

ACS SHOW[®] 2024 DAILYTWO

The Show and Conference Daily | www.american-coatings-show.com | May 1, 2024

Breaking Records in Indy

Floor space sold out at American Coatings Show 2024



Source: Phierce Photography

No corner of the show floor was left unused when the doors opened yesterday morning.

Packed with 588 exhibitors and covering 138,800 square feet, the show's halls quickly filled as visitors engaged in talk about the latest in coatings raw materials, technologies, equipment, and services. Reflecting its growing importance, the popular Powder Coatings Pavilion was a popular feature of the show.

ACS 2024, organized by the American Coatings Association (ACA) in collaboration with Vincentz Network (VN), demonstrates the impact of the show to the coatings industry. By lunchtime, nearly 7,000 attendees had arrived, and the concur-

rent conference attracted more than 900 pre-registered attendees.

"I'm excited to welcome everyone to the eighth edition of the American Coatings Show and Conference. This is a record-breaking year, and we have opened the doors to a sold-out exhibition floor for the first time in ACS history. It is my hope that this week will add value to your career, connect you with the right people in the industry, and exceed all of your expectations," said Cheryl Matthews, vice president, Events & Expositions at ACA.

"Being back in Indy is always the highlight of the year, and the first day exceeded my expectations," added Matthias Janz, director Trade Shows in the

Coatings Division at Vincentz Network. "The show and conference buzzed with energy, creativity, and a shared passion for advancing coatings science and technology."

The product presentations on the show floor were well-attended. Taking place every fifteen minutes, the visitors showed keen interest in novel paint and coatings developments. The conference, consisting of almost 100 selected presentations, continues today with eight sessions. Yesterday was concluded by a networking reception and poster session. 📍

For more information, visit: www.american-coatings-show.com

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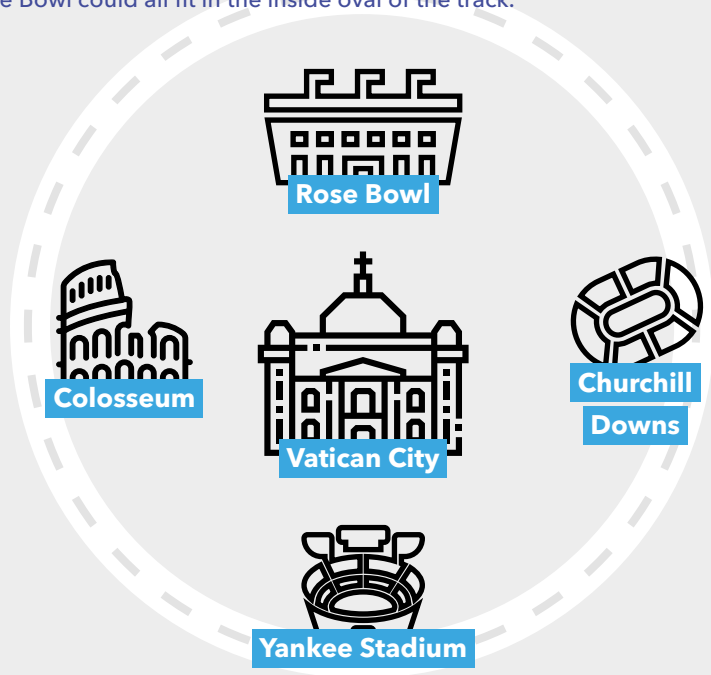
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FUN FACTS

Indy Trivia

Five fun facts you should know about Indianapolis

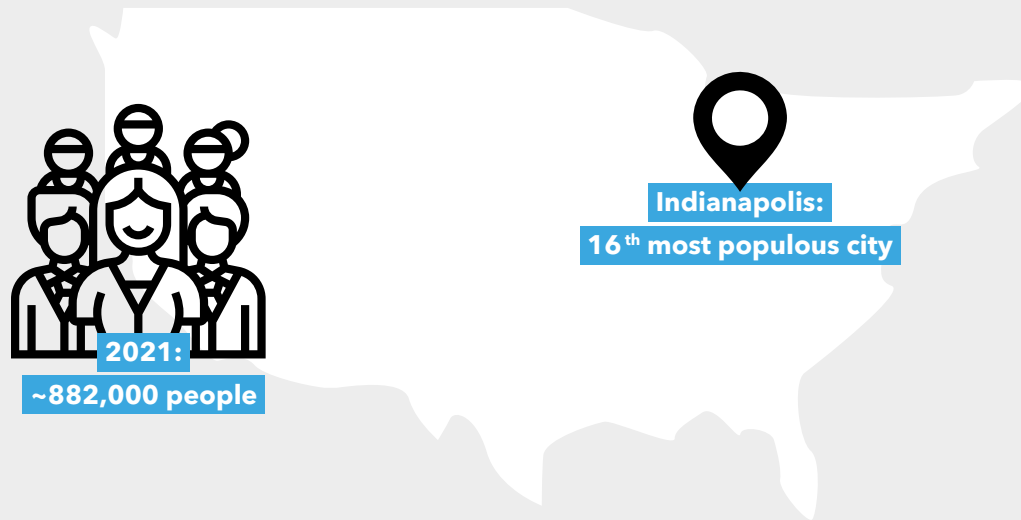
Fact 1: The Indianapolis Motor Speedway is the largest sporting facility in the world. It covers 253 acres and holds over 250,000 seats. The Roman Colosseum and Vatican City, Churchill Downs, Yankee Stadium and the Rose Bowl could all fit in the inside oval of the track.



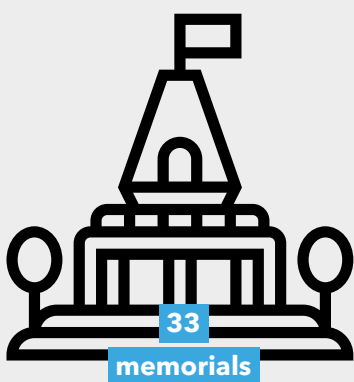
Fact 2: Indiana is known as the Crossroads of America, and Indianapolis backs that name up, with six interstate highways crossing through town.



Fact 3: As of 2021, the population of Indianapolis is about 882,000 people. It is the 16th most populous city in the United States.



Fact 4: Washington, D.C. is the only city in the U.S. that has more memorials and monuments than Indianapolis. Indy comes in second, with 33 such sights.



Fact 5: Indianapolis covers a total area of 368 square miles.



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CONFERENCE

Coatings Innovation in the Future: Sustainability and Performance

Dr. Robert Roop of Axalta held this year's keynote

One of the highlights of the Plenary Session is the keynote, which set the tone for the event.

The American Coatings Conference 2024 began yesterday with the keynote by Dr. Robert Roop, senior vice president and chief technology officer at Axalta Coating Systems.

His lecture, titled "Coatings Innovation in the Future: Sustainability and Performance," explored the shift in coatings innovation. The talk aligned with the overall theme of this year's conference: "Innovations in Coatings Technology: Shaping our Future".

In his keynote, Roop emphasized in the past innovation was driven primarily by the need for improved performance such as durability, cure rates, and consumption while meeting regulatory compliance. Roop added that in the future, innovation will be heavily focused on improved sustainability and driven by societal demands.

SIX KEY CHALLENGES

Roop started with an overview of the current main challenges for the coatings in-

dustry: VOC, recycled and bio-based materials, energy use, product life extension, the elimination of hazardous materials, and material consumption. He then underlined that these challenges all go hand in hand with the ongoing quest to further improve performance.

Roop then gave some examples of progress already under way. For instance, he explained how Axalta has removed cresol due to its toxicity.

Another key area is product life extension which Roop emphasized, citing car longevity enhanced with the use of electrocoatings. A lot of progress has been made. The lifespan of a vehicle in the 1970 was only around six years. Now, the lifespan has doubled as cars now last up to twelve years or longer.

WHAT'S THE FUTURE

Looking ahead, Roop forecasted that the speed in innovation will accelerate. "You do not need a crystal ball to predict that there will be more waterborne solutions," he said. Other areas that he forecasted to grow are low temperature cure, less hazardous materials, higher transfer efficiency, and, of course, increase recycled and




Robert Roop gave the keynote.

bio-based content. Roop shared that he is confident that the coatings industry will "step forward and provide solutions".

ABOUT THE KEYNOTE SPEAKER

Roop has held his current position at Axalta since July 2019, after serving in several technology leadership capacities at

the company for the past decade. Before that, he spent 20 years in technology and operations roles at DuPont, focusing on different polymer and chemical sectors. He earned his B.S. in Chemical Engineering from West Virginia University and his Ph.D. in Chemical Engineering from Texas A&M University. 

And the Winners Are...

Michael Krayer and Sean Bullis of BASF receive the American Coatings Award

In addition to the keynote speech, the American Coatings Award was presented yesterday during the Plenary Session of the American Coatings Conference.

