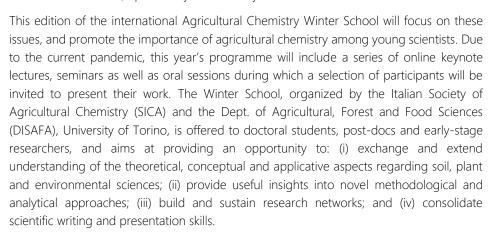
Interactions between biogeochemical cycles of elements in plant-soil-microbe systems

8-11 February 2021 – Torino, Italy

School aims

Feedback or synergistic interactions between the biogeochemical cycles of elements in soil-plant-microbe systems are pivotal in determining ecosystem functioning and the services they provide. Abiotic stress (e.g. drought, nutrient deficiency or toxic elements), management practices, ecosystem disturbance or climate change can disrupt these critical interactions and consequently affect the way both natural and agricultural ecosystems work. In the recent years, significant attention has been devoted to understanding the processes and mechanisms driving these interactions. Research in agricultural chemistry actively contributes to unravelling these interactions that can be expressed and studied at different levels including cross-talk in plant physiological responses, complex interactions in microbial functions, up to ecosystem level dynamics.



Application

Registration for the Winter School can be done online on the school's website www.acws.unito.it. Applicants will be asked to provide a brief description of their research, a short abstract of the work they would like to present, and their motivation for participating. Participation is free of charge.

Deadline for application is the 1st December 2020

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









ww.acws.unito.it

Online Programme

Monday, 8 February 2021			
09:00 - 10:00	Opening Session		
Session 1	Moderators: Daniela Pezzolla, University of Perugia and Daniel Said Pullicino, University of Torino		
10:00 – 10:40 Root responses to multiple and combined nutrient deficiencies			
	Silvia Celletti, Free University of Bolzano, Italy		
10:40 - 11:00	Coffee break		
11:00 - 11:40	Plant mineral nutrition and soil microorganisms as drivers of nutrient cycles in soil		
	Laura Giagnoni, University of Florence, Italy		
11:40 - 12:30	Oral session		
	Selected participants' presentations		

Tuesday, 9 February 2021		
Session 2	Moderators: Antonio Caporale, University of Naples and Ramona Balint, University of Torino	
09:00 - 10:00	At the interface between plant and soil - the regulation of soil organic matter persistence in rhizosphere	
	and detritusphere [Keynote]	
	Carsten W. Müller, University of Copenhagen, Denmark	
10:00 - 10:40	Interactions of the carbon, nitrogen, and phosphorus cycles in soils	
	Marie Spohn, Swedish University of Agricultural Sciences, Sweden	
10:40 - 11:00	Coffee break	
11:00 - 11:40	Promoting restoration of element cycling in PTE-contaminated soils	
	Giovanni Garau, University of Sassari, Italy	
11:40 – 12:30	An editor's view of your manuscript: Getting published in international journals	
	Marinus Pilon, Colorado State University, USA (Editor of New Phytologist)	

Wednesday, 10 February 2021			
Session 3:	Moderators: Stefania Astolfi, Tuscia University and Laura Zanin, University of Udine		
09:00 - 10:00	Iron economy in Arabidopsis chloroplasts [Keynote]		
	Marinus Pilon, Colorado State University, USA		
10:00 - 10:40	Exploring plant-microbe interactions to improve mineral nutrition of plants under abiotic stress		
	Gianpiero Vigani, University of Torino, Italy		
10:40 - 11:00	Coffee break		
11:00 - 11:40	Ecological roles and applicative uses of plant secondary metabolites		
	Fabrizio Araniti, University of Reggio Calabria, Italy		
11:40 - 12:20	New insights on the ecological role of foliar anthocyanins: the quest for novel functions		
	Marco Landi, University of Pisa, Italy		

Thursday, 11 February 2021			
Session 4:	Moderators: Elio Padoan and Beatrice Giannetta, University of Torino		
09:00 - 10:00	Opportunities and current limits of omic approaches in rhizosphere studies [Keynote]		
	Giancarlo Renella, University of Padova, Italy		
10:00 - 10:40	Fostering the understanding of processes at soil biogeochemical hot spots using imaging approaches		
	Carsten W. Müller, University of Copenhagen, Denmark		
10:40 - 11:00	Coffee break		
11:00 - 11:40	From macro to micro: watching through soil, plants and biota with X-rays		
	Ignazio Allegretta, University of Bari, Italy		
11:40 – 12:30	Oral session		
	Selected participants' presentations		

Organizing committee

Daniel Said Pullicino	Michela Schiavon
University of Torino	University of Padova
Laura Zanin	Antonio Caporale
University of Udine	University of Naples
Elio Padoan	Ramona Balint
University of Torino	University of Torino

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