

# 2023 Annual Meeting

# **REGISTRATION BROCHURE**

Monday, May 8 – Thursday, May 11, 2023 Epoxy 201 on May 8th; Short Course on May 5th



Westin Denver Downtown 1672 Lawrence St. Denver, CO 80202

Information regarding sponsorship and exhibitor opportunities can be found at: <a href="https://trfa.memberclicks.net/trfa-sponsors-and-exhibitors-prospectus">https://trfa.memberclicks.net/trfa-sponsors-and-exhibitors-prospectus</a>

Monday, May 8 – Thursday, May 11, 2023

## Join Us in Denver!

On behalf of the TRFA Board of Directors, Committee Chairs and the 2023 Annual Meeting Planning Committee, we are delighted to invite you to the Thermoset Resin Formulators Association (TRFA) 2023 Annual Meeting. This meeting is dedicated to bringing you the latest information and research in our industry.

We hope that you enjoy the 20 groundbreaking technical papers, outstanding research from the Excellence in Thermoset Polymer Research Award recipients, the NEW Epoxy 201 (*an extension of 2022's Epoxy 101*) and an amazing Short Course - Formulation, Curing and Characterization. You will also be able to meet and network with numerous suppliers and distributors - all providing the leading technology and equipment in the industry. Lastly, we leave some time for fun - a tour of Coors Field and two receptions to network and catch up with friends.

Please feel free to reach out with any questions. We look forward to welcoming you to Denver!



Pritesh Patel Chair, Thermoset Resin Formulators Association 2023 Annual Meeting



Jeremy Pasatta President, Thermoset Resin Formulators Association

# Travel Information

The Westin Denver Downtown places guests in the center of the city, near shopping, dining and entertainment. Union Station is close by, as are attractions such as Meow Wolf, Coors Field, Empower Field at Mile High, and 16th Street Mall.

#### **Travel By Air**

The best airport to fly into is Denver International Airport (DEN). The airport is a 27.2 miles from the Denver Westin Downtown.

#### Parking

Onsite parking is \$35 per day; Valet parking is \$46 per day; and Offsite parking is available at Tabor Center.

# Hotel Information

#### The Westin Downtown Denver

1672 Lawrence Street Denver, CO 80202

#### **Room Details**

Standard room rate: \$199 per night Check in: 4:00 p.m. Check out: 11:00 a.m. Pets allowed: \$50 per pet

#### Reservations

Room reservations can be made by calling 303-572-9100 and mentioning the TRFA 2023 Annual Meeting.

The deadline to reserve your room with the TRFA 2023 Annual Meeting rate is **Friday**, **April 14**, **2023**.

Reserve Online: <u>https://book.passkey.com/</u> event/50407530/owner/3485/home

Monday, May 8 – Thursday, May 11, 2023

### Schedule (Detailed schedule will be available closer to the meeting.)

Monday, May 8, 2023			
Time	Presentation		
8:00AM - 6:00PM	Registration Open		
8:30AM - 12:30PM	Epoxy 201 (Additional fee required to attend) Jeremy Pasatta, Advanced Polymer Coatings		
2:00 - 4:00PM	Coors Field Tour (Additional fee required to attend)		
3:00 - 4:30PM	Tabletop Exhibit Setup		
4:00 - 5:00PM	Board of Directors Meeting		
5:00 - 5:30PM	First Time Attendee Reception		
5:30 - 7:30PM	Opening Reception		