The American Coatings Award recognizes excellence in technical presentations at the annual American Coatings Conference. Papers are evaluated based on their innovation, scientific rigor, and relevance to the broader coatings industry.

This year, Michael Krayer, senior scientist in the BASF Dispersions and Resins Group, and Sean Bullis, formulation chemist in the Architectural Coatings Research and Development Group at BASF, were honored for their paper on "Novel Bimodal High Solid Polymer Dispersions for Architectural Coatings".

During the Plenary Session, Steve Sides, advisor to the American Coatings Association, and Damir Gagro, director content coatings division and editor in chief at Vincentz Network, presented the prize to the winners before a short video about Krayer and Bullis' findings.




Left to right: Steve Sides, the winners Sean Bullis and Michael Krayer, Damir Gagro

EFFECTIVENESS OF A HIGH-SOLID BIMODAL LATEX POLYMER DISPERSIONS

Michael Krayer and Sean Bullis of BASF focused on the effectiveness of a high-solid bimodal latex polymer dispersions, showing that they can enable formulation of high solid paints with volume solids > 50%. T

They looked at rheology, wet film thickness when applying the paint via roller application, sag resistance and flow, and leveling performance. In the paper, the researchers state that "combining both high paint solids content with a thicker wet film allows for improved one-coat hide performance, which should ultimately result in an improved painting experience and less end consumer complaints."

EVENT TIP

Michael Krayer will present their findings today in the Architectural Coatings II session at the conference. His talk will start at 5:30 pm. 

Overviews and Perspectives

Well-attended tutorials prepare participants for the conference

Roughly 200 participants attended the nine pre-conference tutorials that were held yesterday just before the official conference kick-off. With 36 participants each, the tutorial introducing coatings formulation and the tutorial on polyurethanes were the most popular, followed by smart coatings (25).

Nine renowned coatings experts from industry and academia provided an introduction and overview of important topics in the coatings industry. In front of groups between 8 and 36 participants, they addressed the subjects "Introduction to coatings formulation", "Anti-corrosive coatings", "Polyurethanes", "Advancements in functional films", "Biocide selection process for coatings", "Machine learning in the coatings lab", "Radiation-cured coatings", "Smart coatings", and "Establishing sustainability goals and targets".

"I took the corrosion protection tutorial, which was very well presented," said Joseph Murphy, Induron. "It was a good general overview of coatings for corrosion protection."

Nikita Kevlich, Luna Labs USA, attended the functional films tutorial. "It was a very informative perspective, some of the latest developments in the past 5 to three years."



As one of the nine Pre-Conference tutorial speakers, Jamil Baghdachi, Eastern Michigan University, discussed smart coatings.

Because the first five parallel tutorials were in the early morning and were followed by another round of four tutorials after a break, it was possible to join multiple sessions. Valerie Chiong, NIC Industries, took the chance, "I attended the tutorials on functional films and radiation-cured

coatings. They were very informative. I liked to see the trends that coatings are moving into. Our company works on thin film coatings, so it's really cool to see the paths that we can go to. It was really worth attending these tutorials." 



Valerie Chiong

NIC Industries

"I attended the tutorials on functional films and radiation-cured coatings. I liked to see the trends that coatings are moving into. Our company works on thin film coatings, so it's really cool to see the paths that we can go to."



Nikita Kevlich

Luna Labs USA

"The functional films tutorial provided a very informative perspective, some of the latest developments in the past five to three years."

Conference Audience Survey

Poll results: raw materials and sustainability keep industry moving

During the Plenary Session of the AC Conference, the audience participated in a short survey.

Coatings experts casted their votes via smartphone and were able to see the results immediately on big screens. They shared their opinions on a variety of topics, including the industry's most pressing challenges, its most important future technologies, and its impact on R&D activities.


When it came to voting on what factors have the biggest impact on research and development, legislation and regulations, as well as customer demands, were considered most important.

R&D INFLUENCED BY MANY FACTORS

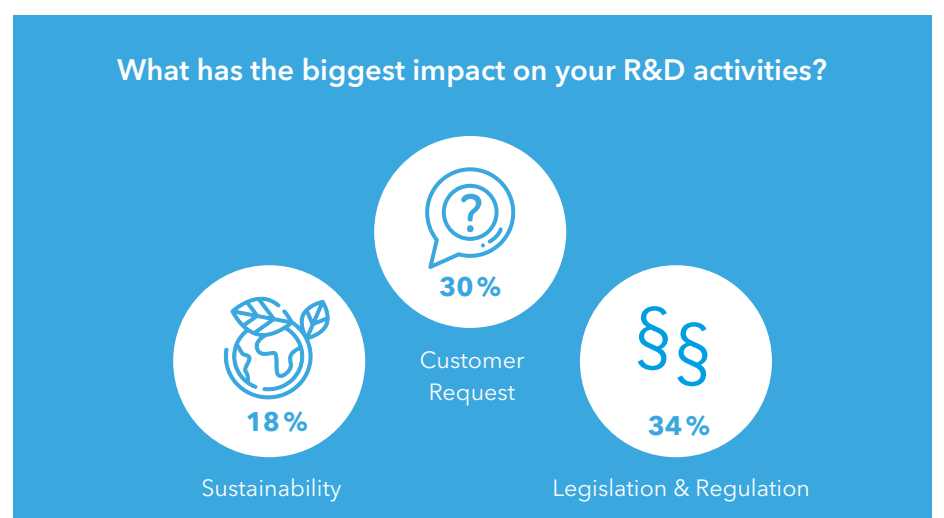
Only one-fifth of those surveyed made sustainability a top priority in the lab, and about 11% were concerned about cost reduction. Priorities have changed some-

what in recent years. Availability of raw materials was a major concern in the past receiving over 40% of the votes, but did not feature as strongly in the responses this time.

Waterborne systems remain the most important future technology for survey respondents. Functional and smart coatings followed closely, with high-solids systems coming in third. UV curing and powder coatings were considered much less important.

When it came to the most important regulation, VOCs ranked first with 54%. Labeling and hazard communication followed with 32% of the vote and 14% voted for food contact. 

 For more information, visit: www.american-coatings-show.com



INTERVIEW

“Continuous Innovations in the Raw Materials of Ink Making”

Broad coatings portfolio with an ink formulation history

Taner Bicer, board member and managing director of hubergroup, and Greg Bengtson, president of hubergroup Chemicals Division in the United States, address developments in inks formulation.

Could you share your ink formulation history and recent evolution into the coatings market? **Bicer:** Before I speak about hubergroup Chemicals Division, launched in 2020, take yourself back in time to 1765, well before the American Declaration of Independence. Our founder in Bavaria had a new idea for making printing inks, which led to a historic role in the global revolution of printed materials. In the following generations, including the digital age, our continuous innovations in the raw materials of ink making made us a dynamic leader in this market. Facing the realities of a shift from print to digital media in recent years, we discovered a remarkable new fit for our company in coatings.

After all, printing inks, pigments, binders, and additives are the principal building blocks of coatings. For this reason, we began with a considerable head start in know-how, R&D, and applications solutions in the vast world of coatings,


“Our blueprint for growth is built upon our foundational business with ink manufacturers.”

surprisingly parallel to ink making. In all that we do, remember that choosing our team means high quality and service but also far-reaching circular responsibility. Our environment and fellow human beings are at the heart of what we do at our factories for customers and society.

Could you describe the scope of your investment and commitment to coatings? **Bicer:** Sizable investments in raw material manufacturing include our reactor capacity of over 300 kilotons annually. We produce PU resins, UV oligomers, various

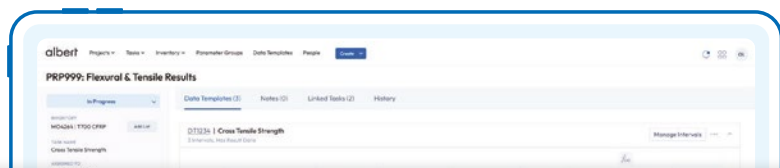
innovative solutions for large customers and niche players. In North America, Greg Bengtson and his team bring a wealth of experience to partnering with customers.

What are HGC’s plans for growth in North America, especially for the coatings market? **Bengtson:** Our blueprint for growth is built upon our foundational business with ink manufacturers. We will seize new opportunities where we have an apparent product and technology fit. So, our strategy includes inks but focuses on other industrial segments with UV resin and UV monomer products.

