



Vinyl Recycling Summit – Webcast Preliminary Agenda July 19, 20, 26, & 27, 2021 2-4pm ET each day

Innovation in Vinyl Recycling

Register by clicking here.

Join us for two hours over four days for webinars by professionals in the vinyl industry on exciting existing and upcoming opportunities in all aspects of vinyl recycling. This year's theme is **investment in innovation**, which will provide insights into pending legislation for infrastructure and recycling and advancements in recycling technology that are occurring.

This is your opportunity to learn about advancements in recycling efforts across the industry.

The Vinyl Sustainability Council (VSC) is assembling leading industry experts who will share their knowledge and experiences. This is your chance to attend a recycling conference focused solely on PVC, which allows for a more specific program, audience, and presentation. Individual speakers will be announced soon.

Day 1: July 19 from 2 pm – 4 pm ET, Current State of Vinyl Recycling and Legislative Update The Vinyl Sustainability Council set a goal to increase post-consumer recycling by 10% by 2025. Learn about pilot programs leading the initiative and the outlook for potential new state and federal legislation affecting vinyl recycling.

- **Keynote Presentation**, *Dave Foell*, *Return Polymers*
- > V-Cycle Progress Update, Rich Krock, Vinyl Institute
- Policy to Create a Circular Plastics Economy, Keith Christman, American Chemistry Council - ACC has developed circular economy goals to reuse, recycle or recover all plastic packaging by 2040. ACC has announced a <u>Roadmap</u> and set of <u>Guiding Principles</u> on how to get there. We are also advocating for policies to achieve these goals. We will review our recent policy proposals.
- State & Federal Legislative Update, Kevin Koonce, Vinyl Institute In this session, attendees will find out about current federal and state legislation and regulations related to recycling of PVC. Koonce will discuss issues like extended producer responsibility (EPR), recycled content, and what types of recycling are being promoted and discouraged from the perspective of policy makers, activists, and industry.
- Financing Packaging Recycling and Recovery in the U.S Has the Time Come?, Dan Felton, AMERIPEN – Join AMERIPEN Executive Director Dan Felton for a lively discussion about the latest developments in several states in the U.S. actively considering packaging producer responsibility legislation and the leadership role AMERIPEN is taking in those discussions, on behalf of the entire packaging value chain, with its packaging recycling and recovery financing principles, objectives and policy.





Day 2: July 20 from 2 pm – 4 pm ET, Mechanical Recycling

Improvements in mechanical recycling equipment continue to be made for the vinyl industry. Speakers will discuss these latest product enhancements, additives to bolster recycled material performance and quality, and advanced sorting and contaminant removal technology to increase the yield of recycled material.

- Applying Advanced Technologies to Modernize Recycling Infrastructure, Jonathan Levy, AMP Robotics - Advanced technologies like artificial intelligence (AI) and robotics are fueling the modernization of recycling by addressing some of its longstanding constraints. In addition to recovering recyclables from municipal collection and precious commodities from electronic scrap, AMP's technology captures high-value materials from construction and demolition debris. Moreover, the ability to transform recoverable material into data opens up vast possibilities to further improve the economics and efficiency of recycling. Learn more about these technologies and the road ahead for next-generation recycling infrastructure.
- Near Infrared (NIR) Spectroscopy in the Plastics Industry: How it works and what can be done to make it work better, Brian Schmatz, trinamiX GmbH - Near Infrared (NIR) spectroscopy is the most prevalent technology used in the recycling industry for automated, high-throughput sorting of plastic waste. This talk will cover the basics of NIR spectroscopy, types of NIR devices and their uses in the plastics industry, and the inherent strengths and weaknesses of this technology for plastics sorting applications.
- What Needs Shredding?, Dave Wilson, SSI Shredding Systems A look at some of SSI Shredding Systems' installations in the plastics markets, including rigid and flexible PVC. Spotlight will be on the Dual Shear, Quad Shear, and Uni-Shear (single shaft) shredder, including some custom integrated solutions.
- Advantages of Pulverization for Recycling in the Vinyl Industries, Jeff Masar, Reduction Engineering – In this session, Masar will discuss how size reduction of the recycled PVC will allow for the user to: add a high percentage of recyclate to their product; more efficiently extrude the smaller recyclate material; hide any contaminants in the recyclate; and allow for open surface area on the recyclate product for better color matching/distribution.
- Melt Filtration in PVC Extrusion, Monika Gneuss, Gneuss Gneuss manufactures screen changers and melt filtration systems for the plastics industry. This presentation will introduce two models, the SF and the RSFgenius, which are used in PVC recycling applications.
- Enhancing Recycle Quality by Replenishing Consumable Additives, Amanda Peak, Baerlocher - Polymers are strategically stabilized for a single time pass through the process and a given end use application, mostly for economic reasons. Stabilizers and lubricants are sacrificial in nature and therefore get consumed during the process of protecting the polymer structure. Replenishing these ingredients will allow for better processing and retention of properties. Baerlocher is a global company with a local presence and experience in the recycling field.





