

PROGRAM

# AC AMERICAN COATINGS CONFERENCE

April 30 - May 2, 2024  
Indiana Convention Center | Indianapolis, IN

Program Subject to Change

## TUESDAY AFTERNOON

### PLENARY SESSION

April 30, 2024 | 12:00 pm

Welcome Address and Conference Introduction

### KEYNOTE ADDRESS

April 30, 2024 | 12:15 - 12:45 pm

Coatings Innovation in the Future: Sustainability and Performance  
Dr. Robert Roop, Senior Vice President and Chief Technology Officer,  
Axalta Coating Systems

### PRESENTATION OF THE AMERICAN COATINGS AWARD

April 30, 2024 | 12:45 - 1:15 pm

## SCHEDULE

April 30, 2024 | 1:30 - 5:00 pm

#### SESSION 1:

#### Measurement & Testing

1:30 - 2:00 pm

1.1 Detecting the mass of pigment particles – toward a universal size standard

Jörg Wieder, femtoG

2:00 - 2:30 pm

1.2 Transmittance technique for adjusting properties in the paint industry

Ernani Paludo, RMA Tech

2:30 - 3:00 pm

1.3 Improving scratch resistance and durability of deep matte plastic coatings

Jim Reader, Evonik

3:00 - 3:30 pm

3:30 - 4:00 pm

1.4 Weathering of Coatings – new developments in international standardization

Oscar Cordo,  
Atlas Material Testing Technology

4:00 - 4:30 pm

1.5 Quantitative image analysis of roller application performance

Sunny Wang, Dow

4:30 - 5:00 pm

1.6 Battery production: Automated quality assurance along the entire line

Jörg Mülleneisen, Optisense

#### SESSION 2:

#### Epoxy Coatings

1:30 - 2:00 pm

2.1 Triaminononane and BHMT as curatives for high-performance epoxy coatings

Karana Shah,  
Ascend Performance Materials

2:00 - 2:30 pm

2.2 Epoxy curing agents for superior chemical resistance in harsh environments

Sudhir Ananthachar, Evonik

2:30 - 3:00 pm

2.3 Sustainable CNSL-based epoxy modifiers for high-performance coatings

Hong Xu, Cardolite

3:30 - 4:00 pm

2.4 Novel fast reacting epoxy for industrial protective coatings application

Yong Zhang, Huntsman

4:00 - 4:30 pm

2.5 Innovative system for UV-resistance in epoxy coatings

Sarah Dotzler, Cargill

4:30 - 5:00 pm

2.6 Coupling agent evolution: Heteroleptic cages

Joseph Lichtenhan,  
Hybrid Plastics

#### SESSION 3:

#### Industrial Coatings 1

1:30 - 2:00 pm

3.1 Low-VOC, solvent-free resin development for UV/EB cured coil coatings

Elaine Ruiz, Arkema

2:00 - 2:30 pm

3.2 Pathway toward self-healing latexes

Mark Soucek, University of Akron

2:30 - 3:00 pm

3.3 Comparing metal-based driers in the aerobic curing of alkyd-based coatings

Martin Klussmann, Borchers

3:30 - 4:00 pm

3.4 Waterborne silicone resin for high temperature resistant coatings

Paula Cousino,  
Momentive Performance Materials

4:00 - 4:30 pm

3.5 Novel formaldehyde-free and melamine-free resin for stoving coatings

Robert Ober, BASF

4:30 - 5:00 pm

3.6 Novel resins and formulation approaches for challenging regulations

Gautam Haldankar, allnex

#### SESSION 4:

#### Wood Coatings

1:30 - 2:00 pm

4.1 Hydrophobic polymers for highly durable wood coatings

Dan Vanaken, Hexion Research

2:00 - 2:30 pm

4.2 Low-VOC, TEA-free high solids PUDs for wood

Israel Skoff, Lubrizol

2:30 - 3:00 pm

4.3 Design of new aqueous acrylic resins for coating and staining wood

Christian Ruud, PPG

3:30 - 4:00 pm

4.4 Hydrophobic wood coatings utilizing organic-inorganic hybrid technology

Tahereh Hayeri,  
Eastern Michigan University

4:00 - 4:30 pm

4.5 Novel acrylic emulsion for matte coatings without matting agents

Senthil Kumar Rengasamy, BASF

4:30 - 5:00 pm

4.6 New bio-based versatile binder for architectural coatings

Latoska Price, Synthomer

Coffee Break

**TUESDAY EVENING** April 30, 2024 | 5:00 – 6:30 pm

**Networking Reception + Poster Session** The ACC Poster Session will be held after presentations on the first day of the conference, during the ACC Reception. Posters will be on display on the show floor.



