PLENARY SESSION
April 5, 2022 | 12:00 pm
Welcome Address and Conference Introduction

KEYNOTE ADDRESS
April 5, 2022 | 12:15 – 12:45 pm
The Role of Innovation in the Coatings Industry When Every Color Must be Green
Chris Killian, Senior Vice President and CTO, Eastman

PRESENTATION OF THE AMERICAN COATINGS AWARD
April 5, 2022 | 12:45 – 1:15 pm

Tuesday Afternoon

SCHEDULE
April 5, 2022 | 1:30 – 4:30 pm

SESSION 1: Science Today, Coatings Tomorrow

1:30 – 2:00 pm
1.1 Watching paint dry: Optical measurement of evolving rheology and microstructure during drying
James Gilchrist, Lehigh University

2:00 – 2:30 pm
1.2 Waterborne non-isocyanate polyurethane epoxy hybrid coating
Qixin Zhou, The University of Akron

2:30 – 3:00 pm
1.3 Latex resins based on plant oils
Andriy Voronov, North Dakota State University

3:30 – 4:00 pm
1.4 Revealing the structure of coatings and their interfaces with substrates using innovative scattering techniques
Mark Foster, The University of Akron

4:00 – 4:30 pm
1.5 Sustainable polymer coatings – Developments and the future
David Grewell, North Dakota State University

SESSION 2: Sustainability

1:30 – 2:00 pm
2.1 Recycled windshields: PVB dispersions as sustainable binders in low-to-zero VOC paints
Andrew Zudans, Shark Solutions

2:00 – 2:30 pm
2.2 The use of levulinates as coalescing agents in water-based coatings
Steve Block, NXTLEVVEL Biochem

2:30 – 3:00 pm
2.3 Lignin as a raw material for production of biobased resins
Mojgan Nejad, Michigan State University

3:30 – 4:00 pm
2.4 Creative formulating strategies to meet bio-preferred certification requirements
Mary Chervenak, Arkema

4:00 – 4:30 pm
2.5 Aliphatic glycidyl ethers as crosslinkers for high-performance NISO coatings
Brendon Bohnert, Nagase Specialty Materials NA

SESSION 3: Measuring and Testing

1:30 – 2:00 pm
3.1 Innovative solution to optimize coatings curing
Yassine Nagazi, Formulaction

2:00 – 2:30 pm
3.2 The determination of polyquaternium-4 on PET film using pyrolysis-GC/MS (Py-GC/MS)
Athena Nguyen, Frontier Lab America

2:30 – 3:00 pm
3.3 Non-Isocyanate Polyurethanes: Advancing applications by leveraging cure chemistry
Vijay Mannari, Eastern Michigan University

3:30 – 4:00 pm
3.4 Separating the effects of TiO_2 dispersion and photoactivity on paint durability
Michael Diebold, Chemours

4:00 – 4:30 pm
3.5 Development of BPA non-intent resin for alternative metal packaging substrate
Goliath Beniah, Eastman Chemical Company

SESSION 4: Automotive Coatings

1:30 – 2:00 pm
4.1 Novel surface additive for crater prevention and improved recoat
Brent Laurenti, BYK

2:00 – 2:30 pm
4.2 Reactable, non-migrating, and non-basic hindered amine light stabilizer for coatings
Ravi Ravichandran, Rianlon

2:30 – 3:00 pm
4.3 Learning from swarms: mini sensors for measuring coating thickness in an industrial environment
Georg Nelke, OptiSense

3:00 – 3:30 pm Coffee Break

3:30 – 4:00 pm
4.4 Radar and LIDAR-suitable car paints – the view of a pigment manufacturer
Adalbert Huber, Schlenk Metallic Pigments

4:00 – 4:30 pm
4.5 Modified acrylic resin for difficult to adhere plastics
Gautam Haldankar, allnex

Tuesday Evening April 5, 2022 | 5:00 – 6:30 pm

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 and poster contributors will be available to discuss their results with interested attendees.