Our UV technology and products are ideal for the wood coatings market. Ultraviolet curing for wood coatings provides an effective and efficient alternative to traditional air, moisture, and thermal-cured coatings. UV curing offers faster curing times, reduced energy consumption, and improved coating performance. 

polyesters, pigments, and pigment concentrates. Following customer expectations, our coatings portfolio will expand in the coming years. Currently, research and development originate in India and Europe. This strong capability supports our extensive global network of sales and service. We consider North America a hub for

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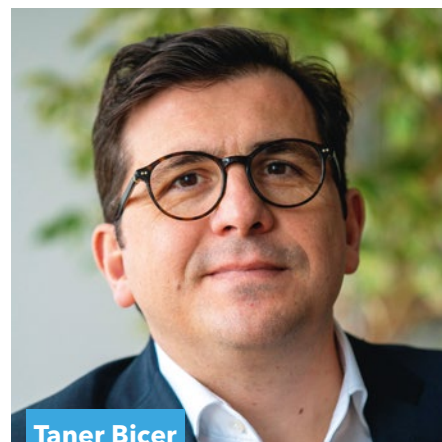
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"Focus on Sourcing Raw Materials from Multiple Suppliers"

Construction industry seeks to lower costs and ensure continuous availability

Pablo Aragon, MDI director, Construction Americas at Omya, overviews R&D efforts of construction chemical suppliers and the challenges they are facing.

What is the current focus of construction chemicals R&D? R&D is the core of our essence. Since construction chemicals continue to focus on perpetual and steady improvement, being up to date with new discoveries, the needs and demands of the sector and society is essential to our R&D.

At Omya, our efforts are committed to the development of more sustainable solutions, which can match or even outperform the offering of raw materials currently available. This is an essential condition for all of our new developments. On top of that, our vision is to provide solutions, which can actually bring additional benefits to the user's health and to the environment.

Our latest products drive innovation by reducing crystalline silica that affect the respiratory system; decreasing carbon footprint of concrete and mortar formulations; producing lightweight materials reducing carbon footprint during transportation; and contributing to building energy savings.

What are the current challenges/barriers in this area? In the construction industry, a significant challenge is the availability of technical resources necessary to keep pace with innovation amid the constant pressure to reduce costs and maintain competitiveness. As a result, much of the industry's efforts are focused on sourcing raw materials from multiple suppliers to lower costs and ensure continuous availability. However, this approach leaves little room for test-

ing breakthrough products, thus impeding their deployment into the market. This slowdown in introducing innovative


"Our efforts are committed to the development of more sustainable solutions, which can match or even outperform the offering of raw materials currently available."

solutions hampers the industry's ability to enhance efficiency and sustainability. Therefore, it's essential to strike a balance between pursuing cost efficiency and being open to experimenting with new technologies and materials to foster con-

tinuous and sustainable evolution in the construction sector. None of this would be possible without our personnel – dif-

ferent teams of international experts who work daily toward a future defined by innovation and sustainable progress.

To what extent have sustainable solutions made inroads here? Interest is

there. Coatings companies are looking for more sustainable solutions, mostly lead by visionary leaders that see this as an opportunity to differentiate in the market. Some of the industry leaders have started down this path but lack of regulatory pressure might delay a full switch to the most sustainable solutions. Our job is to keep promoting alternatives to the industry, improving product performance or keeping at least current performance while reducing formulation cost and carbon footprint. It is important for us to help our customers keep their competitive edge ahead of regulations for early adopters of the technologies. It's also important to "walk the talk." We have been taking measures every year to reduce our carbon footprint in our plants and have a continued commitment to produce more sustainable products for the construction industry. 



Pablo Aragon

**Omya
Booth #1840**



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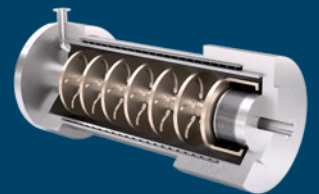
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AC SHOW

Show and Conference Insights

Impressions from ACS day one



Great First Day

The American Coatings Show and Conference 2024 kicked off with a great first day full of networking and innovation. Here are some impressions from the show floor, as well as from the conference sessions and the Plenary Session.

We are looking forward to two more days at the ACS 2024!



Chinese Coatings Experts Visit the ACS

For the third time, a delegation of coatings professionals from China visited the American Coatings Show. J. Andrew Doyle, president & CEO of the American Coatings Association, and Sonja Schulte, publisher at Vincentz Network, welcomed the approximately 40 delegates from China National Coatings Industry Association (CNCIA), before the group visited the show floor.

Sources: Pierce Photography

Novelties in a Nutshell

Today's Product Presentations

Discover one of the highlights of the show floor: the Product Presentations. Explore the latest innovations from our exhibitors as they introduce their newest offerings in concise 15-minute sessions. For the complete schedule across all three days of the event, please visit: www.american-coatings-show.com/attendee-info/#product-presentations.



9:20 - 9:35 am

Replacing PTFE with Composite Additive Powders
Rich Czarnecki
Micro Powders

9:40 - 9:55 am

U.S. Soy:
The Sustainable Solution for Coatings
Lee Walko
United Soybean Board

10:00 - 10:15 am

Elevate the Performance of your Emulsion Polymers with Novelution Surfactants
Jeanine Snyder
Sasol Chemicals

10:20 - 10:35 am

Ancamine 2880:
New Fast Cure, High UV Resistance and EHS Friendly Epoxy Curing Agent
Sadananda Das
Evonik

10:40 - 10:55 am

Rhoplex RN-128:
New All Acrylic Biobased Polymer that Delivers Value and Performance
Paul Doll
Dow

11:00 - 11:15 am

Problem Solving Pigments for High-Performance Paints and Coatings
Mark Ryan
The Shepherd Color Company

11:20 - 11:35 am

Mass Balance Solutions to Accelerate the Shift Towards More Circular Solutions
Chris Miller
Arkema

11:40 - 11:55 am

The Path Forward to Safer 2K Paints
Frank Cogordan
Arkema

12:00 - 12:15 pm

Addibond 106: Polymeric Additive for Enhanced Metal Adhesion in Water-based Coatings
Brian Vest
SYENSQO

12:20 - 12:35 pm

Astrad, a New Portfolio of Water-based, Solvent-based and UV dispersions, for Architectural, Automotive and Industrial Coatings
Phil Adams
Penn Color

12:40 - 12:55 pm

Navigating the Future of Coatings Manufacturing through AI and Microsoft CoPilot
Michael Hammons
HSO

1:00 - 1:15 pm

Bio-based VITA Products - Maximum Sustainability Benefit without Impacting Performance
Mark Coward
Clariant

1:20 - 1:35 pm

Introducing Urotuf F110-D1W-31: A Groundbreaking Aliphatic Waterborne OMU with Superior Performance for Wood Flooring and Furniture Applications
Pengxu Qi
Polynt

1:40 - 1:55 pm

EHM MAX
Stewart Williams
Nouryon

2:00 - 2:15 pm

Future-proof your Coatings
Heather McKelvie and Michael Goedecker
BYK USA

2:20 - 2:35 pm

Specialty Monomers
Bill Wagner and Christoph Fleckenstein
Univar Solutions

2:40 - 2:55 pm

Meet Our Easy-to-dispers Line of Aerosil Grades for Post-addition, Easy Incorporation and More Efficient Production Cycles
Ali Javadi
Evonik

3:00 - 3:15 pm

Mitsubishi Chemical Group Sustainable Solutions for the Coatings Industry
Katsufumi Mochizuki
Mitsubishi Chemical America

3:20 - 3:35 pm

Acrysol RM-735BF:
New High Efficiency Biocide-Free Rheology Modifier
Sunny Wang
Dow

3:40 - 3:55 pm

Sustainability and Peak Oil's Effects on the Chemical Industry
Ted Davlantes, Brendan Cullinan and David Waranke
Brenntag North America

4:00 - 4:15 pm

Are There Limits to Relying on Zeta Potential When It Comes to Complex Systems?
Ronald Brashear and Matthew Burge
BYK USA

4:20 - 4:35 pm

Biodegradable Waxes to Avoid Microplastics in Paints and Coatings - Biomere
Steffen Remdt
Duerex AG

4:40 - 4:55 pm

New White Mineral Pigments - Enhanced Aesthetics / Improved Economics
Christian Anderson
U.S. Silica



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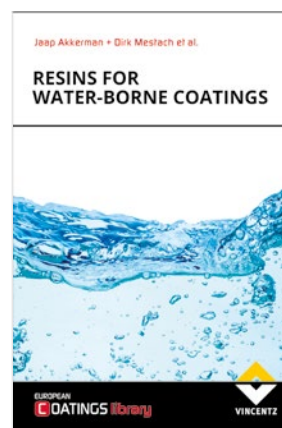
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Paint Analysis
2nd revised edition,
by Roger Dietrich

The market demands modern, high-performance, flawless paints that possess specified properties. Where deviations from set points occur, the cause must be investigated and the error must be remedied. What "standard methods" don't disclose is why a particular coating either meets or fails to meet a requirement. In this text, the author presents modern analytical techniques and their applications in the coatings industry that answer complex questions. The information in this book can be used for performing failure analysis, production control and quality control, and also meet the requirements of modern high-level quality management. "Paint Analysis" is an excellent combination of theory and practice for formulators, paint engineers and applied technologists seeking a sound basic introduction to instrumental paint analysis and concrete answers to everyday problems.



