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## 2017 CoatingsTech Conference

Meeting the Sustainability Challenges  
of Today and Tomorrow

**MARCH 20-22, 2017**

Westin Cleveland Downtown Cleveland, Ohio

This event, which is held on alternate years with the American Coatings Conference, provides coatings professionals the most innovative technologies and applications shaping the industry, as well as regulatory trends and networking opportunities. Through a series of special lectures from notable industry experts, focused technical sessions aimed at fully exploring key topics, and critical advanced training sessions, the 2017 ACA CoatingsTech Conference offers an unprecedented opportunity for all levels of coatings professionals to participate and learn from each other.

<http://www.paint.org/2017-coatingstech-conference/>

### New Conference Features

- Exciting short courses that provide critical training for coatings professionals from entry level technicians to research managers
- High-level presentations from leading industry experts revealing cutting-edge developments and creative responses to industry challenges
- Full exploration of the coatings industry's role in meeting regulatory and sustainability challenges that support end users
- Presentations from heralded industry experts including winners of the Roon Award, Mattiello Lecture, Student Presenter and Poster Award, and the inaugural CoatingsTech Award

### Keynote Address

David Bem is vice president of Science & Technology and chief technology officer at PPG.

Bem will discuss PPG's recent R&D efforts in addressing current and emerging market demands and regulatory trends. He will cover corrosion protection with a reduced environmental impact, coatings that enable energy efficiency, technologies driven by energy production innovation, and coating innovations driven by current and future regulatory trends.

At PPG, Bem oversees innovation across a portfolio of key segments to drive adoption of new paint and coatings offerings in products ranging from automobiles and airplanes to electronics and home care goods.



## 6th Architectural Paint Research Conference

**MARCH 15 – 17, 2017**

<http://www.apr2017.org/>

Columbia University / New York, NY

Organizer: Architectural Paint Research

The 6th International Architectural Paint Research Conference will be hosted by Columbia University in New York City from March 15 to 17, 2017. The theme of the conference, Powers of Ten, is reference to a short film from 1977 by Charles and Ray Eames. Like the film, Architectural Paint Research (APR) deals with magnitudes of scale, from a single pigment particle, to a painted house, to the decorative tastes of an entire region. In the spirit of the film, the 2017 APR conference aims to take a closer look at how we carry out our research at every level, from the micro to the macroscopic.

The 6th International Architectural Paint Research Conference draws on the successes of five previous APR conferences: Stockholm (2014), Lincoln, England (2010), New York (2008), Copenhagen (2005) and London (2000).



## CORROSION 2017 Conference & Expo

**MARCH 26 – 30, 2017**

Sponsored by NACE International

Website: <http://www.nacecorrosion.org>

Morial Convention Center / New Orleans, LA

[lindaw@wolfcontainer.com](mailto:lindaw@wolfcontainer.com)



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# PSCT Membership Application and Dues Renewal Form for 2016 - 2017

## 1. MAILING ADDRESS:

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address : \_\_\_\_\_

\_\_\_\_\_

City: \_\_\_\_\_

State/Prov: \_\_\_\_\_ Postal Code: \_\_\_\_\_

## 2. CONTACT INFORMATION:

Work Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Toll Free: \_\_\_\_\_

Home Phone: \_\_\_\_\_

Email: \_\_\_\_\_

## 3. PSCT MEMBERSHIP DUES

Primary Full Society Membership \$40

Secondary Full Society Membership \$40 – Please indicate primary society membership: \_\_\_\_\_

Student / Educator \$10

Retired Members \$10

## 5. PAYMENT INFORMATION:

Check payable to PSCT

## 6. SIGNATURE AND DATE: (Required)

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**7. RETURN APPLICATION AND CHECK TO:** Dan Bickford, PPG Industries  
400 Guys Run Road  
Cheswick, PA 15024


## OFFICIAL USE ONLY:

Total Amount Due: \$ \_\_\_\_\_ Certified by Society Member \_\_\_\_\_ Date \_\_\_\_\_

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**Pittsburgh Society for Coatings Technology  
Hiram P. Ball Memorial Scholarship**

**PSCT Science, Technology, Engineering  
Mathematics Grant Application**

**APPLICATION DEADLINE: MARCH 15, 2017**

**All Applicants must attach a full and detailed copy of transcript (School website transcript is acceptable).  
PSCT Scholarship Committee has full discretion to reject an incomplete application.**

Applications are to be submitted electronically by e-mail to: **psct1927@gmail.com**. An endorsement e-mail by the Sponsoring PSCT Member(s) must be submitted to **psct1927@gmail.com**. The subject of the application and endorsement must be: PSCT SCHOLARSHIP APPLICATION. The student is advised to submit a COMPLETE application including home address. Submission deadline remains March 15, 2017.