FUNRUN

Wednesday Morning April 6, 2022 | 7:15 – 8:15 am

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

Wednesday Morning

SCHEDULE

April 6, 2022 | 8:30 am – 12:30 pm

SESSION 5: Functional Coatings 1

8:30 – 9:00 am

5.1 Creating functional coatings with formaldehyde-scavenging additives
Mark Langille,
Angus Chemical Company

9:00 – 9:30 am

5.2 Functional silicone additives for easy-to-clean coatings
Yogesh Tiwary,
Momentive Performance Materials

9:30 – 10:00 am

5.3 Reactive spray-applied waterproofing coatings for confined space applications
David Cozzens,
GCP Applied Technologies

SESSION 6: Architectural Coatings 1

8:30 – 9:00 am

6.1 Novel reactive surfactants for latex emulsion polymerization
Julia Zaug,
Stepan Company

9:00 – 9:30 am

6.2 Latex and thickener polarity effects on rheology & stability of latex-HEUR mixtures
Ray Fernando,
California Polytechnic State University

9:30 – 10:00 am

6.3 Improving water resistance of water-based coatings using reactive surfactants
Juliane Santos,
Oxiteno

SESSION 7: Epoxy Coatings

8:30 – 9:00 am

7.1 Reactive epoxy emulsifier for high-performance waterborne epoxy coatings
Lichang Zhou,
Solvay

9:00 – 9:30 am

7.2 Novel epoxy dispersions for futureproofing ultra-low VOC high performance coatings
Matthew Sumpter,
Hexion

9:30 – 10:00 am

7.3 Improving epoxy durability while addressing light stabilizer additives challenges
Mouhcine Kanouni,
Clariant Corporation