Resins for Water-borne Coatings
By Jaap Michiel Akkerman,
Dirk Mestach et al.

Expand your knowledge and get fully acquainted with the various aspects of waterborne coatings - from production, to properties, to special features of their use!

With the shift from solvent-borne resins and coatings to waterborne coatings, "Resins for Water-borne Coatings" is a must-read for any formulator wanting to expand their knowledge.

The authors discuss important aspects of the "solvent-to-water-transition" of the past 40 to 50 years, take a deep dive into the key aspects and theories behind the production, properties and applications of these resins, and provide an overview of how they are currently used in waterborne coatings.



The Rheology Handbook
5th revised edition,
by Thomas Mezger

Already in its 5th edition, this textbook describes the principles of rheology clearly, vividly and in practical terms. The book includes the rheology of additives in waterborne dispersions and surfactant systems. Not only it is a great reference book, it can also serve as a guide for studying the theory behind the methods. The practical use of rheology is presented in the areas quality control, production and application, chemical and mechanical engineering, materials science, and industrial research and development. After reading this book, users should be able to perform tests with rotational and oscillatory rheometers and interpret the results correctly.



Electrocoat
By Michael Brüggemann,
Anja Rach

Electrophoretic paints, commonly known as electrocoat or electropaint, are organic coatings dispersed in water, carrying an electric charge. This enables the paint for deposition onto a metal, which is carrying the opposite charge. Resulting from this special application are special needs for formulating its coating. This textbook identifies requirements and particularities for the electrocoat process and its troubleshooting. It illustrates the theoretical basics of electro-deposition, paint formulation, manufacturing, application process in addition to failures and countermeasures of the electrocoat process. Newcomers and seasoned practitioners alike get a comprehensive overview of the field of electrocoats as well as deeper insight into this technology.



Gisela Gehrenkemper

Editor, European Coatings Library

"Our wide-ranging program of books and multi-media bundles supports you with basic and specialist knowledge, and helps you to smoothly master your everyday working life in the coatings industry."



30% SHOW DISCOUNT!

Stop by at booth #2088 and benefit from the special AC SHOW discount on all on-site purchases and orders.

“Finding Safer Alternatives to the Traditional Toolbox of Industrial Chemicals”

Current trends and challenges in adhesives

Dr. Daniel Weinmann, market development manager, Coatings, Construction & Adhesives - Americas at Westlake Epoxy, provides insight into the market for adhesives and the challenges and drivers of innovation.

What current trends do you see in raw materials for adhesives? After the COVID-19 pandemic, there are significant industry changes underway where supply chain optimization, local inventory (close to the customer) and reducing risk exposure via multiple source qualifications are important strategic actions being taken by manufacturers. Purchasing raw materials from domestic suppliers offers environmental benefits because of lower carbon emissions from transport compared to overseas cargo shipments. Recent disruptions caused by transportation issues at the Panama Canal and the Suez Canal are increasing lead times for imported raw materials. There is growing demand for

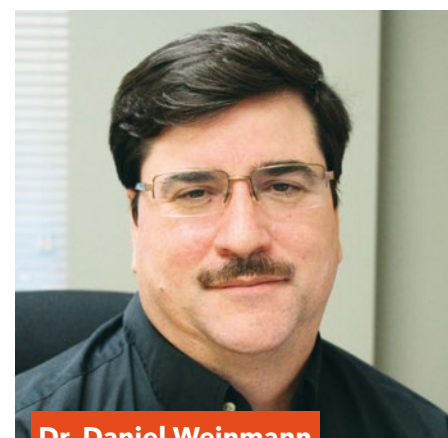
improved sustainability through increased renewable carbon content in resins and curing agents, as well as less energy-intensive manufacturing processes. In Europe, REACH registration and product safety testing are important drivers. Globally, there is an increased focus on using safer chemical constituents (e.g., eliminate SVHC compounds) for improved GHS labeling.

What market demands or shifts in consumer preferences are emerging? Customers are looking for adhesives that offer identifiable and marked reductions in environmental impacts and sustainability. They are carefully reviewing the product's GHS labels and anything with a CMR designation is not acceptable. The shift from solvent-borne to waterborne epoxy formulations continues to be an important option for meeting these initiatives. For industrial applications, automated on-line application and lower odor adhesives are important options for customers. With growth

of electronic vehicles and the increasing use of composites and plastics to reduce weight, high performance epoxy adhesives are an important and growing technology for customers. Adhesives formulators are asking for epoxy resin systems that offer higher performance over a wider range of application temperatures (e.g., from greater than 40°C, down to 0°C).


Are there specific compliance issues that the sector is facing? There is increasing pressure from regulators to ensure that chemicals are compliant with EU REACH and the EU Green Deal emission targets. Stricter regional regulations are being introduced in a growing list of countries outside of Europe. As the adhesive market looks for ways to meet their sustainability initiatives, there are increasing requests for Environmental Product Declarations, as well as for Life Cycle Assessment.

Increased testing costs and addition of chemicals to the SVHC list have result-



Dr. Daniel Weinmann

Westlake Epoxy
Booth #2348

ed in several chemicals being effectively eliminated from the list of available raw materials. Finding safer alternatives to the traditional toolbox of industrial chemicals offers opportunities to innovate new products for the adhesives market. 



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ACS 2024
Booth #2950

SERVICE

Local Beer, Wine and Cider

Fountain Square Brewing www.fountainsquarebeer.com

It all started when a couple of chemists put their heads (and passion!) together to do one thing: craft great beer. Located in the hip, funky Fountain Square Cultural District, the owners converted an old warehouse into a most dazzling soda pop fountain-esque brewery.

1301 Barth Ave., Indianapolis, IN 46203, 317-493-1410



Source pictures: Visit Indy

Broad Ripple Brewpub www.broadripplebrewpub.com

The brewpub was the city's first ever microbrewery when its English owner opened its doors in 1990. Since then this Broad Ripple staple has served a consistent menu of English pub food like shepherd's pie and scotch eggs which perfectly pair with one of their microbrews.

842 E. 65th St., Indianapolis, IN 46220 317-253-2739



Source: Visit Indy

Source: freeskyline - StockAdobe.com

Easley Winery www.easleywinery.com

With over 40 years' experience making award-winning wines, Easley's family-owned business produces something everyone will love. Located right downtown, it's easy to stop in for tours and tastings of Indiana champagne, Reggae and Sweet Tulip wines, and seasonal specialties like warm mulled wine.

205 N. College Ave, Indianapolis, IN 46202, 317-636-4516



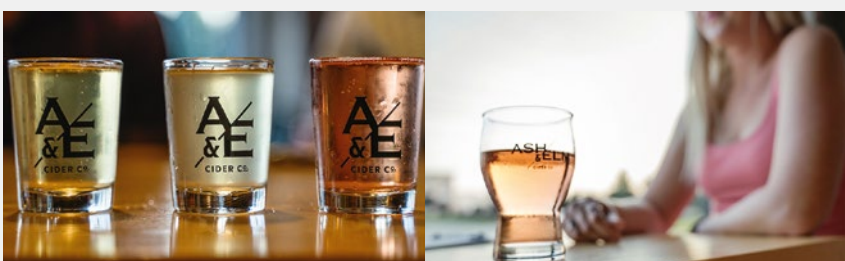
Source pictures: Visit Indy

Ash & Elm Cider Company www.ashandelmcider.com

Ash & Elm makes complex and balanced ciders that are never from concentrate and naturally gluten-free. Each cider uses fresh-pressed apple juice and all-natural ingredients like hand-peeled lemons, real fruit infusions, and crushed, toasted, and blended whole spices. Talk with the knowledgeable bar staff, try a flight to find your favorite style, and enjoy some house-made bites while you're at it.

2104 E. Washington St. Indianapolis, IN 46201, 317-600-3164

Source of information and text: Visit Indy



Source pictures: Visit Indy

Indy After Hours

Plenty of bars and clubs to visit after show days

Opting for an early night at the hotel can be a welcome relief after a day at the show, but unwinding at one of the nearby pubs or bars could also offer an equally relaxing experience.

Whether you're into craft beer, exotic cocktails, or dancing to live music, Indianapolis' nightlife has a lot to offer. Following the American Coatings Show, you can stroll to the conveniently nearby downtown area, which boasts plenty of entertainment options.

CITY OF CRAFT BEER

The craft beer scene in Indy is constantly expanding, providing a wide array of choices for beer enthusiasts. Indy's inaugural local brewery, the Broad Ripple Brewpub, not only offers a diverse selection of craft beers but also serves up traditional British fare in a cozy setting reminiscent of an English countryside pub. Another notable destination is the Indiana City Brewing Company, housed in a bottling facility dating back to the pre-Prohibition era.

