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



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

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

organized by
Società Italiana di Chimica Agraria (SICA)
Società Italiana di Pedologia (SIPe)
Società Italiana della Scienza del Suolo (SISS)







in collaboration with Mediterranean Agronomic Institute – CIHEAM, Valenzano (Bari) International Humic Substances Society (IHSS)





#### Welcome to SPSS 2019

On behalf of the Organizing and Scientific Committees, we are glad to invite you to 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 (IAM) and the Italian Chapter of the International Humic Substances Society. The Meeting will be held next 23-26 September 2019 at the IAM Campus in Valenzano (Bari, Italy).

The title of this meeting "Natural and Human-induced Impacts on the Critical Zone and Food Production" sets up the ambitious goal of integrating scientific backgrounds and topics, all focused on the "critical zone" (where soil and living organisms interact) but starting from differing theoretical perspectives and applied approaches. Physical, chemical and biological characteristics and processes will feed and nourish the diversity of experiences, opinions and scientific knowledge. SPSS 2019 aims to gather thoughts and findings of scientists coming from the scientific societies and the institutions involved in research approaches to the critical zone. Scientists, professionals and individuals interested in these fields of science are warmly invited to attend this Conference, to bring their knowledge or their doubts, thus contributing to create a permanent forum of stimulating scientific debates.

We strongly believe in scientific and human contamination and we want to contribute to organize with you an interesting and productive occasion for sharing enthusiasm, passion and engagement in the scientific work in a lively and nice location of southern Italy.

The scientific program is structured into 5 sessions, distributed during 4 days which also include a scientific and cultural excursion and social events. You are kindly invited to attend the scientific meeting and the excursion but also to enjoy a few days in Bari in September 2019.

Teodoro Miano, University of Bari Aldo Moro, Bari (*Chair, SICA President*) Giuseppe Corti, Polytechnic University of Marche, Ancona (*SIPe President*) Paola Adamo, University of Napoli Federico II, Napoli (*SISS President*) Claudio Zaccone, University of Foggia, Foggia (*Secretary*)



SPSS 2019 "Natural and Human-induced Impacts on the Critical Zone and Food Production"

#### PRELIMINARY PROGRAMME

#### MONDAY, SEPTEMBER 23

8.30-13.30 Registration

14.00-14.30 Opening ceremony

#### SESSION I. Natural and agricultural soil systems

Keywords/Topics: soil genesis, soil mapping, soil mineralogy, soil organic matter, climate changes, land degradation, primary production, soil use and management, C sequestration, soil ecology, etc.

14.30-15.15 Invited speaker: Takashi Kosaki. President, International Union of Soil Sciences (IUSS). "Harmonization of natural and agricultural soil systems for sustaining society"

15.15-16.00 Oral presentations

16.00-16.30 Coffee break

16.30-17.15 Oral presentations

17.15-18.00 Poster presentations (Session I)

18.00-19.00 General Assembly (SISS)

#### TUESDAY, SEPTEMBER 24

8.30-18.00 Pedological and cultural excursion

Field trip with morphological description of soil profiles; visit to Matera, European Capital of Culture for 2019 and UNESCO World Heritage site.

#### 18.30-19.30 General Assembly (SIPe)

#### WEDNESDAY, SEPTEMBER 25

#### SESSION II. Soil pollution and food safety

Keywords/Topics: source and fate of organic and inorganic pollutants, pollutant translocation and accumulation in plants, management of polluted soils, soil reclamation, pollutant in the food chain, risk assessment, etc.

9.00-9.45 Invited speaker: Panos Panagos. Research Scientific Officer, Joint Research Centre (JRC-ESDAC). "Modelling soil erosion in Europe: threats for C sink and biodiversity"

9.45-10.30 Oral presentations

10.30-11.00 Coffee break

11.00-11.45 Oral presentations

11.45-12.45 Poster presentations (Sessions II and III)

12.45-14.00 Lunch

#### SESSION III. Organic amendments and soil quality

Keywords/Topics: soil organic matter, humic substances, isolation/fractionation procedures, soil amendments, fertilizers, biostimulants, chemical/biochemical/biological indicators, etc.

14.00-14.45 Invited speaker: José María García-Mina Freire. Vice President, International Humic Substances Society (IHSS). "Discriminating the action of root applied- and foliar applied-humic acid on plant growth"

14.45-15.30 Oral presentations

15.30-16.00 Coffee break

16.00-16.45 Oral presentations

#### 16.45-17.45 General Assembly (SICA)

19.30 Social Dinner

#### THURSDAY, SEPTEMBER 26

#### SESSION IV. Plant responses to natural and human-induced drivers

Keywords/Topics: plant physiology, plant phenology, phenotypic plasticity, mineral nutrition, biotic/abiotic stresses (including climate change), crop yield, plant-pathogen interactions, sustainability, etc.

