



CA19110



European Cooperation in
Science and Technology

PROGRAM OF TRAINING SCHOOL

CA19110 "Plasma applications for smart and sustainable agriculture" – PIAgri

Dates and location

17-19 March 2021., Hotel Termag, Jahorina, Bosnia and Herzegovina

Wednesday, March 17, 2021		Session 1 (15:00-18:05h) Chairs: Nevena Puac & Frantisek Krcma	
15:00-15:20	OPENING TS1		
15:20-16:00	Zoran Lj Petrovic	Serbian Academy for Sciences and Arts, Belgrade, Serbia School of Engineering, Ulster University, United Kingdom	Why Non-equilibrium (Plasmas)?
16:00-16:40	David Graves	Department of Chemical and Biomolecular Engineering, University of California, Berkeley, United States of America	Reactive Oxygen and Nitrogen Species: From Plasma Generation to Biological Function
16:40-16:55	Break		
16:55-17:35	Petr Lukes	Institute of Plasma Physics CAS, Prague, Czech Republic	Chemistry in plasma treated liquids and methods of characterization
17:35-18:05	Suzana Zivkovic	Institut for Biological Research "Sinisa Stankovic", University of Belgrade, Serbia	Plasma treatment of plants: puzzle games for biologists and physicists
Thursday, March 18, 2021		Session 1 (9:00-12:45h) Chairpersons: Fellipe Iza & Anton Nikiforov	
9:00-10:00	Frantisek Krcma	Faculty of Chemistry, Brno University of Technology, Czech Republic	Plasma sources for treatment of liquids
10:00-10:30	Jan Benedikt	CAU · Institute for experimental and applied physics, Kiel University, Germany	Mass spectroscopy diagnostics of sources and reactive species in atmospheric plasmas
10:30-10:45	Break		
10:45-11:15	Jörg Ehlbeck	Leibniz Institute for Plasma Science and Technology, Germany	Upscaling of plasma sources for food processing applications
11:15-12:00	Ray Boxman	School of Electrical Engineering, Tel Aviv University, Israel	How to Write a Good Journal Paper (or Thesis)
12:00-12:45	Ray Boxman	School of Electrical Engineering, Tel Aviv University, Israel	How to Write a Good Journal Paper (or Thesis)
12:45-14:30	Lunch Break		

**"Session 2 (14:30-16:55h)
Chairs: Zdenko Machala & Monica Magureanu"**

14:30-15:00	Wolfgang Gernjak	ICRA, Spain	The role of chemically or physically induced redox processes in wastewater treatment
15:00-15:40	Ester Marotta	Department of Chemical Sciences, University of Padova, Italy	How to study the degradation process of organic contaminants in plasma systems for water treatment
15:40-15:55	Break		
15:55-16:25	Joanna Pawlat	Lublin University of Technology, Poland	Plasma sources for the treatment of seeds and plants
16:25-16:55	Jana Simeckova	Faculty of AgriScience, Mendel University in Brno, Czech Republic	Soil – bio aspect
16:55-17:25	Stephan Reuter	Polytechnique Montréal, Canada	Basics of Optical Diagnostics of Atomic and Molecular Species in Plasmas

Friday, March 19, 2021

**"Session 1 (9:00-12:45h),
Chairs: Matteo Gherardi & Henrike Burst"**

9:00-9:40	Vida Mildaziene	Faculty of Natural Sciences, Vytautas Magnus University, Lithuania	Plant response to stress induced by seed treatment with plasma: the biochemical context
9:40-10:10	Milica Milutinovic	Institute for Biological Research "Sinisa Stankovic", University of Belgrade, Serbia	Connecting the dots: from plasma physics to plant biology
10:10-10:55	Break		
10:55-11:35	Ronny Branderburg	Leibniz Institute for Plasma Science and Technology, Germany	Imaging and electrical diagnostics of non-equilibrium plasmas at atmospheric pressure
11:35-12:15	Pietro Rocculi	Department of Agricultural and Food Sciences, University of Bologna, Italy	Characterization of plasma treated food products: quality, safety and assessment techniques
12:15-12:35	Gregor Primc & Augusto Stancampiano	Institute Jozef Stefan, Ljubljana, Slovenia; GREMI, CNRS/Université d'Orléans, France	Scientific Communication of CA19110
12:35-12:45	CLOSING REMARKS		