Indy also has many casual sports bars with great food and beers. Chatham Tap,

High Velocity and Kilroy's are just a few.

HAPPY HOUR

More in the mood for an exotic cocktail at a chic bar? Plat 99 is an ultra-modern lounge inside The Alexander Hotel. Choose from their great variety of unique cocktail creations and relax in style. Above one of the restaurant favourites in Indy, St. Elmo's, the 1933 Lounge serves classic cocktails in a vintage speakeasy atmosphere. Another great spot for cocktails is ball & biscuit.

LIVE MUSIC AND DANCING

From big stadiums to small venues, Indy has plenty of spots to listen to live music. Visitors can check out indie bands at The Hi Fi and Radio Radio, or enjoy jazz music at Chatterbox and Jazz Kitchen. An Indianapolis classic is the Slippery Noodle Inn, a Blues bar. Other live music spots are Howl at the Moon and Tin Roof.

For more information, visit: www.visitindy.com



Source pictures: Visit Indy



“Trend toward Safer Alternatives”

Long-term outdoor durability of wood coatings continually enhanced



David Vanaken


Hexion
Booth #1576

David Vanaken, global technical and marketing director at Hexion Research, identifies opportunities and risks in the market segment.

What technologies do you see improving in wood coatings? The latest progress in wood coatings technology has been largely centered around the creation of resins that enable the production of sustainable, low-VOC coatings with superior quality and high-performance attributes. The performance and long-term outdoor durability of waterborne systems have been continually enhanced, often exceeding that of solvent-borne coatings. Wood protective coatings need to possess qualities such as resistance to water, weathering, and UV radiation. Therefore, they must be sufficiently fortified with a range of components like UV stabilizers, biocides, and fire retardants. Moreover, a wood coating should limit the leaching of these components upon weathering. For instance, the incorporation of highly hydrophobic neoacid-derived monomers in high-performance wood coatings has elevated the performance of wood stains in terms of outdoor durability, while also minimizing the leach-out of active materials.

What novel developments are particularly exciting? The industry has shifted focus from reducing volatile organic compounds to sustainability and safer products. The ongoing development of moisture-curing, isocyanate-free polyurethane coatings is particularly noteworthy. UV photopolymerizable polyurethanes, acrylics, and epoxies are well-established, but their growth is constrained by the toxicity of conventional acrylic reactive diluents, with formulators seeking safer, less toxic substitutes. The demand for intumescent coatings for weathered wooden facades is expected to increase. Manufacturers are currently working on the development of efficient, aesthetically pleasing, transparent, and thin intumescent coatings for such substrates. Efforts are being intensified to provide effective solutions for sustainable wood protection. Recent trends in this area include the use of bio-based building materials, including bio-based monomers and biopolymers. The mass-

balance approach (e.g. ISCC PLUS) together with Life Cycle Analysis data, allows for tracking, transparency and claiming sustainability.

What are your expectations for the wood coatings market? Environmental concerns are driving the use of sustainable wood and coatings in construction and furniture industries. The trend toward safer alternatives like waterborne coatings and UV curable systems is growing, especially in Europe. However, issues with raw materials, inflation, geopolitical unrest, and energy costs have slowed growth. The COVID-19 pandemic led to a surge in DIY projects in previous years and is now seeing a slowdown. The availability of cheaper alternatives such as wood composites and the use of other materials such as PVC and aluminum for window and door frames may further hamper growth of the wood coatings market. 

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INTERVIEW

“Plastic Coatings Have Evolved Significantly”

Demand in automotive and electronics applications

Eugénie Charrière, global marketing and strategy director at Vencorex, highlights new developments, trends and challenges in plastic coatings.

What are the most exciting applications for plastic coatings today? In today's dynamic landscape, plastic coatings have evolved significantly, particularly in critical end-use sectors like automotive and electronics. Within vehicle interiors and across consumer electronics, the demand for coatings that exhibit resilience against scratches, perspiration, sun-tan lotion, and offer enhanced aesthetic and tactile sensations is crucial. Vencorex, a global leader in aliphatic isocyanates and a fully-owned subsidiary of PPT Global Chemical, has developed solutions to meet these complex requirements, like a pioneering crosslinker tailored for 2K waterborne polyurethane matte finishes, delivering enhancements in both scratch and chemical resistance.

How prevalent have plastic coatings based on renewable raw materials be-

come? As new bio-based and biodegradable plastics are becoming commercially available, plastic coatings from renewable sources are rapidly gaining traction. A considerable research effort is ongoing in the industry reflecting a heightened emphasis on the replacement of fossil-based materials.

In the shorter term, plastic manufacturers are looking for energy efficiency for the painting lines, driven by cost-effectiveness and CO₂ emission reduction. We address this concern with a fast-drying crosslinker enabling stoving at lower temperatures of 2K polyurethane coatings.

What are the general challenges of coating plastic substrates, and how can they be overcome? Addressing the challenges inherent in coating plastic substrates requires a nuanced approach informed by industry expertise. Foremost among these challenges is the recycling of coated plastic components, a topic

that has garnered significant attention within the research community. Notably, the European-founded project DECOAT leads the charge, pioneering smart additives for seamless integration into coating formulations. These additives facilitate controlled disbonding under



Eugénie Charrière

Vencorex
Booth #1037

“Plastic coatings from renewable sources are rapidly gaining traction.”

specific trigger conditions, enhancing recycling efficacy. DECOAT and similar initiatives underscore the industry's commitment to sustainability and innovation, leveraging advanced materials and cutting-edge technologies. ◀

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“More Cooperative Approaches between the Different Players are Needed”

AI in the coatings industry

Ralph J. Woehrheide, president of Metromation, addresses the current status of AI usage in the paint and coatings industry and what companies have to take into consideration.

To what extent is the paint and coatings industry already leveraging AI? There are several promising approaches from different companies, which became publicly available, and most of these are intended to leverage AI for internal processes. There are some overlapping solutions in place, like extended sales platforms from raw material suppliers or different solutions for understanding the application process better at automotive manufacturer paint shops. However, I think there still needs to be more cooperative approaches between the different players in the process, namely raw materials, paint, and application. I understand that companies want to keep competitive advantage, but I think a breakthrough can only be achieved if data sharing is

Adding data that gives an AI more “food” is to add the number of measurements (e.g., in a production process). But this needs a careful evaluation of cost.

“Data must be valid. That’s why it is necessary to work on better methods of measuring physical properties of paint systems with higher precision.”

And there is another aspect: data must be valid. That’s why it is also necessary to work on better methods of measuring physical properties of paint systems with higher precision, which is part of the work we do with Orontec.

What aspects of paint manufacturing benefit the most from AI technologies?


A promising approach is to use machine learning as one discipline of AI, aiming at making paint production more robust against raw material quality variance. But from a lot of production technology is still based on technology of the last century, and we have to modernize the processes, reduce complexity, and speed up testing processes. That’s why we follow the concept of the modular factory, where we cooperate with Hemmelrath Technologies from Germany.

We will introduce their approach of using AI in production at a presentation at his year’s ACS conference. One important aspect is that the AI helps to predict the quality of the output based on material and process data and enables the operator to adjust it. The use of raw material characteristics, a high degree of digitally available data, and a streamlined compact production process delivers robust results and paves the way for using AI in paint production effectively.

What other factors are important when paint companies want to start to use AI?

At first, we should be careful with our expectations of what AI can do. AI was born

in 1956, and since then, a lot of progress has been made due to computer power and deeper research. But it should be clear that machine learning and generative AI

needs significantly more. There are areas where AI can help, but other areas, where human beings are superior. The latter especially applies to decisions in a situation of uncertainty. So, in order to fully embrace the full potential of technology, it needs people to support it; because, who wants a factory without human beings? I doubt that this would even be possible. And it needs a transformation of processes, which also needs support from employees. I fully understand that people are afraid of change, and it is a management task to explain the benefits of automation and AI for better workplaces and growth. A culture of learning and encouraging employees to try new things is critical. Laying off staff with the excuse that they are not fitting into today’s tech landscape is admitting that management has failed to make progress part of the company culture. A lot of family-owned companies demonstrate what that can look like, and I hope they will continue to show this in their success stories. 



Ralph J. Woehrheide

Metromation
Booth #3058

taking place which can generate added value and enable new business models. The strategy to let machine learning do its work is to increase the number of data points by sharing data over the supply chain. That’s one of the core ideas of the Smart Paint Factory Alliance, which we initiated in Germany in 2022 and we want to bring it to the United States as well.



Source: Song_about_summer - stock.adobe



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PRODUCTS

On the Show Floor

Novel products at the ACS



Once again, there are plenty of innovative, new products on display at the American Coatings Show. Below you find

a selection of some of the novelties presented.