Tuesday, May	9, 2023
Time	Presentation
7:30AM - 6:00PM	Registration Open
7:30 - 8:00AM	Continental Breakfast Available
8:00 - 8:10AM	Welcome Remarks Jeremy Pasatta, President, Thermoset Resin Formulators Association Pritesh Patel, Chair, Thermoset Resin Formulators Association 2023 Annual Meeting
8:10 - 8:40AM	Technical Paper #1
8:40 - 9:10AM	Technical Paper #2
9:10 - 9:40AM	Technical Paper #3
9:40 - 10:10AM	Break & Tabletop Showcase
10:10 - 10:40AM	Technical Paper #4
10:40 - 11:10AM	Technical Paper #5
11:10 - 11:40AM	Technical Paper #6
11:40 AM - 12:40 PM	Tabletop Showcase First Course of Lunch (11:40 AM - 12:00PM) Student Posters Lunch (12:00 - 12:40pm)
12:40 - 1:10PM	Technical Paper #7
1:10 - 1:40PM	Technical Paper #8
1:40 - 2:10PM	Technical Paper #9
2:10 - 2:30 PM	Break & Tabletop Showcase
2:30 - 3:00PM	Technical Paper #10
3:00 - 3:30PM	Technical Paper #11
3:30 - 4:00PM	Technical Paper #12
4:00 - 6:00PM	Tabletop Showcase and Student Posters Reception

### Schedule continued on next page

3

Monday, May 8 – Thursday, May 11, 2023

# Schedule continued

Wednesday, May 10, 2023			
Time	Presentation		
7:30 - 8:00AM	Breakfast On Your Own		
8:00 - 8:30AM	Research Award Paper		
8:30 - 9:00AM	Research Award Paper		
9:00 - 9:30AM	Break & Tabletop Showcase		
9:30 - 10:00 AM	Technical Paper #13		
10:00 - 10:30 AM	Technical Paper #14		
10:30 AM -11:00 AM	Break & Tabletop Showcase		
11:00 AM - 11:30 AM	Technical Paper #15		
11:30 AM - 12:00 PM	Technical Paper #16		
12:00 - 1:00PM	Lunch and General Membership Meeting		
1:00 - 1:30PM	Technical Paper #17		
1:30 - 2:00PM	Technical Paper #18		
2:00 - 2:30PM	Technical Paper #19		
2:30 - 3:00PM	Technical Paper #20		

Thursday, Ma	y 11, 2023
Time	Presentation
8:00 AM - 4:00PM	Short Course: Formulation, Curing, and Characterization Jeff Gotro, PhD, InnoCentrix, LLC

### **Optional Tour: Coors Field**



#### Monday, May 8, 2023, 2:00 - 4:00PM (Additional fee required to attend)

#### <u>Overview</u>

This tour provides a behind-the-scenes look at one of the premier ballparks in Major League Baseball. Tours typically last 70-80 minutes and cover a distance of approximately one mile. All tours are accessible for guests with disabilities.

4



Monday, May 8 – Thursday, May 11, 2023

### **Optional Courses**

### ▶ 2023 Pre-Course: Epoxy 201

Presented By: Jeremy Pasatta, *Advanced Polymer Coatings* Monday, May 8, 2023, 8:30AM - 12:30PM (*Additional fee required to attend*)

#### **Overview**

About the Faculty

Do you want to expand on your basic knowledge of epoxies to push your formulation and products further? Epoxy 201 goes beyond the fundamentals of epoxy chemistry to discuss in more detail topics such as epoxy toughening, tuning crosslink density for optimal properties, epoxy adduct reactions and advantages, design and synthesis of epoxy resins, reversible crosslinking for recyclability and biobased materials for epoxy formulations.

#### Jeremy Pasatta

Jeremy received his Bachelor of Science in Polymer Chemistry from Rochester Institute of Technology in 2000, and has completed graduate studies in Biochemistry at University of Texas, Austin and Polymer Science at University of Akron. He has held positions at Eastman Kodak, Lexmark International, CVC Thermoset Specialties, Valtris and Huntsman Corporation, focusing on new product development and scale up, manufacturing support and optimization, technical services as well as sales and

marketing support. Currently, Jeremy is VP of Technology and Process at Advanced Polymer Coatings in Avon, OH. Jeremy holds several patents related to tougheners for thermosets and has presented at numerous domestic and international conferences. Jeremy also serves as the current president of the Thermoset Resin Formulators Association (TRFA).



