



Finanziato
dall'Unione europea
NextGenerationEU



Ministero
dell'Università
e della Ricerca



Italiadomani
PIANO NAZIONALE
DI RIPRESA E RESILIENZA



SAMOTHRACE

20 gennaio 2026 - ore 9:30

RAGUSA  BAPS

Pillar Smart Agriculture
and Environment



Pillar Smart Agriculture and Environment

- 📍 Ottimizzare risorse, ridurre sprechi e tutelare il territorio
- 📍 Monitorare ambiente e agricoltura con accuratezza senza precedenti
- 📍 Integrare micro e nano tecnologie per un futuro sostenibile
- 📍 Supportare gli enti preposti al controllo e gli agricoltori con strumenti di precisione

www.samothrace.eu





Finanziato
dall'Unione europea
NextGenerationEU



Ministero
dell'Università
e della Ricerca



Italiadomani
PIANO NAZIONALE
DI RIPRESA E RESILIENZA



Pillar Smart Agriculture and Environment

9:30 **Caffè di benvenuto**

10:00 **Saluti Istituzionali**

10:30 **Presentazione dei Pitch**

- Monitoring CO₂ fluxes from anthropic and other natural processes / **D. Longo / UniCt**
- Gas Sensor fabrication and validation for environmental monitoring / **S. Sinopoli / UniMe**
- XCROPS: Advanced diagnostic solutions for plant health / **S. W. Davino / UniPA**
- Portable optical Raman Tweezers for micro and nanoplastics analysis in water and complex fluids / **P. G. Gucciardi / CNR**
- Multiple Connectivity IoT Monitor Systems PoCs / **A. Lionetto / ST**
- Functionalization of screen-printed electrodes for the electrochemical monitoring of pollutants / **A. Ferlazzo / UniCt**
- Innovative green nanofertilizers for crop resilience / **V. Torrisi / CNR-IMM**
- Optical sensors for smart environmental monitoring / **A. Cavallaro / UniCt**
- Pesticides detection in water using cyclodextrin modified screen-printed electrodes / **G. Nocito / CNR-ISMN**
- From Ground Motion to Structural Response: a Digital hybrid Seismic Sensor and Rotational Accelerometer developed in the Samothrace Project / **G. Fertitta / INGV**
- Portable Fluorescence Platforms for Plant Pathogen Surveillance: Smartphone-Read Sensor Arrays and RPA for Fast Citrus Quarantine Screening / **F. La Spada / UniCt**
- Electrochemical Sensor based on Algae / **M. Chelly / UniMe**
- IBE-HydroXPhenotyping: Innovation Buttressed Ecosystems Phytotrones and related working protocols / **E. Riggi / CNR-IBE**
- PCR-Free Real-Time Antibiotic-Resistant Gene Detection in Wastewater through Impedimetric DNA Sensor Based on Gold-Modified NiO Nanostructures / **R. Magnano San Lio / UniCt**
- Innovative cryogels for water purification in environmental and agricultural field / **S. Carroccio / CNR-IPCB**
- Treatment and monitoring of PFAS: adsorption on activated carbon and EB-CTAB detection / **L. Coscarelli / Sanniotech**
- Solid-State based UV analytes monitoring for environmental and agronomic applications / **A. Sciuto / CNR-IMM**
- Portable vapochromic paper-based chemosensors for the selective and sensitive detection of Nitrogen-containing Volatile Organic Compounds by smartphone-assisted RGB color analysis / **M. Gaeta / UniCt**
- Study and implementation of an early warning system for floods / **F. Blancato / MI**



Finanziato
dall'Unione europea
NextGenerationEU



Ministero
dell'Università
e della Ricerca



Italiadomani
PIANO NAZIONALE
DI RIPRESA E RESILIENZA



Pillar Smart Agriculture and Environment

12:00 **Sessione Dimostratori**

13:00 **Pranzo**

14:00 **Presentazioni Attività di Ricerca**

- Recovery of Gold from e-waste by laser reduced graphene oxide and application for catalytic CO₂ conversion / **Scardaci / UniCt**
- A Bio-Based sensing method: the Artemia salina model / **M. Albano / UniMe**
- Highly functionalized hybrid carbon nano-forms materials for photodegradation of pollutants from water / **R. Infantino / UniPa**
- Photocatalytic nanocomposites for environmental remediation / **V. M. Marzullo / CNR-IMM**
- Development of a prototype of a single-photon spectrophotometer using integrating cavities for water quality monitoring / **A. Agugliaro / INFN**
- Smart monitoring systems for dairy farming: integrating environmental data, cow behavioural activities and emissions in intensive and extensive production systems / **P. R. D'Urso M. Bonfanti / UniCt**
- Electrochemical sensors based on novel friendly nanomaterials / **J. Belhaj / UniMe**
- Intermittent aeration for the optimization of biological nitrogen removal from low C/N wastewater (Unikore) / **R. Campo / UniKore**
- Advanced TEM analysis of nanomaterials for water remediation / **G. Sfuncia / CNR-IMM**
- Advanced field monitoring for tropical crops in Sicily / **G. Marsella / INFN**
- Real-time monitoring and control of removal of contaminants of emerging concern (CEC) from wastewater by advanced treatment processes / **F. Fazzino / UniCt**
- Computational study of the 5-hydroxymethylfurfural to furandicarboxylic acid conversion on the halloysite surface / **L. Guercio / UniPa**
- Distributed Fiber Optic Sensing for the detection of ultra-small volcano deformation / **G. Currenti / INGV**
- Assessing proximal sensing performance for early detection of biotic and abiotic stress in mediterranean crops / **D. Vanella / UniCt**
- Development of new materials for sensing and removal of organic pollutants from wastewater / **S. Marullo / UniPa**
- Instrument for olive mill wastewater monitoring / **E. Riggi / CNR-IBE**
- The impact of cadmium on plant health and metabolite profile / **D. Bekkai / UniMe**
- Development of functional polymeric materials for simultaneous removal of different contaminants from water: application in environmental and agricultural fields / **S. Filice / CNR-IMM**

16:00 **Coffee break**



Finanziato
dall'Unione europea
NextGenerationEU



Ministero
dell'Università
e della Ricerca



Italiadomani
PIANO NAZIONALE
DI RIPRESA E RESILIENZA



Pillar Smart Agriculture and Environment

16:30
17:30

Tavola Rotonda

Moderatore: Carlo **Ottaviano** | giornalista Il Messaggero

Pierluigi **Catalfo** | Università di Catania

Giorgio **Carpenzano** | Assessorato Regionale dell'Agricoltura

Dipartimento Regionale dell'Agricoltura

Gaetano **Valastro** | Direttore Tecnico ARPA

Loris **Franco** | IRRITEC S.p.A.

Massimiliano **Brugaletta** | Procurement specialist LBG Sicilia s.r.l.

Alessandro **Angelica** | Responsabile Servizio Agribusiness e Green Transition, BAPS



Registrati qui



www.samothrace.eu