

Closing Event of the BIOSMARTFERT Project: Innovation for Sustainable Agriculture

January 27, 2026, Research Area of Pisa, Via Moruzzi 1, Pisa, Room 27

PRIN: PROGETTI DI RICERCA DI RILEVANTE INTERESSE NAZIONALE – Bando 2022 Prot. 20225WLFRR

**BIOpolymers from agri-food waste digestates for SMART release bioFERTilisers
BIOSMARTFERT 12/10/2023-28/02/2026**



Programma

- **10:00 Welcome** Grazia Masciandaro, Responsabile CNR-IRET, Sede secondaria di PISA
- **10:10** Grazia Masciandaro. BIOSMARTFERT: BIOpolymers from agri-food waste digestates for SMART release bioFERTilisers
- **10:20** Isabella Pecorini, Alessio Castagnoli, Erika Pasciucco, Sara Corti, Francesco Pasciucco, Gloria Uccello Barretta, Antonio Panico, Renato Iannelli. *Thermal and sonic pretreatments for the production of VFAs as precursors of PHAs in a mixed microbial system.*
- **10:40** Sara Corti, Francesco Pasciucco, Roberta Palmieri, Antonio Panico, Renato Iannelli, Isabella Pecorini. *Enzymatic pretreatments applied to the organic fraction of municipal solid waste for the optimisation of VFA production*
- **10:55** Eleftherios Touloupakis, Isabela Calegari Moia, Raffaella Margherita Zampieri. *PHB production by photosynthetic non-sulfur bacteria*
- **11:10** Simona Bronco, Cristina De Monte, Stefano Pezzini, Leonardo Arrighetti, Umberto Granata, Lucia Ricci. *Extractability of PHA from microbial cultures as carrier materials for controlled-release fertilizers*
- **11:25** Federica Aiello, Federica Balzano, Gloria Uccello Barretta. *Analysis of VFAs and PHAs from agrifood waste: the NMR contribution to compositional and structural elucidation*
- **11:40** Roberta Palmieri, Isabella Pecorini, Alessio Castagnoli, Erika Pasciucco, Sara Corti, Francesco Pasciucco, Renato Iannelli, Eleftherios Touloupakis, Antonio Panico. *Integrated Modeling of Dark and Photo Fermentation as tool to support the optimization of the Anaerobic Biorefiner*
- **11:55** Eleonora Peruzzi, Serena Doni, Cristina Macci, Irene Rosellini, Marco Carlo Mascherpa, Grazia Masciandaro. *Agronomic tests to evaluate the properties of SRF*
- **12:10** Francesco Pasciucco, Eleonora Peruzzi, Antonio Panico, Prawat Sukphun, Alessio Castagnoli, Renato Iannelli, Isabella Pecorini. *Life Cycle Analysis applied to the Biosmartfert concept: circular production of fertilizers from bioproducts*
- **12:25 Conclusions**
- **12.45 Light lunch**