Radiation-curing Technologies for Industrial Coatings and Printing Inks

With a state-of-the-art portfolio of resins, colorants, lamination adhesives, and monomers, hubergroup Chemicals will present a range of capabilities in custom manufacturing. The manufacturer focuses on radiation-curing technologies for industrial coatings and the printing ink industry. These include sustainable raw materials for industrial coatings, primarily focusing on the wood and furniture sector, as well as polymer/LVT flooring, such as radiation-curing oligomers and monomers.

Conventional drying resins based on rosin, ketone, polyurethane, and special additives complete the portfolio.

This chemicals specialist, with a growing presence in North America, offers custom manufacturing and adapts and develops new products with sustainable solutions in mind.

i hubergroup Chemical
US - Rolling Meadows
www.hubergroup.com/us
Booth #2638

Multi-shaft Mixers for High-viscosity Formulations

Schold's multi-shaft mixers integrate high-speed dispersion with low-speed agitation, serving as multiple machines in one robust unit. Co-axial, twin-shaft, and triple-shaft configurations offer versatility for specialty paints to industrial coatings and customizable configurations to specific coating applications.

Other key benefits include:

- Enhanced product quality: Achieve consistent batch-to-batch quality with the combined action of high and low-speed technology.
- Efficient processing of challenging materials: Move products into the "work zone," facilitating the processing of high viscosity, poor-flow coatings.
- Increased production efficiency: A consolidated approach reduces processing time and improves overall output.

i Schold Manufacturing
US - Chicago
www.schold.com
Booth #2654

Sustainable, Performance-enhancing Tinting Solution

Increasingly stringent environmental regulations mean colorant companies are looking for more eco-friendly solutions that don't compromise overall paint performance. Vibrantz's new technology is the first volumetrically dosed tinting system of solid colorants designed for use in architectural and industrial paint applications. Free of biocides and made with 100% recyclable packaging, this sustainable tinting

solution extends paint shelf life, is easier to use than traditional technologies, and contributes to a reduced cost of ownership for tinting systems in their entirety.

i Vibrantz Technologies
US - Mayfield Heights
www.vibrantzpearls.com
Booth # 1336

Efficient, Alkali-stable Dispersant

Silicate paints are known for their extremely durable, breathable finish on mineral surfaces. They are enjoying more widespread interest in today's sustainability-focused setting because they are naturally water-based, coalescent and VOC-free, and their high pH eliminates the need for biocide.

These specialty formulations can nevertheless exhibit many of the same in-can and application issues as their traditional acrylic- or latex-based architectural coating counterparts. While additives are available to optimize performance, not every additive for water-borne paint is suitable for use in silicate paints.

Münzing will showcase a new alkali-stable, high-molecular weight dispersant optimized for dispersing efficiency across pigment types in both silicate and



non-silicate paint formulations.

i Münzing
DE - Abstatt
www.munzing.com
Booth #1447

Low Carbon Footprint Bio-based Binders

At this year's ACS, Ecoat will present a way to formulate a solvent-free wood saturator that is durable and safer for applicators. A water-based product to protect decks from water damage without any peeling or slippery effect, for direct application without the need for end-users to sand between coats.

"Secoia 4487" is a water-based, bio-based long oil alkyd binder that offers surfactant-free technology. It is non-film-forming for deep wood impregnation

(decking and furniture oil, cladding), highlights the wood natural aspect (fire of the wood), is highly hydrophobic and displays excellent water repellency even after the QUV test. This binder is 96% biobased and certified as biopreferred, it is low VOC and also prevents grain raising.

i Ecoat
FR - Grasse
www.ecoat.fr
Booth #728

Innovative Latex Binder Solutions

Trinseo, a materials solutions provider, will launch its new binder for architectural coatings and showcase its innovative latex binder portfolio at the American Coatings Show.

"Ligos C 9484" is a vinyl acrylic emulsion that unites performance with flexibility for architectural coating applications. The binder delivers strong hiding performance, excellent leveling proper-

ties, and high scrub and block resistance. Furthermore, the emulsion offers flexibility in formulation, allowing you to get the most out of your binder design.

i Trinseo
US - Midland
www.trinseo.com
Booth #1974

Tougher, More Flexible Epoxy Systems with Cashew Nut Byproduct

Cardolite is pleased to introduce "LITE 514HP," a new cashew nutshell liquid (CNSL) derived, high bio-content and BPA-free epoxy resin and modifier for one-component and two-component epoxy coatings, adhesives and composites.

This CNSL increases the flexibility and toughness of epoxy systems while maintaining very good chemical resistance and corrosion protection and minimizing the impact on glass transition temperature and mechanical strength. The hydro-

phobic backbone from the CNSL leads to excellent water resistance and hydrolytic stability as demonstrated by the retention of high bond strength after exposure to hot water. CNSL is a byproduct of cashew nut production and does not interfere with the food chain.

i Cardolite
US - Bristol
www.cardolite.com
Booth #1752

New Natural and PFAS-free Additives

Micro Powders will debut several new products with an emphasis on natural ingredients and PFAS-free technology:

A 100% natural, bio-based texturing additive for powder coatings that adds an aggressive, grainy texture to both TGIC and HAA chemistries. Another highlight is a 100% natural mattifier.

A multi-functional, microplastic-free mattifier for architectural coatings. This powder improves burnishing and enhances cleanability and soil release for matte, satin, and eggshell finishes, plus it is surface treated for easy incorporation.

New additions to the nano-composite waxes portfolio include a PTFE replacement option that is surface treated for ease of use. And a value-engineered composite of biodegradable syn-

thetic wax and aluminum oxide that provides lubricity with rub, scratch, and abrasion resistance.

i Micro Powders
US - Tarrytown
www.micropowders.com
Booth #2254



Modular Dissolver for Greater Flexibility

The new CV3 evo dissolver has been completely redesigned for adaptation to new and extended customer requests and requirements. The redesign includes a compact, smaller, corporate design with higher functionality such as a closed worktop, unique lifting column, integrated control panel, large color display with light-up buttons and system adaptability. Modular components offer greater flexibility to accommodate future growth and scaling up of processes for R&D in production. All this at the same price point as the old model to bring improvements with no additional cost.

Optional accessories offer capabilities to perform media milling, dispersion under vacuum, or homogenization by a rotor-stator and is equipped with new standard and optional adaptable features for laboratory dispersion.

i VMA Getzmann
DE - Reichshof
www.vma-getzmann.com
Booth #2239

Gloss Measurement to Suit Any Application

A new range of gloss meters brings gloss, reflectance, and haze measurement to the "PosiTector" coating inspection platform. Select up to three measurement angles to suit any application. Readings are then saved into memory and can be transferred to the corresponding software to quickly archive data and generate professional reports.

Three gloss probe models are available: The "GLS 60" is suitable for most gloss applications and uses the preferred angle for semi-gloss; the "GLS 20/60" is recommended for high- to semi-gloss applications; and the "GLS 20/60/85," which is suitable for all gloss applications. The last two models also calculate haze (Haze Index).

i DeFelsko Corporation
US - Ogdensburg
www.defelsko.com/gls
Booth #2358



New Lower Yellowing Epoxy Products

Westlake Epoxy will launch several lower yellowing epoxy products at this year's show. Its deep pour lower yellowing epoxy system offers an extended set time, lower exotherm and superior air release. This enables up to 4-inch pours in a single application. Superior light stability is built into the final thermoset backbone.

A new ultra-low yellowing cycloaliphatic amine is available for decorative coatings. This product provides superior color and gloss retention when used with Bis-A

or Bis-F epoxy resins. For improved performance, it can be used with an aliphatic epoxy resin. In a clear enamel, after 384 hours of QUV-A, the ultra-low yellowing amine system has a Delta E of only 3 units and gloss retention greater than 95% (60-degree gloss).

i Westlake Epoxy
US - Stafford
www.westlakeepoxy.com
Booth #2348

Marrying Perception-based Measurement with Established Standards

The latest instrument vision system, "Rhopoint Aesthetix IVS," combines high-definition dual camera technology with a new level of appearance measurement to describe how technical quality aspects are perceived by consumers. The dual camera system captures the subtleties of surface characteristics below human visual resolution and merges them with human visual perception. This measurement framework captures all the important quality aspects of a surface that affect perception, including gloss, haze, color and texture, offering new ways to measure reflective contrast, sparkle and coarseness, surface waviness and topography. Measurements, surface maps and images are displayed and analyzed in a comprehensive software package suitable for research and quality control applications.