9.00-9.45 Invited speaker: Philip J. White. Programme Leader, The James Hutton Institute. "Improving Nutrient Acquisition by Plants from the Soil"

9.45-10.30 Oral presentations

10.30-11.00 Coffee break

11.00-11.45 Oral presentations

11.45-12.45 Poster presentations (Sessions IV and V)

12.45-14.00 Lunch

#### SESSION V. Frontiers in plant and soil sciences

Keywords/Topics: new challenges and opportunities in soil and plant sciences, nanomaterials, modelling, satellite remote sensing, smart farming, state-of-the-art analytical approaches, "omic" sciences, etc.

14.00-14.45 Invited speaker: Yiannis Deligiannakis. President, International Humic Substances Society (IHSS). "Humic-nanomaterials hybrids as fertiliser-delivery technology and antioxidants"

14.45-15.30 Oral presentations

15.30-16.00 Coffee break

16.00-16.45 Oral presentations

#### 16.45 Closing ceremony

#### **CONFERENCE VENUE**



The SPSS 2019 meeting will be held at the Mediterranean Agronomic Institute (CIHEAM)

Via Ceglie 9 70010 VALENZANO (Bari) - Italy

#### REGISTRATION

Registration for the SPSS 2019 participants can be performed on-line using the platform available at <a href="https://spss2019.azuleon.org">https://spss2019.azuleon.org</a>.

The registration fee includes the access to the 4-days congress, the participant kit, the pedological and cultural excursion with guides and lunch box, meals and coffee breaks at the Congress venue, the social dinner and the shuttle connections from downtown Bari to the venue (and return) during the meeting.

| Registration fee                 | Early<br>(until July 10) | Standard<br>(after July 10) |
|----------------------------------|--------------------------|-----------------------------|
| Regular member <sup>1</sup>      | 280 €                    | 350 €                       |
| Regular non member               | 330 €                    | 400 €                       |
| Student <sup>2</sup>             | 140 €                    | 200 €                       |
| Accompanying person <sup>3</sup> | 140 €                    | 200€                        |

<sup>&</sup>lt;sup>1</sup> Fee reserved to regular members (2019) of SICA, SIPe or SISS;

<sup>&</sup>lt;sup>2</sup> Master or PhD students, research and fellowship project holders;

<sup>&</sup>lt;sup>3</sup> Fee includes: excursion, meals and coffee breaks at the Congress venue, social dinner and shuttle connections.

#### **ABSTRACT SUBMISSION**

Abstracts (2500 characters, spaces included) can be submitted exclusively through the SPSS 2019 platform (<a href="https://spss2019.azuleon.org">https://spss2019.azuleon.org</a>) accessing your personal *mySPSS* page (registration is needed).

Abstracts should be written in English and submitted within June 30<sup>th</sup>, 2019.

#### **PUBLICATION OF RESULTS**

The best oral and poster presentations on plant- and soil-related topics will be awarded with a free-of-charge publication voucher on **Plants** (ISSN 2223-7747; <a href="www.mdpi.com/journal/plants">www.mdpi.com/journal/plants</a>) and **Soil Systems** (ISSN 2571-8789; <a href="www.mdpi.com/journal/soilsystems">www.mdpi.com/journal/soilsystems</a>), respectively.

The Book of Abstracts, as pdf file, will be available on the SPSS web site. Two Special Issues will be also launched; authors will be invited to submit the full-length version of their works for publication in Plants or Soil Systems, two international, peer-reviewed, open access journals published monthly by MDPI.

#### **SPONSORS**













#### **ORGANIZING COMMITTEE**

Teodoro Miano (Chair)

Claudio Zaccone (Secretary)

Gennaro Brunetti

Claudio Cocozza

Carmine Crecchio

Valeria D'Orazio

Concetta Eliana Gattullo

Elisabetta Loffredo

Donato Mondelli

Maria Pizzigallo

Patrizia Ricciuti

Riccardo Rolli

Nicola Senesi (Honorary President)

Matteo Spagnuolo

Fabio Terribile

Roberto Terzano

Pandi Zdruli

#### **SCIENTIFIC COMMITTEE**

Paola Adamo

Alberto Agnelli

Antonello Bonfante

Eleonora Bonifacio

Stefano Cesco

Giuseppe Corti

Gloria Falsone

Giuseppe Lo Papa

Sara Marinari

Teodoro Miano (Chair)

Roberto Pinton

Simone Priori

Maria Rao

Fabio Terribile

Simona Vingiani

Claudio Zaccone

### https://spss2019.azuleon.org

### We wait for you at



in Bari.



SPSS 2019 "Natural and Human-induced Impacts on the Critical Zone and Food Production"