

Plant-soil-microbe interactions and ecosystem dynamics in a changing environment

10-13 February 2020 – Torino, Italy

School aims

The interactions between plants, soils and their microbial communities are pivotal in controlling ecosystem dynamics, functions and the services they provide. Biotic and abiotic pressures, resulting from climate change, land-use change, pollution amongst others, can disrupt these critical interactions and consequently affect the way both natural and agricultural ecosystems work. Research in agricultural chemistry plays an important role in unravelling these interactions and how they are influenced by, or adapt to environmental change. This edition of the Agricultural Chemistry Winter School will focus on these issues, and promote the importance of agricultural chemistry among young scientists in an international, friendly and casual environment.

The Winter School, organized by the Italian Society of Agricultural Chemistry (SICA) and the Dept. of Agricultural, Forest and Food Sciences (DISAFA), University of Torino, is offered to doctoral students, post-docs and early-stage researchers, and aims at providing an opportunity to: (i) exchange and extend understanding of the theoretical, conceptual and applicative aspects regarding soil, plant and environmental sciences; (ii) provide useful insights into novel methodological and analytical approaches; (iii) build and sustain research networks; and (iv) consolidate scientific writing and presentation skills. The programme will therefore provide a series of activities including keynote lectures, seminars, workshops, as well as oral and poster presentations by the participants.



School venue

All the activities related to the school will take place at the:

Cavallerizza Reale (Sala Multifunzione)

Via Giuseppe Verdi 9

Torino, Italy.

School details and contact

All details regarding the school, can be found at www.acws.unito.it

For any information related to the school please contact:

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Department of Agricultural, Forest and Food Sciences

University of Torino



Programme

Monday, 10 February 2020

14:00 – 14:30	Registration
14:30 – 15:15	Opening Session
Session 1	Moderator: <i>Antonio Caporale, University of Naples</i>
15:15 – 16:00	The rhizosphere: a highly dynamic soil environment <i>Mauro De Feudis, University of Perugia, Italy</i>
16:00 – 16:15	Coffee break
16:15 – 17:00	Microbial ecology of the rhizosphere <i>Stefano Mocali, Council for Agricultural Research and Agricultural Economy Analysis, Florence, Italy</i>
17:00 – 17:45	Plant nutrient availability and uptake in the rhizosphere <i>Michela Schiavon, University of Padova, Italy</i>
18:30	Get together

Tuesday, 11 February 2020

Session 2	Moderator: <i>Vito Armando Laudicina, University of Palermo</i>
09:00 – 10:00	Rhizodeposition: Processes and Functions in Agroecosystems [Keynote] <i>Johanna Pausch, Universitat Bayreuth, Germany</i>
10:00 – 10:45	Soil organic matter dynamics and feedbacks to climate in forest ecosystems <i>Emily Solly, ETH Zurich, Switzerland</i>
10:45 – 11:15	Coffee break
11:15 – 12:00	Biogeochemical processes at the soil-root interface <i>Antonio Caporale, University of Naples, Italy</i>
12:00 – 12:45	Trace element cycling in soil-plant systems <i>Roberto Terzano, University of Bari, Italy</i>
12:45 – 14:00	Lunch break / Poster session
Workshop 1	Moderator: <i>Ramona Balint, CNR-IGG, Torino</i>
14:00 – 14:45	Navigating the seas of publication - getting published in international journals <i>Naoise Nunan, CNRS, Paris, France (Editor-in-chief of Geoderma)</i>
14:45 – 18:00	What makes a well-written article? <i>Group work activity on the identification of essential characteristics of a well-written article</i>
20:30	Social dinner

Wednesday, 12 February 2020

Session 3:	Moderator: <i>Youry Pii, Free University of Bolzano</i>
09:00 – 10:00	Biogeochemical interface in soil: Heterogeneity and functioning [Keynote] <i>Naoise Nunan, Centre National de la Recherche Scientifique, Paris, France</i>
10:00 – 10:45	Effects of plant genotypes and soil management interactions on microbial communities and their feedback <i>Paola Corneo, University of Trento, Italy</i>
10:45 – 11:15	Coffee break
11:15 – 12:00	Mycorrhizal fungi: beneficial symbionts for plants and ecosystem processes <i>Luisa Lanfranco, University of Torino, Italy</i>
12:00 – 12:45	The role of root-associated bacteria in plant stress alleviation and growth promotion <i>Tanja Mimmo, Free University of Bolzano, Italy</i>
12:45 – 14:00	Lunch break / Poster session
14:00 – 14:45	Stable isotopes in soil-plant systems <i>Johanna Pausch, Universitat Bayreuth, Germany</i>
Workshop 2	Moderators: <i>Daniela Pezzolla, University of Perugia and Elio Padoan, University of Torino</i>
14:45 – 18:00	Presenting your research <i>Poster pitches and poster session</i>

Thursday, 13 February 2020

Session 4:	Moderators: <i>Anita Zamboni, University of Verona and Ramona Balint, CNR-IGG, Torino</i>
09:00 – 10:00	Principles of redox regulation in plants [Keynote] <i>Paolo Trost, University of Bologna, Italy</i>
10:00 – 10:45	Groupwork presentations
10:45 – 11:15	Coffee break
11:15 – 12:00	Groupwork presentations
12:00 – 13:00	Closing session



Application

Enrolment for the Winter School is now open, by using the online form available on the school's website www.acws.unito.it.

Deadline for application is the 1st December 2019

Applicants will be asked to provide a brief description of their research, and a short abstract of the work they would like to present. Doctoral students will also be required to provide proof of their status from their supervisor. The school will be limited to **30 participants**. Preference will be given to doctoral students carrying out research in topics related to agricultural chemistry. Selected applicants will be informed by email and invited to complete their registration by payment of the participation fee, payable by bank transfer. The registration fee of €80 will include participation to the sessions, course materials, as well as coffee and lunch breaks.

You will find useful information for getting to and staying in Torino on the website, although we are always available to help you make your stay a pleasant one.

Organizing committee

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University of Torino

Youry Pii
Free University of Bolzano

Daniela Pezzolla
University of Perugia

Vito Armando Laudicina
University of Palermo

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