**WEDNESDAY MORNING** May 1, 2024 | 7:15 – 8:15 am

The Fun Run is an opportunity for attendees to start the day with an energizing run or walk before attending sessions. It also offers networking opportunities during a relaxed, yet spirited activity. Proceeds from the Fun Run fund student participation at future conferences.

## WEDNESDAY MORNING

**SCHEDULE**  
May 1, 2024 | 8:30 am – 12:30 pm

### SESSION 5:

#### Functional Coatings 1

**8:30 – 9:00 am**

5.1 Fluorine-free, dynamically oleophobic polymer coating  
Marshall Ming,  
Georgia Southern University

**9:00 – 9:30 am**

5.2 Novel additives for abrasion resistance in polymer coatings  
Ryan Khawarizmi, PPG

**9:30 – 10:00 am**

5.3 Fabrication of amphiphilic coatings for robust anti-icing surfaces  
Tong Li,  
North Dakota State University

**10:00 – 11:00 am**

**11:00 – 11:30 am**

5.4 Novel hybrid polymer with multifunctional coating attributes  
Tirthankar Jana, Berger Paints India

**11:30 am – 12:00 pm**

5.5 Eco-friendly, formaldehyde and solvent-free flame retardant for direct application  
Kiehnel Michael,  
Pyrex Industries GmbH  
(BCH North America)

**12:00 – 12:30 pm**

5.6 The anti-soiling coating for increasing energy efficiency in solar panels  
Arezoo Assarian, Eninco Engineering

### SESSION 6:

#### Architectural Coatings 1

**8:30 – 9:00 am**

6.1 Effects of siloxane and silica additives on dirt pickup resistance  
Meixi Chen, Evonik

**9:00 – 9:30 am**

6.2 1K permanent anti-graffiti coatings for architectural surfaces  
Forough Zarean, Wacker Chemical

**9:30 – 10:00 am**

6.3 Advances in 1K PVDF/acrylic hybrid dispersion and its applications  
Wei Wang, Arkema

**11:00 – 11:30 am**

6.4 Investigating the link between lab and real-world grain cracking of paints  
Xin Li, BASF

**11:30 am – 12:00 pm**

6.5 Evaluating self-cleaning performance of exterior paints  
Daniel Fonseca, Dow

**12:00 – 12:30 pm**

6.6 High performance UV stabilizer system for water-based coating  
Ravi Ravichandran, Amindon

### SESSION 7:

#### Industrial Coatings 2

**8:30 – 9:00 am**

7.1 Painting with pollution: Polyols from waste CO<sub>2</sub> for use in PU-based coatings  
Richard Stevenson, EconicTechnologies

**9:00 – 9:30 am**

7.2 Functional Additives for Hot Block and Performance in Waterborne Coatings  
Brian Vest, Syensqo

**9:30 – 10:00 am**

7.3 Novel polymeric dispersants for improved dispersion of polycyclic pigments  
Anthony Gilbert, Lubrizol

**11:00 – 11:30 am**

7.4 Future trends of DOT state specs to include high-performance coatings  
Don Lawson,  
AGC Chemicals Americas

**11:30 am – 12:00 pm**

7.5 Novel rheology booster for hydrophilic and hydrophobic fumed silica  
Francisco Cortes Baledon, Evonik

**12:00 – 12:30 pm**

7.6 PU coating from palm olein/ recycled PET polyol as inhibitor  
Abbas Ahmad Adamu,  
Hussaini Adamu Federal Polytechnic

### SESSION 8:

#### Waterborne Coatings 1

**8:30 – 9:00 am**

8.1 Water resistance of polyacrylic films using polymerizable surfactant  
Celine Burel, Syensqo

**9:00 – 9:30 am**

8.2 Balancing Open Time and Rain Resistance with Diffusing Wave Spectroscopy and Conventional Application Tests  
Kaliappa Ragunathan, BASF