SESSION 8: Waterborne Coatings

8:30 – 9:00 am

8.1 Alternatives to fluorosurfactants for waterbased floor care coatings
Tony Moy,
BASF

9:00 – 9:30 am

8.2 Fluoro-free and silicone-free blocking resistance additives for waterborne coatings
Carolina Vargas,
Stepan Company

9:30 – 10:00 am

8.3 Selecting an amino alcohol dispersant for waterborne industrial coatings
Mark Langille,
Angus Chemical Company

10:00 – 11:00 am — **Coffee Break**

11:00 – 11:30 am

5.4 Evaluation of amino methyl propanol in high PVC, quick-drying acrylic coatings
Bobby Picker,
Univar Solutions

11:30 am – 12:00 pm

5.5 Novel silicone hardener for eco-friendly heat-resistant coatings
Francisco Cortes Baledon,
Evonik Corporation

12:00 – 12:30 pm

5.6 The use of single-walled carbon nanotubes in coatings colorants
Andrew Bartlett,
Chromaflo Technologies

11:00 – 11:30 am

6.4 Expand alkyd applications & durability with high-performance cobalt-free catalysts
Joshua Halstead,
Milliken

11:30 am – 12:00 pm

6.5 Effect of different surfactants on emulsion polymerization of vinyl-acrylic latex
Bruno Dário,
Oxiteno

12:00 – 12:30 pm

6.6 Develop formulation solution of an exterior paint with improved early rain resistance
Yujie Lu,
Dow

11:00 – 11:30 am

7.4 Unique additives for high performance industrial protective coatings
Yong Zhang,
Huntsman Corporation

11:30 am – 12:00 pm

7.5 Novel waterborne acrylic-epoxy hybrid coatings provide superior metal protection
Denise Lindenmuth,
Dow

12:00 – 12:30 pm

7.6 Fast-cure amine technologies enable rapid return to service in floor coatings
Shiying Zheng,
Evonik Corporation

11:00 – 11:30 am

8.4 Novel high performance OMU without aromatic moieties for wood flooring applications
Alexander Delgado,
Polynt

11:30 am – 12:00 pm

8.5 Novel dispersing agents for high performance waterborne coatings
Cathy Cooper,
Lubrizol Advanced Materials

12:00 – 12:30 pm

8.6 DFT vs VOC and their impact on performance in waterborne DTM coatings
Tony Neely,
BASF

12:30 – 2:30pm — **Networking: Lunch on the Show Floor**

Wednesday Afternoon

SCHEDULE
April 6, 2022 | 2:30 – 6:30 pm

SESSION 9: Functional Coatings 2

2:30 – 3:00 pm

9.1 Antimicrobial coating from soybean oil-based polyurethane dispersions
Marshall Ming,
Georgia Southern University

3:00 – 3:30 pm

9.2 Improved adhesion of silicone roof coatings to difficult membranes with novel silanes
Letitia Luu,
Evonik Corporation

3:30 – 4:00 pm

9.3 Selective and environmentally friendly removal of silyl-PU coatings from substrates
Erick Iezzi,
U.S. Naval Research Laboratory

5:00 – 5:30 pm

9.4 Amphiphilic self-stratified durable coatings for marine and anti-icing applications
Alireza Rahimi,
Applied Medical Technology

5:30 – 6:00 pm

9.5 Key considerations for functional antiviral paints
Avantika Golas,
Corning Incorporated

6:00 – 6:30 pm

9.6 Novel fumed silica composite drives high-performance for thermal insulation coatings
Maria Nargiello,
Evonik Corporation

SESSION 10: Architectural Coatings 2

2:30 – 3:00 pm

10.1 High-performance TiO_2-free roof coatings via novel hollow plastic microspheres
Evan Montanez,
Coadtech

3:00 – 3:30 pm

10.2 Formulation for high-gloss latex and comparison of lab and real-world performance
Xin Li,
BASF

3:30 – 4:00 pm

10.3 Improving application experience and applied hide for professional paints
Sunny Wang,
Dow Coating Materials

5:00 – 5:30 pm

10.4 A novel approach to tinting alkyds and stains with waterborne colorants
Mark Ellsworth,
EPS/CCA

5:30 – 6:00 pm

10.5 New advances in copper phthalocyanine blue 15:6 pigments in architectural coatings
Nilanjan Chakrabarti,
Sun Chemical Corporation

6:00 – 6:30 pm

10.6 Neutralizing agent providing odorless pH control, zero-VOC and extended shelf life
Miguel Herrera,
Omya

SESSION 11: Polyurethane Coatings

2:30 – 3:00 pm

11.1 Extremely low-VOC acrylic polyol technology for 2K WB high-performance concrete coating to TPO
Karl Sundberg,
allnex

3:00 – 3:30 pm

11.2 Novel polyisocyanates for flexibilizing polyurea coatings
Marc Cornick,
Vencorex

3:30 – 4:00 pm

11.3 Nonionic diols for hydrophilic modifications – impact of chain length
Pär Jörgensen,
Perstorp

5:00 – 5:30 pm

11.4 Renewable multipurpose polyurethane coatings
Terri Carson,
Alberdingk

5:30 – 6:00 pm

11.5 1K moisture curable silylated resin for use on multiple substrates
Dean Kondos,
Momentive Performance Materials

6:00 – 6:30 pm

11.6 Demonstration and validation of isocyanate-free, siloxane-based aircraft topcoats
Erick Iezzi,
U.S. Naval Research Laboratory

SESSION 12: Tools and Systems

2:30 – 3:00 pm

12.1 Service life prediction as a coating resin design trait
Erik Sapper,
California Polytechnic State University

3:00 – 3:30 pm

12.2 Improving the odds of success using a benign-by-design approach to product development
Ingrid Meier,
Evonik Corporation

3:30 – 4:00 pm

12.3 Novel formulation optimization using big data, modeling, and predictive tools
Partha Majumdar,
The Dow Chemical Company

5:00 – 5:30 pm

12.4 Rational coating formulation concept and application
Jamil Baghdachi,
Innovative Technical Systems

5:30 – 6:00 pm

12.5 Leveraging the 2020 idea of the year to revolutionize your paint process
Michael Bonner,
Saint Clair Systems

6:00 – 6:30 pm

12.6 Paint recycling – sustainability through circular economy
Sanjeev Bagaria ,
International Paint Recycling Organisation