Presented By: Jeff Gotro, PhD, InnoCentrix LLC

Thursday, May 11, 2023, 8:00AM-4:00PM (Additional fee required to attend)

#### <u>Overview</u>

#### Formulation

- 1. Formulation Basics
  - Components
  - Stoichiometry considerations
  - Example formulations
- 2. Formulation Strategies
  - How to build a formulation
  - · Base resins, selection, optimization
  - How to incorporate additives (adhesion promoters, flame retardants, tougheners, diluents, etc.)
  - Fillers
    - a. Filler types, role of fillers
    - b. Particle packing concepts
- 3. Design for Manufacturing (mixing, dispersion, packaging)
- 4. Product Architecture Concept
  - How to build a product architecture (or sometimes call a product platform)
  - Advantages of having product architectures
  - » Customization for specific customers
  - » Product line extensions

#### Curing

- Introduction to thermoset cure chemistry
- Key concepts of gelation and vitrification during curing
- Important structure-property-process relationships

#### Characterization

#### Thermal Analysis Methods for Thermoset formulations:

- Differential Scanning Calorimetry (DSC)
- Thermal Mechanical Analysis (TMA)
- Thermogravimetric Analysis (TGA)
- Dynamic Mechanical Analysis (DMA)

#### **Rheological testing:**

- Rheological testing of uncured, formulated thermosets (critical to understand dispensing of adhesives, coatings, laminates, composites)
- Overview of rheological testing
- » controlled stress, controlled strain, testing geometries
- Rheology during curing and processing (chemorheology)

#### About the Faculty

#### Jeff Gotro, PhD

Jeff has over thirty-eight years' experience in thermosetting polymers used in electronics having held scientific and leadership positions at IBM, AlliedSignal, Honevwell International. and Ablestik



Laboratories. During his corporate life, Jeff developed a deep understanding of polymer science and became a nationally recognized authority in thermosetting polymers. He has received invitations to speak at prestigious Gordon Research Conferences (Thermosetting Polymers and Composites) and has presented numerous invited lectures, along with technical presentations and short courses at national technical conferences. Jeff was an Adjunct Professor at Syracuse University in the Dept. of Chemical Engineering and Materials Science from 1986-1993. Jeff has published 60 technical papers (including 4 book chapters, one with Dr. Prime) in the field of polymeric materials for advanced electronic packaging applications and holds 15 issued US patents, and have 6 patents pending. Jeff has a Ph.D. in Materials Science from Northwestern University with a specialty in polymer science.

Visit the InnoCentrix website.

View Dr. Gotro's Linkedin Profile.

Visit his blog to get tips and practical advice.

@associationtrfa #TRFA2023

414-488-3916

5

### 2023 TRFA Annual Meeting – Registration Form

Please register using this page or online at www.trfa.org

#### Trial Meeting Membership - If you took advantage TRFA member companies, non-member companies, of this program, TRFA Staff will reach out to you to press, consultants, academics and spouse/ coordinate registration for companions are welcome to attend. your one attendee. Please complete the 2023 Annual Meeting Registration Form, including complete business Register online or return forms via fax/mail to: address, phone and email. TRFA Indicate your method of payment. Payment in full in 6737 W. Washington St., Suite 4210

- U.S. funds must accompany registration.
- Please complete the Event Registration indicating
- events you plan on attending.

Milwaukee, WI 53214 Fax: 414-755-1346 • Phone: 414-488-3916 www.trfa.org

Time is money! Register now and save! Attendees who register before March 31. 2023 pay Early Bird Registration Fees listed at left. Attendees registering after March 31, 2023 fees increase by \$100.

**Refunds:** Full meeting refunds may be obtained after the 2023 Annual Meeting only if TRFA is notified of the cancellation before Monday, April 24, 2023.