**9:30 – 10:00 am**

8.3 Improving water resistance of acrylic emulsions using reactive surfactants  
Fabricio Pereira, Indorama Ventures

**11:00 – 11:30 am**

8.4 Waterborne, energy curable soft-feel coatings  
Jonathan Shaw, allnex USA

**11:30 am – 12:00 pm**

8.5 Why is MFFT not the coating formation temperature of latex paints?  
Artur Palasz, Spekrochem

**12:00 – 12:30 pm**

8.6 Low-MFFT acrylic copolymer for removable floor finishes and enhanced durability  
Jena Johngrass, Synthomer

**12:30 – 2:30 pm**

**Networking Lunch on the Show Floor**

# WEDNESDAY AFTERNOON

## SCHEDULE

May 1, 2024 | 2:30 - 6:30 pm

### SESSION 9:

#### Functional Coatings 2

**2:30 - 3:00 pm**

9.1 Trends to go for sustainable coatings

Andre van Linden, AkzoNobel

**3:00 - 3:30 pm**

9.2 Antibacterial and antifungal coatings and sealants

Emma Wrigglesworth, Inhibit Coatings

**3:30 - 4:00 pm**

9.3 An investigation of solar reflectivity of exterior architectural coatings

Ray Fernando, California Polytechnic State University

**4:00 - 5:00 pm**

**5:00 - 5:30 pm**

9.4 3D printing high-performance polymers and coatings

Eugene Caldoni (for Rigoberto Advincula), University of Tennessee and ORNL

**5:30 - 6:00 pm**

9.5 Vinyl esters-based intumescent paints: Enhancing performance and properties

Christophe Steinbrecher, Hexion Research

**6:00 - 6:30 pm**

9.6 Energy-curable solutions for low-VOC dielectric EV-battery coatings

Saeid Biria, Arkema-Sartomer BU

### SESSION 10:

#### Architectural Coatings 2

**2:30 - 3:00 pm**

10.1 Development of hygienic paint to meet EPA's residual efficacy requirement

Chun Liu, Arxada

**3:00 - 3:30 pm**

10.2 Dispersants for silicate and high-pH paints

Catherine Vitale, Münzing

**3:30 - 4:00 pm**

10.3 Innovative calcium carbonate for TiO<sub>2</sub> extension

Dino Papagianidis, Omya

**5:00 - 5:30 pm**

10.4 Building performance exterior acrylics to master regulatory challenges

Mary Chervenak, Arkema

**5:30 - 6:00 pm**

10.5 Novel Bi-Modal, High Solid Polymer Dispersions for Architectural Coatings

Michael Krayer, BASF

**6:00 - 6:30 pm**

10.6 Incorporation of nonionic reactive surfactants and emulsion stability

Bruno Dario, Indorama Ventures

### SESSION 11:

#### Protective Coatings 1

**2:30 - 3:00 pm**

11.1 Comparison of amphiphilic zwitterionic polymers for fouling-release coatings

Joseph Dahlgren, North Dakota State University

**3:00 - 3:30 pm**

11.2 Hydrophobic polymers for silane curing, isocyanate-free protective topcoats

Denis Heymans, Hexion Research

**3:30 - 4:00 pm**

11.3 Improving the sustainability of high-performance water-based DTM coatings

Jeffrey Arendt, Arkema

**5:00 - 5:30 pm**

11.4 Innovative calcium silicate anticorrosion pigment for protective coatings

Bin Cao, Evonik

**5:30 - 6:00 pm**

11.5 Si-based binders: transforming the market for industrial thermal insulation

Jenafer Duley, Dow

**6:00 - 6:30 pm**

11.6 UV-curable sol-gel hybrid coatings for advanced and sustainable applications

Vjaykumar Mannari, Eastern Michigan University

### SESSION 12:

#### Waterborne Coatings 2

**2:30 - 3:00 pm**

12.1 Zero-VOC coalescing agents and their impact on paint surface properties

Michael Praw, Indorama Ventures

**3:00 - 3:30 pm**

12.2 Low-VOC water-based formulations: How to improve the abrasion resistance

Stephanie Vanslambrouck, EMCO-Inortech

**3:30 - 4:00 pm**

12.3 Solvent-borne to waterborne: A new hydroxyl functional resin for topcoats

Chandra Pandey, Lubrizol

**5:00 - 5:30 pm**

12.4 New developments in emulsion & dispersion stability analysis and shelf-life

Daniel Scholz, DataPhysics Instruments

**5:30 - 6:00 pm**

12.5 Polycaprolactone polyols designed for polyurethane dispersions

Chuck Jones, Ingevity