4:00 – 5:00 pm **Networking: Coffee Break**

Thursday Morning

SCHEDULE

April 7, 2022 | 8:00 am – 12:00 pm

SESSION 13:

Biobased Materials

8:00 – 8:30 am

13.1 Lignin-based waterborne polyurethane dispersion resin
Saeid Nikafshar,
Michigan State University

8:30 – 9:00 am

13.2 Biomass derived coatings and adhesives using renewable, low-cost 1,5-pentanediol
Lei Zheng,
University of Massachusetts Amherst

9:00 – 9:30 am

13.3 Sustainable & high performance: new bio-based dispersion to prevent knot staining
Ziniu Yu,
BASF

SESSION 14:

Weathering and Corrosion Testing

8:00 – 8:30 am

14.1 Evaluation of ASTM D7869-13 test method for premium architectural finishes-II
Kurt Wood,
Arkema

8:30 – 9:00 am

14.2 Novel hybrid additives for exterior wood coatings
Melanie Bauer,
Michelman

9:00 – 9:30 am

14.3 Influence of cool mirrors on specimen temperatures during accelerated outdoor tests
Oscar Cordo,
Atlas Material Testing Technology

SESSION 15:

Protective Coatings

8:00 – 8:30 am

15.1 1-k and 2-k PVDF hybrid dispersions for stay-clean storage tank topcoats
Wei Wang,
Arkema

8:30 – 9:00 am

15.2 Novel polyester-based resins as an alternative to fluoropolymer technologies
Geoff Webster,
Eastman Chemical Company

9:00 – 9:30 am

15.3 Formulation latitude with solventborne DTM acrylic polyol: from monocoat to primer
Susana Porzio,
BASF

SESSION 16:

Radiation Curing

8:00 – 8:30 am

16.1 Achieving ultra-low gloss coatings through oligomer design and technology
Marcus Hutchins,
allnex

8:30 – 9:00 am

16.2 Energy-efficient curing of cycloaliphatic epoxy coating systems
Patrick Shipman,
Achiewell

9:00 – 9:30 am

16.3 Resins for luxury vinyl tile: enabling differentiation through product performance
Marcus Hutchins,
allnex

9:30 – 10:30 am — **Networking: Coffee Break**

10:30 – 11:00 am

13.4 Modification of hemicellulose with polymers based on acrylic plant oil-based monomers
Yehor Polunin,
North Dakota State University

11:00 – 11:30 am

13.5 Synthesis of bio-based polyols and their applications in industrial coatings
Seyed Mojtaba Mirabedini,
Eastern Michigan University

10:30 – 11:00 am

14.4 Correlation of early chalking results to final results
Michael Diebold,
Chemours

11:00 – 11:30 am

14.5 Impact of processing conditions on the properties of high-performance powder systems
Connie Przeslawski,
AGC Chemicals Americas

11:30 am – 12:00 pm

14.6 Ponding water algae induced damage on acrylic coating
Sumit Khatri,
Texas A&M University

10:30 – 11:00 am

15.4 From academic laboratory discovery to a commercial smart additive for coatings
Patrick Dodds,
Hexigone Inhibitors

11:00 – 11:30 am

15.5 Additives to prevent coating defects caused by film dewetting
Jim Reader,
Evonik Corporation

11:30 am – 12:00 pm

15.6 One-part waterborne hybrid technology for improved concrete adhesion
Lei Yang,
Arkema

10:30 – 11:00 am

16.4 Deep matte wood coatings with improved burnish resistance
Hossein Riazi,
Evonik Corporation

11:00 – 11:30 am

16.5 Waterborne UV PUD for wood and beyond
Marcus Hutchins,
allnex

For the most up-to-date information about the ACC 2022 program, visit www.american-coatings-show.com.

12:30 pm — **End of Conference and Light Lunch on the Show Floor**