Applicant (student): \_\_\_\_\_

Permanent Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

PSCT Member Sponsor: \_\_\_\_\_

Present School/University (2016-17): \_\_\_\_\_

College/University (2017-18) \_\_\_\_\_

OFFICIAL CLASS STATUS AS OF DECEMBER 31, 2016:

Graduating High School Senior      College:       Freshman       Sophomore       Junior

Major Course of Study: \_\_\_\_\_ Cumulative Grade Point Average: \_\_\_\_\_

Science, Technology, Engineering, or Mathematics Grant Applicant:       Major Study GPA (last 12 months): \_\_\_\_\_

**FIRST-TIME APPLICANTS:** Please submit 2 character references from teachers, clergy, employers, professionals, etc., who are familiar with the student's goals and aspirations.

\_\_\_\_\_  
STUDENT SIGNATURE      Date: \_\_\_\_\_

\_\_\_\_\_  
PSCT SPONSORING MEMBER SIGNATURE      Date: \_\_\_\_\_

Revised 11/2016

**PSCT SCHOLARSHIP COMMITTEE HAS FULL DISCRETION TO REJECT AN INCOMPLETE APPLICATION.**

# Pittsburgh Society for Coatings Technology Hiram P. Ball Memorial Scholarship

**APPLICATION DEADLINE: MARCH 15, 2017**

**ALL APPLICANTS MUST MEET AND COMPLETE ALL REQUIREMENTS OUTLINED BELOW.**

**PSCT SCHOLARSHIP COMMITTEE HAS FULL DISCRETION TO REJECT AN INCOMPLETE APPLICATION.**

## GENERAL INFORMATION

- The PSCT Board of Directors will determine, in January, the total amount of scholarship money to be awarded each year.
- Scholarship money will be awarded equally to students as recommended by the Scholarship Committee.
- The Science, Technology, Engineering and Mathematics (STEM) grant will be added to the recipient's scholarship award. (See STEM grant requirements below.)
- **ELIGIBILITY:** Scholarship awards are to support undergraduate studies of FULL-TIME students enrolled in an accredited college or university seeking an associate or bachelor degree as of December 31, 2016. (Students must have maintained a minimum of 12 credits per semester for the 2 previous semesters to be considered full time), Students graduating from their senior year of high school are also eligible for the award.
- The Scholarship Committee will consist of five PSCT Members who do not have a child or relative applying for a scholarship.
- Scholarships are limited to one award per applicant per PSCT member per year.
- **COURSE OF STUDY:** All courses of study are open. (Exception: The additional STEM grant has further course of study restrictions. See STEM grant requirements below.) The PSCT does encourage students to pursue scientific, engineering, or mathematical programs that lead to employment in the Coatings Industry.

## REQUIREMENTS

- Applicants must submit a COMPLETE Hiram P. Ball Memorial Scholarship Application which includes a 200-word minimum essay explaining how their course of study will allow the student to reach their professional and educational goals
- Applicants must maintain a 2.75 cumulative GPA (out of 4.0).
- Applicants must submit a full and detailed copy of their transcript. School website transcripts are acceptable.
- Applicants must meet eligibility requirements with regard to enrollment and status at their college or university. (See general information above for more details on who is eligible.)
- Applicant must be the child of an actively participating PSCT member who is current with dues. The PSCT Member must attend at least four (4) PSCT meetings or events a year. The sponsoring PSCT member must submit an electronic letter of endorsement confirming the applicant meets all of the requirements.

### OR

The applicant may be a Student Member of the PSCT who is current with dues. Student Member applicants must be sponsored by an actively participating PSCT member who is also current with dues. The Student Member applicant must attend at least four (4) PSCT meetings or events a year. The sponsoring PSCT member must submit a letter to the Scholarship Committee endorsing the applicant.

- Applicant may receive the award up to a maximum of four times.
- New Applicants must also submit 2 Character References who know the student and their goals:
  - Examples: Teachers, Clergy, Employers, Neighbors/Friends, Professionals (doctors, business people).
  - References from relatives are NOT acceptable.

## PSCT Science, Technology, Engineering Mathematics Grant Requirements

The Pittsburgh Society for Coatings Technology is a technical society to promote the welfare of the coatings Industry. The Society will be offering an additional grant to one student who is enrolled in a technical course of study. To be considered for this grant, the student must meet the following criteria. If more than one applicant meets the criteria, the award will be made to the student with the highest cumulative grade point average as of application deadline. If no applicant meets the requirements, no grant will be made. The decision of the PSCT Scholarship Committee regarding the grant is final.

### Criteria:

- Must meet all other Hiram P. Ball Memorial Scholarship requirements.
- Applicant must have declared a major in Science, Technology, Engineering or Mathematics.
- Applicant must be entering their Junior or Senior year of college or university.
- Applicant must identify course directly associated with declared major curriculum including the degree audit.
- Applicants must highlight within the transcript, the courses that were taken.
- Applicant must have a GPA of 3.0 or greater in these related courses over the past 12 months (including summer school).
- The grant will be an additional \$500 over the Hiram P. Ball Memorial Scholarship award.

Revised 11/2016