



| Session | Start-ups/SMEs looking for Finance: pre-seed/angel/seed funding |
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| Title | Demeter Bio Bio-based materials that don't last |
| Company | Demeter Bio |
| Speaker | Rayan Osseiran |
| Keywords feedstock (max. 2) | Waste Byproduct |
| Keywords technology (max 2) | Biomaterial Extraction |
| Keywords End-Product (max 2) | Chitosan-Melanin |
| Abstract: | |
| <p>Demeter Bio is a London-based biotechnology company developing MelioShield, a novel biopolymer derived from natural sources. It is an innovative cross-link of chitosan and melanin that serves as a high-performance, biodegradable alternative to harmful chemicals like PFAS, UV filters, and microplastics. It is also derived from bio-based feedstock that are a byproduct of organic waste processing – essentially converting organic waste into high-value materials.</p> <p>MelioShield delivers superior UV protection, exceptional antioxidant activity (2x greater than melanin, 10x greater than chitosan), and natural antimicrobial properties. The material serves multiple industries, including beauty, packaging, coatings, and pharmaceuticals, offering a single ingredient that replaces multiple conventional and persistent chemicals.</p> <p>Founded by biotechnologist Dr. Adelya Khayrova and entrepreneur Rayan Osseiran, Demeter Bio advances the circular economy by transforming waste streams into valuable materials that can replace UV Filters, PFAS and microplastics. Unlike these persistent synthetic alternatives, MelioShield is fully biodegradable and returns safely to nature. The company's B2B partnership strategy focuses on seamless integration into existing supply chains, targeting chemical suppliers, contract manufacturers, and brands seeking sustainable solutions.</p> <p>Currently in lab-scale production phase, Demeter Bio is preparing to unveil major milestones including pilot-scale production and first POC agreements, positioning MelioShield as a game-changing solution for industries transitioning away from harmful, non-circular materials.</p> | |