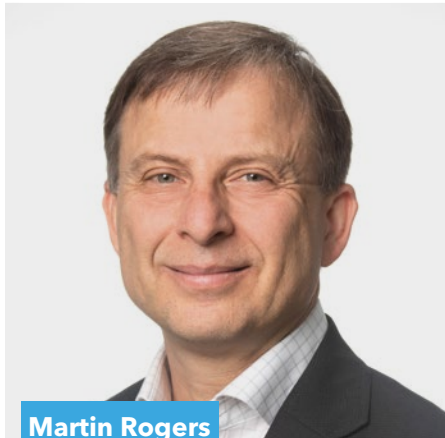
i Rhopoint Americas
US - Troy
www.rhopointamericas.com/
Booth #3058



INTERVIEW

“Significant Opportunities for New Materials”

A look at the industrial coatings sector



Martin Rogers

Eastman

Martin Rogers, group leader - CASE product translation and development at Eastman, expands on trends and challenges in industrial coatings.

Where does R&D in raw materials for industrial currently focus? The development of raw materials is increasingly influenced by sustainability considerations. In industrial coatings, the most prominent sustainability factors include reducing volatile organic compounds (VOCs) and materials of concern (MOC), minimizing carbon footprint, and enhancing performance to extend the lifespan and durability of coatings. An example of research and development efforts to address remaining requirements is improvement of water-borne coatings through advancements in resins and additives. The need for innovation continues in replacing materials of concern with new materials of similarly high performance with significantly less impact on health and environment. One example is new resin development offering increased durability and weathering resistance without the use of heavily scrutinized materials. Other examples include formaldehyde and melamine-free systems. Current advancements in raw

material development are moving to more sustainable materials in industrial coatings with low VOCs and MOC, greater durability and improved carbon footprint.

Looking ahead, what trends and challenges do you think will shape the sector in the near future? The industry will face ongoing challenges to innovate

“Current advancements in raw material development are moving to more sustainable materials.”

What eco-friendly or bio-based materials are currently gaining traction in the industrial coatings market? Bio-based materials have the potential to make a substantial impact on reducing carbon footprint and eliminating materials of concern. There is growing recognition of the value of rediscovering long-standing products as bio-based materials, particularly those derived from cellulose and plant oils like soy, cashew nut or castor. In industrial coatings, progress is being made in utilizing recycled content to help reduce waste while minimizing carbon footprint. There are also recent advancements in converting carbon dioxide into resins for use in coatings. Many of the new eco-friendly technologies or bio-based materials that could provide potential reduction in carbon footprint or waste are relatively early in development and adoption by the industry.

due to changing regulations. Potential regulations of perfluoroalkyl substances, reclassifications of exempt solvents and growing focus on microplastics will necessitate continued innovation in industrial coatings. Decarbonization efforts across the economy present significant opportunities for new materials. The rise of electric vehicles and batteries, as well as the development of infrastructure associated with renewable energy, creates new coating demands and requirements. Across all of these challenges, digitalization in material design and enhancing the ability to collect, store and analyze data will play a critical role. In response to these challenges and opportunities, the industry will need to continue to innovate, explore alternative materials and develop coatings that align with evolving regulations and market demand. ◀

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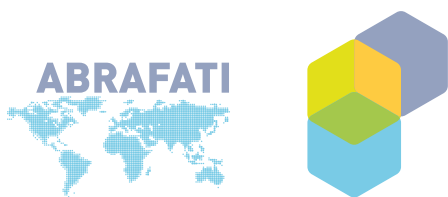


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www.abrafatishow.com.br



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www.gulf-coatings-show.com

SERVICE

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Unsure of how to fill your time after the show? In addition to the sights, Indianapolis also has a plethora of options to cater to both sports enthusiasts and shopping aficionados.

The city boasts a thriving sports scene with teams like the NBA Pacers,

WNBA Fever, NASL Indy Eleven soccer team, and ECHL Indy Fuel hockey team. The iconic Indianapolis Motor Speedway hosts the renowned Indy 500 every May, attracting 33 skilled drivers to compete in the thrilling race.

Delve into the rich history of sports at the NCAA Hall of Champions, featuring

exhibits dedicated to all 24 collegiate sports. The interactive displays span two levels, showcasing sports simulators and a 1930s retro gymnasium.

Challenge your sports knowledge with trivia and gain insight into the stories of past champions.

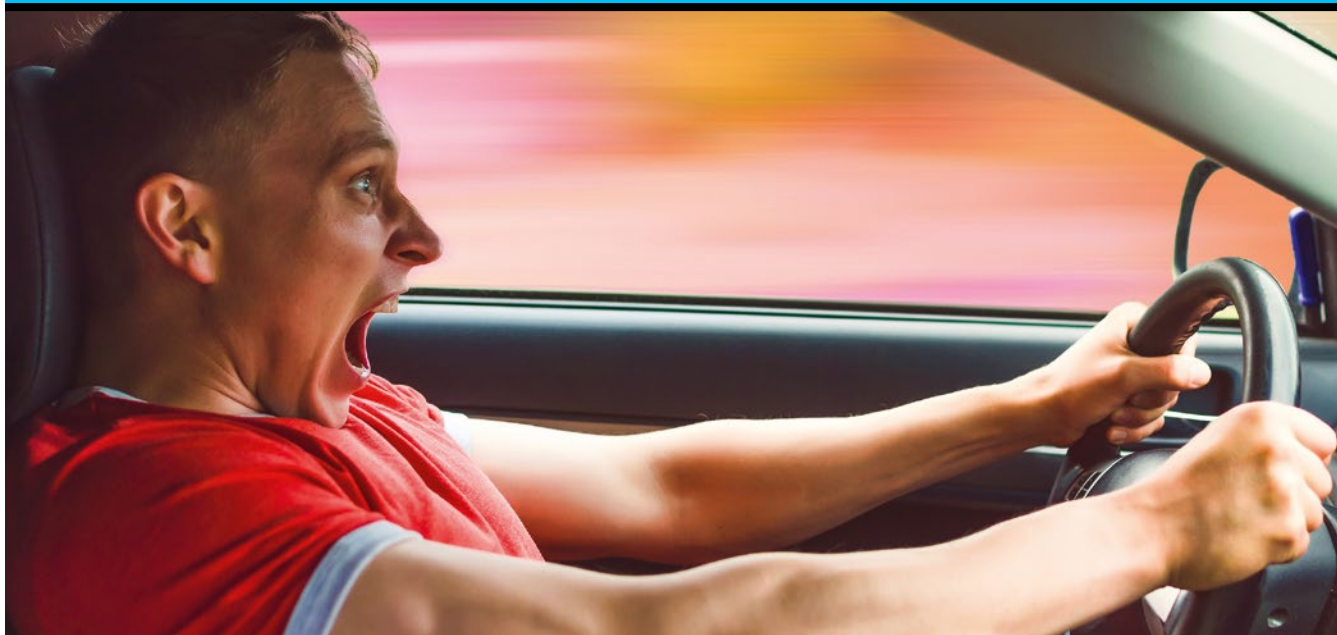
PETE DYE'S GOLF LEGACY

Indiana takes pride in being the home of the renowned golf course architect, Pete Dye. Explore his impressive designs, including the Brickyard Crossing, where four holes are ingeniously integrated into the infield of the Indianapolis Motor



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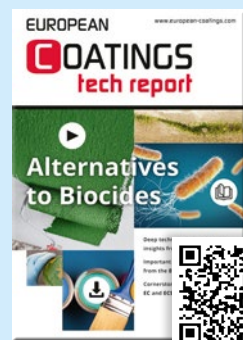
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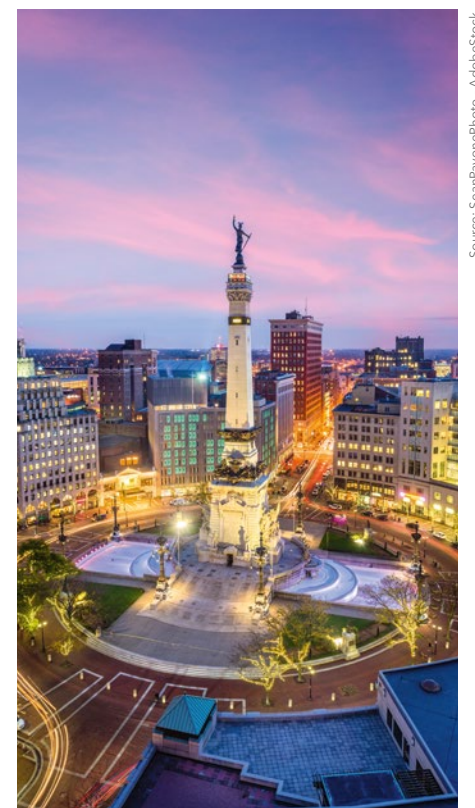
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VINCENTZ



Source: SeanParvonePhoto - AdobeStock

Speedway. The Pete Dye Golf Trail pays homage to his remarkable contributions to the world of golf.

