



UNIVERSITÀ  
DEGLI STUDI DELLA  
TUSCIA

DIPARTIMENTO  
DI SCIENZE AGRARIE  
E FORESTALI



A.D. 1308  
**unipg**  
UNIVERSITÀ DEGLI STUDI  
DI PERUGIA



SAPIENZA  
UNIVERSITÀ DI ROMA

**Nano** Rome, 20-23 September  
**2022 Innovation**  
Conference & Exhibition

## Nanotechnology in Agriculture

Summer School (30/6 – 1/07/2022)

*1st Edition*

### Program

#### First day (30/06/22)

- Registration 8.30- 9.00
- Welcome Greetings 9.00-9.15
  - Prof. [G. M. Balestra](#), *Convener*, [University of Tuscia](#)
  - Prof. [D. Monarca](#), Head of Dep. of Agric. and Forest Sciences ([DAFNE](#))
  - Prof. [M. Rossi](#), [University of Rome La Sapienza](#), [NanoInnovation2022](#)
- I Session – Nanomaterials sustainable design 9.15-11.15
  - Prof. [S. Giovagnoli](#), [University of Perugia](#)
    - *Controlled release in nanoagrochemicals*
  - Prof. [G. Ciccarella](#), [University of Salento](#)
    - *Ecofriendly nanocarriers*
  - Prof. [S. Santra](#) and Dr. Jorge Pereira, [University of Central Florida](#)
    - *Improving bioavailability of nanomaterials in plant systems*

#### Coffee Break 11.15-11.45

- II Session – Advanced techniques for nanomaterials characterization 11.45-13.15
  - Prof. [L. Dini](#) and Dr. [S. Tacconi](#), [University of Rome La Sapienza](#)
    - *Microscopy techniques for visualizing nanomaterial in plant tissues*
  - Proff. [E. Camaioni](#) and [R. Vivani](#), [University of Perugia](#)
    - *Spectroscopy characterization of nanomaterials*

#### Light Lunch 13.15-14.15

- III Session – Nanomaterials application: Plant nutrition 14.15-15.45
  - Prof. [L. Marchiol, University of Udine](#)
    - *Agriculture sustainability. The role of engineered nanomaterials in plant nutrition*
  - Prof. [G. Fellet, University of Udine](#)
    - *Current knowledge and findings on Nanofertilizers*
- IV Session – Nanomaterials application: Wastes valorization 15.45-17.15
  - Dr. [E. Fortunati](#), PhD Researcher
    - *Nanocellulose from biomasses for innovative applications*
  - Prof. [M. Romagnoli, University of Tuscia](#)
    - *Lignin nanocarriers for smart delivering: recent trends and applications*
- Panel Discussion at Experimental Farm of University of Tuscia 17.30-18.30
  - Media, Journalists

Aperitif in Field 18.30

## Second day (01/07/22)

- V Session – Nanomaterials application: Plant protection 9.00-11.00
  - Prof [G. M. Balestra, University of Tuscia](#)
    - *Antimicrobial action mechanisms of nanomaterials*
  - Prof. [M. L. Paret, University of Florida](#)
    - *Considerations towards experimental planning for conducting studies using nanomaterials as plant protectants*
  - Prof. [L. De La Fuente, Auburn University](#)
    - *Nanoformulations for xylem pathogens: Xylella fastidiosa*

Coffee Break 11.00-11.30

- VI Session – Rules and risks of nanomaterials 11.30-13.00
  - Dr. [I. De Angelis, Italian National Institute of Health](#)
    - *Challenges and potential risks for human health of nanotechnologies in food sector*
  - Dr. [F. Benetti, Ecam Ricert](#)
    - *EU regulation of nanomaterials for environment, food, human health*

Light lunch 13.00-14.00

- VII Session – Interactions between nanomaterials and Environment 14.00-16.00
  - Dr. [S. Palleschi, Italian National Institute of Health](#)

- *Primary and secondary micro-nanoplastics: potential risk for human health and environment*
  - Prof. [T. Tosco](#), [Polytechnic University of Turin](#)
    - *Nanopesticides to reduce the environmental impacts of agrochemicals*
  - Prof. [R. Sethi](#), [Polytechnic University of Turin](#)
    - *Nanoparticles for the removal of contaminants from groundwaters*
- Greetings and Conclusions 16.00-16.30

### Scientific Committee

- Prof. Giorgio M. Balestra (*Convener*)
- Prof. Stefano Giovagnoli
- Prof. Emidio Camaioni
- Prof. Marco Rossi

### Organizing Committee

- Prof. Giorgio M. Balestra
- Dr. Daniele Schiavi
- Prof. Luciana Dini
- Dr. Cristina Gippa

### Scientific Patronage



**SIPaV**

Società Italiana di Patologia Vegetale  
Italian Phytopathological Society

[Società Italiana di Patologia Vegetale](#)

[Italian Phytopathological Society](#)



[Associazione Italiana per la Protezione delle Piante](#)

[Italian Association for Plant Protection](#)



[Mediterranean Phytopathological Union](#)



[Società Italiana di Agronomia](#)

[Italian Society of Agronomy](#)



**SAPIENZA**  
UNIVERSITÀ DI ROMA

[Dottorato in Biologia Molecolare e dello Sviluppo](#)

[Phd in Cell And Developmental Biology](#)