



Session	Start-ups/SMEs looking for Finance: Pre-seed/Angel/Seed
Title	Unlock the full potential of biologicals
Company	Altered Materials
Speaker	Marco Illicg
TRL	TRL 4 - 7
Keywords feedstock (max 2)	Biopolymers; Biologicals
Keywords technology (max 2)	Encapsulation
Keywords End-Product (max 2)	Nano-capsule; Micro-Capsule
Abstract:	
Agricultural biologicals are growing rapidly, but their adoption is still limited by inconsistent field performance. Biostimulants and biopesticides can lose a significant share of their activity through UV exposure, oxidation, microbial degradation and wash-off before delivering their full effect. Altered Materials is developing biodegradable, microplastic-free micro- and nano-encapsulation technologies that protect biological active ingredients and enable controlled and bio-responsive delivery. Our platform is designed to improve formulation stability, persistence and field reliability while reducing the amount of active ingredient required and the need for repeated applications. Rather than developing new active ingredients, we improve the performance of existing ones and help agrochemical companies turn promising biologicals into more robust products. We work through a B2B co-development model, supporting formulation development, validation, scale-up and white-label production. The technology is currently at TRL 4, with industrial PoCs and agronomic trials underway and one patent pending. In our most advanced industrial PoC, we demonstrated reproducible encapsulation and improved protection against light-induced degradation. Our goal is to make biological crop inputs more effective, reliable and easier to adopt at scale, accelerating the transition toward more sustainable crop protection and plant nutrition.	