**6:00 - 6:30 pm**

12.6 Fibrillated cellulose improves physical property and rheology of roof coating

Qi Wang, Sappi

**Coffee Break**

# THURSDAY MORNING

**SCHEDULE**  
May 2, 2024 | 8:30 am – 12:30 pm

## SESSION 13:

### Bio-based Materials

**8:30 – 9:00 am**

13.1 Synthesis of novel bisphenol-A-free sustainable epoxy resins for coatings

Ayowale Soyemi,  
Eastern Michigan University

**9:00 – 9:30 am**

13.2 Enhancing 2k PU coating formulations using bio-based polyols

Wolfgang Geuking, Cargill

**9:30 – 10:00 am**

13.3 Sustainable revolution in paints: Bio-based surfactants as high-performance additives

Laura Benavides, Integrity Biochem

**10:00 – 11:00 am**

**11:00 – 11:30 am**

13.4 Impacts of rosin in alkyds from vegetable oil fatty acids

Eric Kiturkes, Ingevity

**11:30 am – 12:00 pm**

13.5 Formulating bio-based polyols for low-VOC, solvent-borne protective coatings

Kyle Flack, BASF

**12:00 – 12:30 pm**

13.6 Alkyd/acrylic hybrid latexes for use in waterborne wood coatings

Richard Flecksteiner, Synthomer

**12:30 pm**

## SESSION 14:

### Service-Life Prediction and Durability

**8:30 – 9:00 am**

14.1 Hierarchical service-life prediction models for the design of new coatings

Erik Sapper, California Polytechnic State University

**9:00 – 9:30 am**

14.2 Damage accumulation and combined stressor matching in accelerated UV testing

Cameron Causey, California Polytechnic State University

**9:30 – 10:00 am**

14.3 Exploring graphene and related nanomaterials as multifunctional additives

Lynn Chikosha, Universal Matter

**11:00 – 11:30 am**

14.4 Novel polyester-based resin shows extreme weatherability for asset protection

James Horne, Eastman

**11:30 am – 12:00 pm**

14.5 Long-term UV exposure testing & aesthetics of powder coating topcoats

Connie Przeslowski,  
AGC Chemicals Americas

**12:00 – 12:30 pm**

14.6 Superhydrophobic coatings and filters: High durability and nanocomposites

Eugene Caldon (for Rigoberto Advincula),  
University of Tennessee and ORNL

**End of Conference**

## SESSION 15:

### Protective Coatings 2

**8:30 – 9:00 am**

15.1 Graphene-filled abrasion-resistant coatings and their characterization

Xiaoning Qi,  
North Dakota State University

**9:00 – 9:30 am**

15.2 ULE epoxy protective coatings – A perfect cure for adverse conditions

Raghuraman Govindan  
Karunakaran, Evonik

**9:30 – 10:00 am**

15.3 Bio-based high-solids polyamide polyols for protective coatings

Milena Garay-Tovar, Lubrizol

**11:00 – 11:30 am**

15.4 Co-blending for reduced carbon burden anti-corrosion coatings

Patrick Dodds, Hexigone Inhibitors

**11:30 am – 12:00 pm**

15.5 Silane modified colloidal silica in waterborne PUD coatings for steel

Peter Greenwood, Nouryon

**12:00 – 12:30 pm**

15.6 Waterborne silicone copolymer binders for industrial coatings

Amithabha Mitra,  
Wacker Chemicals

## SESSION 16:

### Digitalization and Big Data

**8:30 – 9:00 am**

16.1 Exterior exposure performance investigation through the lens of big data

Yujie Lu, Dow

**9:00 – 9:30 am**

16.2 From visual to digital: Color release for pearlescent pigments

Thomas Rentschler,  
EMD Electronics

**9:30 – 10:00 am**

16.3 Digital testing and measurement technologies for coating application

Ludger Wahlers, Erichsen

**11:00 – 11:30 am**

16.4 Accelerating new additive development through the use of automation

Ingrid Meier, Evonik

**11:30 am – 12:00 pm**

16.5 Digital transformation in the coatings industry

Sam Lim, Dow

**12:00 – 12:30 pm**

16.6 Artificial intelligence in paint production

Ralph J. Woerheide, Metromation

For the most up-to-date information about the ACC 2024 program, visit [www.american-coatings-show.com](http://www.american-coatings-show.com).