



IUSS Bulletin 135



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International Decade of Soils (2015-2024)

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In Memoriam





At the excursions to a rewetted coastal peatland the participants learned how greenhouse gases were investigated with in the project WETSCAPES (© Marcel Silvius/GGGI).

bon stability in Flanders Moss' peatlands' (talk in the session 'Peatland management').

Melanie Heck (PhD student at University of Freiburg, Germany): 'In-vitro biomass production of different peat moss species' (talk in the session 'Plant growth & decomposition').

Tracy Rankin (PhD student at McGill University, Canada): 'Controls on autotrophic and heterotrophic respiration in an ombrotrophic bog' (talk in the plenary session 'Peatland rewetting and greenhouse gas emissions').

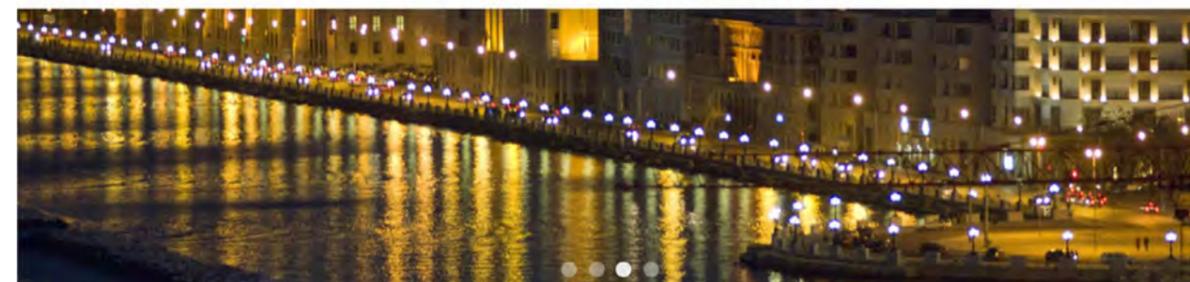
Kamila Harenda (PhD student at Poznan University, Poland): 'Heat wave 2018 – Impact on Rzecin peatland carbon balance in the context of the optical parameters of the atmosphere'.



First Joint Meeting on Soil and Plant System Sciences (SPSS 2019)

Natural and Human-induced Impacts on the Critical Zone and Food Production

Bari, Italy • 23-26 September 2019



Report of the First Joint Meeting on Soil and Plant System Sciences (SPSS 2019)

By Claudio Zaccone

The First Joint Meeting on **Soil and Plant System Sciences (SPSS 2019)**, organized by the Italian Society of Agricultural Chemistry (SICA), the Italian Society of Pedology (SIPe) and the Italian Society of Soil Science (SISS), in collaboration with the Mediterranean Agronomic Institute (CIHEAM) and the Italian Chapter of the International Humic Substances Society (IHSS), was held on **23-26 September 2019** at the CIHEAM Campus in Valenzano (Bari, Italy).

The title of this meeting '**Natural and Human-induced Impacts on the Critical Zone and Food Production**' set an ambitious goal of integrating scientific backgrounds and topics, all focusing on the 'critical zone' (where soil and living organisms interact) but coming from differing theoretical perspectives and applied approaches.

The scientific programme consisted of 5 sessions (**Natural and agricultural soil systems, Soil pollution and food safety, Organic amendments and soil quality, Plant responses to natural and human-induced drivers, Frontiers in plant and soil sciences**), distributed over 4 days which also included a scientific and cultural excursion and a social event.

Each session was opened by an invited speaker: I. **Takashi Kosaki**, President of the International Union of Soil Sciences (IUSS); II. **Fabio Terribile**, University of Naples Federico II, Italy, President of the Soil Morphology and Micromorphology Commission, IUSS; III. **José María García-Mina Freire**, University of Navarra, Spain, Vice President of the International Humic Substances Society (IHSS); IV. **Philip J. White**, Programme Leader, The James Hutton Institute, Scotland; and V. **Yiannis Deligiannakis**, University of Ioannina, Greece, President of the IHSS.

The field trip on Tuesday 24th September consisted of a pedological excursion with a morphological description of four soil profiles organised by Fabio Terribile and Pandi Zdruli, and a cultural visit to Matera, UNESCO World Heritage site and European Capital of Culture for 2019.

SPSS 2019 gathered thoughts and findings of scientists coming from several scientific societies and institutions involved in research approaches to the *critical zone*.

More than 160 scientists, professionals and individuals from different countries (including Italy, Spain, Greece, Russia, UK, Germany, Nigeria and Trinidad & Tobago) attended the meeting where **35 oral presentations and 90 posters** contributed to creating a permanent forum for stimulating scientific debates, especially for young scientists and students (almost **50% of the total number of attendees**).



SPSS Opening ceremony (© Teodoro Miano)

For best oral presentations and posters on both plant- and soil-related topics, four young scientists were awarded a voucher granting them free-of-charge publication on *Plants* (ISSN 2223-7747; www.mdpi.com/journal/plants) and *Soil Systems* (ISSN 2571-8789; www.mdpi.com/journal/soilsystems), respectively.

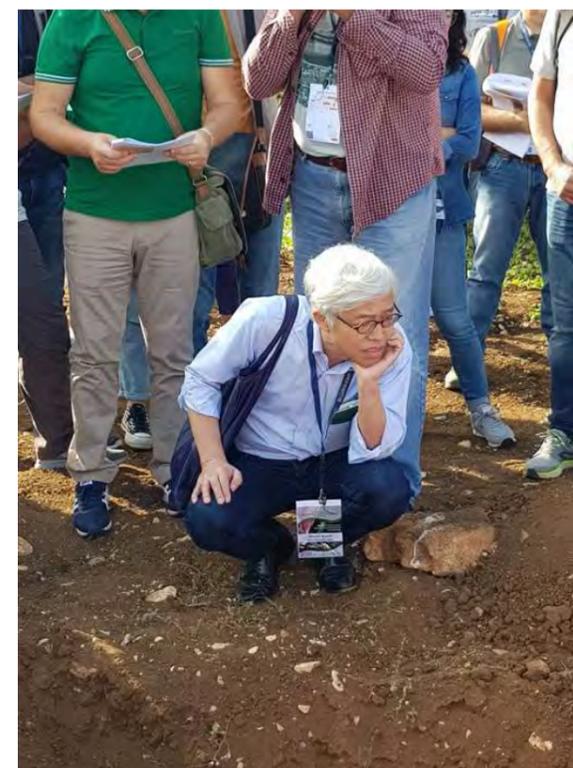
The Book of Abstracts (a PDF document), along with more information, can be found at <https://spss2019.azuleon.org/>.

Last but not least, a very special social dinner was organized on Wednesday 25th at the Masseria Mangiato in Martina Franca (Taranto), where participants were received and accompanied all night by Salento's piz-zica and tarantella music performed by the Terraross group, featuring Dominique Antonacci at the drums.

At the end of the meeting, all participants were given a *terracotta* 'pedon' made by the artist Antonio Vestita and conceived in collaboration with Teodoro Miano, Chair of the SPSS 2019 meeting.



Pedological excursion (© Teodoro Miano)



Two impressions from the field trip featuring Takashi Kosaki, IUSS President (© Teodoro Miano)