

Epoch Biodesign to Accelerate Global Scale-Up of Revolutionary Plastic Recycling Technology with Former INVISTA CTO

Appointment builds momentum after Epoch's Series A & it plans to process tens of thousands of tonnes of waste, using its game-changing plastic-eating enzymes

LONDON, UNITED KINGDOM, October 2, 2025 /EINPresswire.com/ -- Former INVISTA CTO Jerry Grunewald Joins Epoch Biodesign to Accelerate Global Scale-Up of Revolutionary Plastic Recycling Technology



What excites me about joining Epoch Biodesign is their approach to achieving true circular plastic recycling, not downcycling. The key differentiator is their ability to maintain material purity."

Jerry Grunewald, Senior Advisor, Epoch Biodesign

Industry veteran brings four decades of Nylon expertise to pioneering biorecycling technology business

□ Jerry Grunewald, previously CTO of the world's largest Nylon 6,6 producer, INVISTA, joins Epoch Biodesign (Epoch) as Senior Advisor

□ Having held multiple leadership roles over 36 years in R&D, Technology, and Operations across INVISTA and DuPont, Grunewald is one of the world's leading experts on plastics and plastics industrialisation, his knowledge

and connections set to play a crucial role as Epoch rapidly scales up

□ Grunewald's appointment builds on the momentum of Epoch's Series A, which lifted the company's total funding past \$40 million. Epoch plans to process tens of thousands of tonnes of plastic waste for major fashion, automotive, and industrial customers, using its game-changing plastic-eating enzymes

□ Combining AI and advanced synthetic biology, Epoch's unique biorecycling technology breaks down waste textiles and other plastics into their building block monomers, which can then be turned back into virgin-quality textile-grade polymers

□ With plastic production set to triple and new regulations requiring end-of-life recycling solutions, Epoch's technology can turn a growing crisis into a circular revolution

□ [Hi-res media images: HERE](#)

London, UK 2nd October 2025 — Epoch Biodesign (Epoch), the company transforming plastic waste into high-performance materials through pioneering biorecycling enzyme technology,

today announces that Jerry Grunewald has joined as Senior Advisor.

Formerly Chief Technology Officer at INVISTA, the world's largest producer of Nylon 6,6, Grunewald is one of the world's leading experts on plastics and plastics industrialisation, having held leadership roles spanning R&D, Technology, and Operations across all INVISTA's 13 global operating sites, over a 36-year career at INVISTA and DuPont.

Combining AI and advanced synthetic biology, Epoch's biorecycling technology deconstructs waste textiles and other plastics into their building block monomers, which can then be turned back into virgin-quality textile-grade polymers.

Grunewald's knowledge and connections – he led the construction, setup, and commissioning of INVISTA's world-scale facility in Shanghai, China, the world's largest fully integrated Nylon 6,6 production facility with a capacity exceeding 400,000 tonnes per year – will play a crucial role as Epoch rapidly scales up.

Having recently closed a Series A funding round, which lifted total investment beyond \$40 million, Epoch is using the capital to build its first commercial plant and expand its library of revolutionary plastic-eating enzymes. With critical partnerships across performance apparel, automotive, luxury fashion, and technical textiles, Epoch is demonstrating true textile-to-textile circularity at scale and aims to process tens of thousands of tonnes of waste by 2028.

Traditional mechanical and chemical recycling struggles with blended textiles and other plastics, lowering the quality of the material. These methods can't currently process Nylon 6,6 blends – Epoch's priority product – and are less attractive options for other materials as they are energy-intensive and can produce toxic byproducts. Chemical recycling requires high temperatures, in some cases above 500°C, making it energy-intensive and expensive. As a result, most recycled plastics end up as lower-value products destined for landfills. With plastic production projected to increase by as much as three times in the next 35 years, this challenge is only growing. However, Epoch's enzymes break down mixed plastic waste at room temperature, transforming it into high-quality chemical building blocks that can compete with virgin materials on both



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performance and price. Its recycling technology fully recovers the material's value, turning a growing crisis into a circular revolution.

Jacob Nathan, Founder and CEO of Epoch Biodesign, said: "Jerry's deep understanding of polymer chemistry and industrial-scale manufacturing is exactly what we need as we build our first commercial facility. Having evaluated countless innovative startups during his tenure leading INVISTA's technology centre, we see Jerry's appointment as an endorsement of our biorecycling technology, validating our approach to making all plastics truly recyclable.

"Jerry's industry network and technical expertise will be invaluable as we scale our biorecycling enzyme technology, and his experience of building modern, efficient and industry-scale manufacturing plants will help us rapidly navigate the complexities of bringing our enzyme technology to mass-recycling reality."

Jerry Grunewald, Senior Advisor, Epoch Biodesign: "What excites me about joining Epoch Biodesign is their approach to achieving true circular recycling, not downcycling. The key differentiator is their ability to maintain material purity throughout the recycling process.

"The Epoch approach works at lower temperatures which minimises degradation and byproducts. If you end up with impurities, there is more potential to create a second-grade material that can't be used for high-quality applications like airbag fibres or automotive parts. The Epoch process has the opportunity to produce materials that can meet these exacting standards and that is a huge step forward.

"Beyond the science, I see the Epoch approach as technically feasible, scalable, and on a realistic timeline for commercialisation, which I am here to support. The industry desperately needs this solution, and I believe Epoch has the ingredients for success to what is a very challenging process."

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Hi-res media images: [HERE](#)

Editors' notes:

About Epoch Biodesign

Epoch Biodesign's mission is to address the global waste crisis by enabling infinite recycling of materials, starting with Nylon 6,6. It achieves this by combining artificial intelligence and advanced synthetic biology to engineer targeted enzymes. These enzymes efficiently deconstruct

waste materials, such as textiles currently destined for landfills, at a molecular level into valuable, virgin-quality materials.

Jacob Nathan, Epoch's Founder and CEO, has secured over \$40 million in funding from leading investors, including Lowercarbon Capital and Inditex. Epoch is currently building the world's largest Nylon 6,6 biorecycling facility.

For more information about Epoch Biodesign, visit www.epochbiodesign.com

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