RETAIL THERAPY IN THE HEART OF THE CITY

If shopping is more to your speed, the Circle Center Mall is conveniently connected to the Indiana Convention Center and numerous hotels via a skywalk. Boasting four levels, this expansive mall houses over 100 shops and dining options. For a more upscale experience, venture just north to the Fashion Mall at Keystone, featuring high-end retailers, luxury designers, and fine dining establishments.

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“The Field of Particle Analysis is Approached from Two Sides”

Developments in particle analysis

Dr. Jörg Wieder, one of the founders of femtoG, shares his insight on particle analysis and the role of digitalization in the field.

What are the latest developments in particle analysis? We have an interesting situation where the field of particle analysis is approached from two sides. First, there are new technical solutions that allow the measurement of multiple parameters at once, at high throughput, and possibly online. Second, there is pressure from legislators in the European Union, to characterize particle size, with a particular focus on nanoparticles (particles smaller than 100 nm).

Both points aren't aligned yet. Many standard sizing methods (e.g., laser diffraction, or ultracentrifugation) give equivalent diameters which are not fully suitable to identify nanoparticle content according to the guidelines of the European Commission. This is where we enter the stage of bridging this gap. We directly measure the mass of single particles - a fundamental property - parallel to a particle diameter. Our novel method is fast, can be automated, and provides information on the particle structure. Beyond that, our analysis allows to crosslink particle properties to many relevant units that are already mass-based, like price (\$/kg), toxicity (mg/kg body weight), or surface area (m²/g).

What are the challenges for measuring nanoparticles? Defining what counts as a nanoparticle may in itself already be the greatest challenge. Very few particles are well-defined geometric objects like spheres or cylinders and thus easily characterized by a one-dimensional

length scale. Therefore, all sizing methods measure equivalent diameters (more than 10 definitions exist) - none of which have been proven reliable at identifying nanoparticles.

“Defining what counts as a nanoparticle may in itself already be the greatest challenge.”


Consequently, only electron microscopy imaging techniques are accepted for identifying nanoparticles, which are slow and costly. Despite being powerful, electron microscopy can only deliver a relative nanoparticle content, yet it is the absolute number of nanoparticles per gram of product that matters - especially for a

health and safety assessment. Moreover, a mass measurement is independent of optical properties (such as refractive indices). This is especially helpful for the characterization of multicomponent sys-

tems, e.g., when quantifying coating material break off from core particles).

How much can automation and digitization play a part? Automation and digitization as a concept can surely boost the efficiency of existing processes in the way of making them faster and cheaper.

However, they are much less useful when we don't fully understand certain properties and parameters. In my opinion, we must ask ourselves whether we measure the right properties before analytical capacities are scaled up. New measurement concepts relying on aerosolized particles, like ours, could have a stronger leverage towards efficiency; as they have a continuous sample flow by default, they can be employed online to shorten feedback loops significantly.

From a traditional perspective, electron microscopy seems an obvious candidate for automation - add automatic sampling and use advanced AI image analysis algorithms. Yet, at its roots, you apply a 2D solution to a 3D problem to obtain a 1D number, e.g., Feret diameters. If you just want to count the particles of different sizes, it is debatable whether this automation strongly increases efficiency - in my opinion, it doesn't. 



Dr. Jörg Wieder
femtoG



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INTERVIEW

“Evolving Requirements of Electric Vehicles”

Growth in automotive and industrial coatings expected



Carlos Hernandez

Orion
Booth #1466

Carlos Hernandez, marketing manager for Coatings & Printing Systems Americas at Orion, provides an outlook for technological and optical advances in carbon blacks.

Where do you see growth potential for carbon blacks? We see two major growth

areas. The first is the automotive industry. Some coatings and automotive manufacturers; for example, Axalta Coating Systems and Chevrolet, have chosen black shades

have two grades that have exceptional color development. They show very high jetness, and one of them is the deepest black on the market today. Both have blu-


economy. Guided by our sustainability strategy, we help coatings manufacturers produce sustainable materials and participate in the circular economy. We offer circular grades based on pyrolysis oil, and bio-based grades based on renewable resources – all of which meet the same application requirements as conventional specialty carbon blacks.

“We also see market potential in industrial coatings.”

as “Color of the Year.” While most growth will be in the automotive industry, we also see market potential in industrial coatings. We offer 240 grades to support a variety of industries in a range of applications and color, shading or tinting requirements. For example, in automotive coatings, gas blacks have been setting the standard for dispersion and coloristic performance, in primarily solvent-borne applications. We

ish undertones and are universally suitable for water- and solvent-borne coatings systems.

To what extent is sustainability driving your product development? Sustainability is a key driver in our product development. In fact, we have organized our business around sustainable development and are driving our commitment to the circular

What new and additional functionalities do you see on the horizon? We see functionalities and properties related to the evolving requirements of automotive electric vehicles. We are constantly developing new conductive grades that can meet the antistatic, conductivity and other properties required for electric vehicles. They must also have the necessary coloristic properties and meet performance requirements for dispersibility and cleanliness. Thanks to the expansion of our gas black production, we will also be able to supply the market with these carbon blacks, which have excellent dispersibility and color development. 

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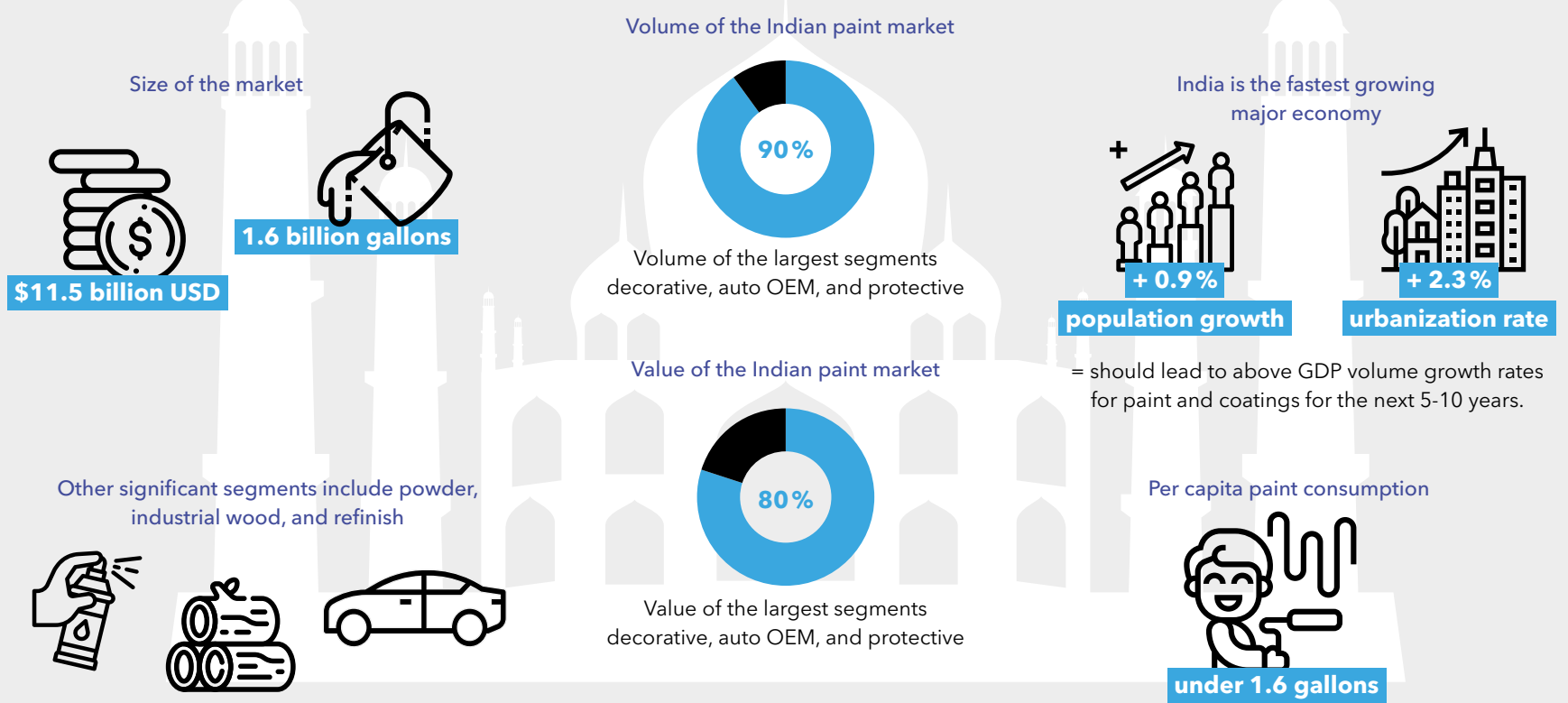
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Visit the show floor and stop by to see them.



The Indian Paint Market

Key figures in terms of size, segments, and growth



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