#### PERSONAL INFORMATION:

#### **REGISTRATION FEES & PAYMENT:** (All fees are in US Dollars)

Company		
City		
State		
hone	Fax	
Email		
Spouse/Companion Name Badge	9	
Please provide emergency con	tact information:	
lame		

Phone

Please provide any special dietary or accessibility needs:

#### EVENT REGISTRATION

Please indicate all events you (and your spouse/companion) will be attending and complete payment information. Meeting attendees are welcome to attend all functions including committee meetings and membership luncheon. (A = Attendee, S = Spouse/Companion):

#### A/S MONDAY, MAY 8, 2023

- 8:30AM 12:30PM: Epoxy 201 (Additional Fee Required)
- 2:00PM 4:00PM: Coors Field Tour (Additional Fee Required)
- 4:00PM 5:00PM: Board of Directors Meeting (By Invitation Only)
- 5:00PM 5:30PM: 1st Time Attendee Reception
- □ □ 5:30PM 7:30PM: Welcome Reception

#### A/S TUESDAY, MAY 9, 2023

- 7:30AM 8:00AM: Continental Breakfast
- 8:10AM 9:40AM: Technical Papers Session (1, 2, 3)
- □ □ 10:10AM 11:40AM: Technical Papers Session (4, 5, 6)
- □ □ 11:40AM 12:40PM: Lunch & Tabletop Showcase
- □ □ 12:40PM 2:10PM: Technical Papers Session (7, 8, 9)
- 2:30PM 4:00PM: Technical Papers Session (10, 11, 12)

#### A/S WEDNESDAY, MAY 10, 2023

- 8:00AM 9:00AM: Research Award Presentation(s)
- 9:30AM 10:30AM: Technical Papers Session (13, 14)
- □ □ 11:00AM 12:00PM: Technical Papers Session (15, 16)
- 12:00PM 1:00PM: Luncheon and General Membership Meeting
- 1:00PM 3:00PM: Technical Papers Session (17, 18, 19, 20)

#### A/S THURSDAY, MAY 11, 2023

8:00AM - 4:00PM: Short Course: Formulation, Curing & Characterization (Additional Fee Required; Lunch Included)

fter March 31, 2023 all registration fees increase by \$100.

#### Annual Meeting Member Registration Fees:

•	Before 3/31	After 3/31	
Formulator Member	\$850	\$950	\$
Distributor Member	\$900	\$1,000	\$
Supplier Member	\$950	\$1,050	\$
Professional Services			
Retired Attendee	\$450	\$550	\$

#### Annual Meeting Non-Member Registration Fees:

Formulator (1st meeting)	\$950	\$1,050	\$
Formulator (2nd or more meetings)	. \$1,500.	\$1,600	\$
Distributor (1st meeting)	. \$1,000.	\$1,100	\$
Distributor (2nd or more meetings).			
Supplier (1st meeting)	. \$1,050.	\$1,150	\$
Supplier (2nd or more meetings)	. \$1,650.	\$1,750	\$
Professional Services			
Student Attendee Discounted Fee	\$250	\$350	\$
Spouse/Companion	\$450	\$550	\$

#### **Epoxy 201 Registration Fees:**

Member Attending Annual Meeting \$50	00\$600\$	
Member Epoxy 201 ONLY\$75	50\$850\$	
Non-Mbr Attending Annual Meeting \$60	00\$700\$	
Non-Mbr Epoxy 201 ONLY\$85	50\$950\$	

#### Short Course Registration Fees:

Member Attending Annual Meeting \$500	\$600\$
Member Short Course ONLY\$750	\$850\$
Non-Mbr Attending Annual Meeting \$600	\$700\$
Non-Mbr Short Course ONLY\$850	\$950\$

#### **Optional Event Registration Fees:**

oors Field Tour	\$17	' \$17	7	\$

#### PAYMENT

C

otal	enc	osed	\$ 

Remit check payable to TRFA with completed registration form, or pay by credit card by filling out the information below and send to info@trfa.org or fax to: 414-755-1346.

Check enclosed	Charge	e to my: MasterCard	Discover	AMEX
Cardholder Name				
Card Number		Exp Dat	e	CVV
Billing Address				
Billing City/State/Zip				
Cardholder Signature				Date

Please register online: www.trfa.org or remit payment to

TRFA • 6737 W Washington St, Suite 4210 • Milwaukee, WI 53214

If you have any questions about your registration, please email info@trfa.org or call 414-488-3916