Advanced Solutions in Vinyl Recycling with Titanate Catalysts/Coupling Agents, Salvatore Monte, Kenrich Petrochemicals - Titanium/Aluminum coupling and catalysis applications are demonstrated in mechanical recycling. Ziegler, Natta & Kaminisky used Titanium and Aluminum catalysts to produce Addition Polymers; Titanate catalysts produce Condensation Polymers; Heteroatom Titanates couple fillers and catalyze Polymers; PVC uses Mercuric Chloride and Palladium catalysts. Monte uses organometallics to recycle PVC/Polymer compounds.

Day 3: July 26 from 2 pm – 4 pm ET, Molecular / Chemical Recycling

Chemical recycling can provide a solution to highly contaminated plastic scrap. Hear directly from the companies making advancements in technologies as they explain the features and benefits of their solutions.

- Polyloop Technology: Direct Recovery of Formulated R-PVC Compound, Gabriel Faysse, Polyloop - Recycling composites is still a challenge when various layers are crosslinked together. This process is solvent-based purification (SBP) / Dissolution-based on a physical process, leaving the polymer intact, so that it can be directly reused in the same application again and again. This technology will turn PVC composite from postindustrial and pre-consumer feedstock into new high-quality material. Last year, the technology had been introduced as a concept; now after one year dedicated to laboratory test and qualification of customer's feedstock, it's time for upscaling. This STRAP process (Solvent-Targeted Recovery and Precipitation) should not be confused with chemical recycling.
- Circular Flooring: Recycling PVC from Post-consumer Flooring Waste, Thomas Diefenhardt, Fraunhofer Institute – The aim of the EU-funded project Circular Flooring is to enable the circular use of plasticized PVC from waste flooring by developing recycling process that eliminate legacy phthalic acid esters that are not conform with the EU REACH Directive.
- Circular Economies and Advanced Materials using Microwave-based Green Chemistry: Learnings from Best Practices, Florian Turk, Microwave Solutions - Recycling and finally circularity of material flows have become an imperative for companies and industries globally. Advanced and agile recycling and circular technologies are applied to many different types of carbonaecous materials and by many different industries - offering strong insights of best practices and success principles to learn from.
- Integrating Transformational Technologies in Plastics Industry for Profitability, Competitiveness, and Sustainability, Dr. Hebab Quazi, Martech International -Transformational Technology Integration in a commercial plastics plant requires a well defined road map for an end-to-end solution. The tasks begin with establishing demanding competitive- advantages. The action plan requires realistic and flexible strategic plan, on-time financial support, and modifiable work plan. Manufacturing process improvements are focused on reliability, operability, competitiveness, sustainability and profitability.
- Transitioning Towards a More Circular Economy with Chemical Recycling, Jayme Leita & Henry Li, Eastman Chemical Company – Sustainability and a true circular economy are major drivers for the industry. We are seeing a growing demand on sustainability driven by both end consumers and regulations. Powered by molecular recycling that





diverts plastic waste from landfills, incinerators, and our oceans, our Renew family of plasticizers are drop-in replacements that don't compromise performance. Eastman Renew plasticizers can be used in a variety of applications including building and construction, food packaging, and consumer goods.

A Catalytic Process for the Chemical Upcycling of PVC Waste, Scott Svadlenak, Oregon State University – We are developing a batch process designed to convert PVC plastic into a dechlorinated polymer, enabling Cl recovery and reintroduction of plastic into product streams. The goal of the project is to explore chemical pathways for dechlorinating PVC while avoiding carbonization of the plastic.

Day 4: July 27 from 2 pm – 4 pm ET, Investment

Keynote by U.S. EPA on updates to the National Recycling Strategy. Also, learn about various sources and methods to finance the investments in infrastructure needed to invest in and grow recycling. Additional presentations will discuss credits for carbon capture and how specifications can influence recycle content products.

- EPA Updates to the National Recycling Strategy, Nena Shaw, U.S. Environmental Protection Agency – Nena Shaw will share updates, progress, and plans to achieve the national recycling goal of increasing the recycling rate to 50% by 2030.
- Business Assistance for North Carolina Plastic Recyclers, Mike Greene, North Carolina Department of Environmental Quality The North Carolina Department of Environmental Quality's Recycling Business Assistance Center (RBAC) offers a wide range of services for recycling companies including business assistance, markets and financing. This presentation will cover all of RBAC's offerings as well as information on our partner organizations that can assist you in locating to and recycling in NC.
- How to Attract Growth Capital in a Dynamic Recycling Market and Enable the Circular Economy, Jack Norris, SK Capital Partners – PE firms are seeking invest in businesses that are sustainability-advantaged and help enable the circular economy. Hear from SK Capital Partners, an investor focused on the specialty materials and chemicals sector, on the critical factors private equity looks for in investment targets and how to attract growth capital to your plastics recycling business.
- > A Focus on Investments, Funding, & Grants, Ed Daniels, REMADE Institute
- Characterizing Recycled Vinyl Streams: A Collaborative Approach to Increasing the Use of Recycled Content – A Panel with Jeff Rezin, of Rezin, Inc., Alan Kupfer, of Westlake Chemical Corporation, and Bret Biggers, Industrial Waste & Recycling Association

This is your opportunity to focus on the unique opportunities happening in vinyl recycling today, as well as learn more about where the industry is going! <u>Register by clicking here.</u>