

## **SWOT highlights on bio-based materials from agri-food wastes**

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Circularity and/or bio-derivation in (nano-)materials for both mass consumption and specialty applications are highly desirable, but at the same time they should not be used per se as attributes of sustainability. The talk will spotlight some key SWOT elements along the whole circular bio-based value chain, where multiple, and sometimes counterintuitive considerations may apply, concerning for instance the responsible feedstock sourcing, the transformation footprint and the different end-of-life options for materials. The relationship between physical and chemical complexity and target application will also be considered, with a snapshot on few case studies and innovations examples. Finally, a perspective on main future trajectories in the field will be considered, especially by looking at some of the main strategies in Europe for fostering industrial R&I, with the challenge of bridging the gap between low TRL concepts and market in the circular bio-based innovation journey.