



3rd Summer School

Nanotechnology in Agriculture

19-20 September 2024, Torino - Italy



Politecnico
di Torino

DIATI - Department of Environment, Land and
Infrastructure Engineering
DET - Department of Electronics and Telecommunications



UNIVERSITÀ
DI TORINO

DISAFA - Department of Agricultural,
Forest and Food Sciences

OVERVIEW

Nanotechnology holds the potential to deeply impact farming practices through enhanced efficiency, reduced environmental impact, and improved crop yields, thereby contributing to global food security and sustainable agricultural development. The summer school aims to provide with a comprehensive understanding of the potential applications of nanotechnologies in agriculture, with a specific focus on advancements in precision agriculture through the development of nanosensors and high-tech nano and micro devices, and on nanoparticle-based approaches to pest control and fertilization, including synthesis approaches, characterization, and environmental impact of these materials. By addressing these critical areas, the school aims to equip participants with the knowledge and skills necessary to contribute to sustainable agricultural practices and address global food security challenges.

REGISTRATION

Registration deadline: August 23, 2024
Participation fee: 200 euros (VAT included).
Included are all course material and lunch.
Participants are responsible for own transport, accommodation, other meals, personal expenses.
Further details and registration link available in the School website.

WHO SHOULD ATTEND

PhD and MSc students, academics and researcher from industries working on topics related to nanotechnology, climate-smart agriculture and related topics.

Participants are encouraged to present a poster on their own research work. Posters will be displayed in the teaching room and discussion with speakers and participants is foreseen during coffee breaks and lunches.

VENUE

The Summer School is jointly organized by Politecnico di Torino (DIATI and DET) and Università degli Studi di Torino (DISAFA).
Sessions of 19th morning and 20th: Cittadella Politecnica, Corso Castelfidardo 39, 10138 Torino
Session of 19th afternoon: DISAFA - Università degli Studi di Torino - Largo Paolo Braccini, 2, 10095 Grugliasco
A bus transfer will be organized from Politecnico to DISAFA. Further details are available in the School website.

SCHOOL WEBSITE

https://sites.google.com/view/nanoagri2024torino/home?a_uthuser=0





Program

Day 1 (19th September)

- 8.15 – 9.00 Registration and opening
Organizing committee: Danilo Demarchi (Politecnico di Torino), Silvia Fogliatto (Università degli Studi di Torino), Tiziana Tosco (Politecnico di Torino), Francesco Vidotto (Università degli Studi di Torino)
- 09:00 – 12:30 Session 1 - Synthesis, efficacy and environmental fate of nanopesticides
Speakers: Melanie Kah (University of Auckland), Renato Grillo (Sao Paulo State University), Silvia Fogliatto, Francesco Vidotto (Università degli Studi di Torino), Tiziana Tosco (Politecnico di Torino), Giorgio Balestra, Daniele Schiavi (Università degli Studi della Tuscia)
- 12:30 – 14:30 Lunch break and transfer to DISAFA - UNITO
- 14:30 – 16:00 Session 2 - Precision agriculture and smart sprayers
Speakers: Fabrizio Gioelli (Università degli Studi di Torino), Marco Grella (Università degli Studi di Torino)
- 16:00 – 18:00 Visit to DISAFA research facilities, group photo

Day 2 (20th September)

- 09:00 – 11:15 Session 3 - Nanofertilizers
Speakers: Guido Fellet, Laura Pilotto (Università di Udine), Youry Pii (Università di Bolzano)
- 11:15 – 11:45 Coffee break + posters
- 11:45 – 13:15 Session 4 - Characterization
Speakers: Milica Velimirovic (VITO - Flemish Institute for Technological Research NV), Luciana Dini, Daniela Uccelletti (Sapienza Università di Roma)
- 13:15 – 14:30 Lunch break
- 14:30 – 16:45 Session 5 - Nanosensors
Speakers: Sandro Carrara (EPFL, Switzerland), Danilo Demarchi, Sergio Ferrero (Politecnico di Torino)
- 16:45 Closing

The detailed program is available at the School website