

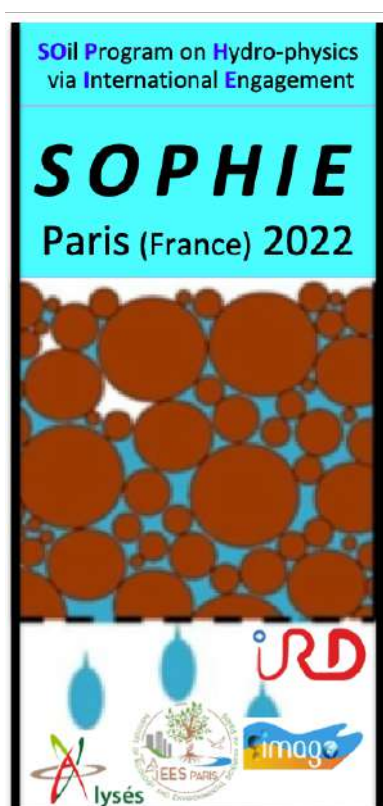


Soil Program on Hydro-Physics via International Engagement

Annual meeting 2022

Thursday 20 / Saturday 22, January 2022

Institut de Recherche pour le Développement (IRD)
Bondy, FRANCE



Registration form at :

<https://forms.office.com/r/x859quH72G>

Agenda up-dated on the 26th November 2021

Day 1 – Institutions and participants presentation

13:30 - 14:00 Participants' arrival and registration

14:00 – 14:45 Session 1: welcome speeches and self presentation

(the duration of this session will be adjusted to the number of individuals and laboratories who would like to make a 5' self presentation).

- IRD Bondy representative (3' welcome speech)
- Ms. Emma Rochelle-Newall (IEES co-Director) (3' welcome speech)
- Christian Hartman & Hanane Aroui Boukbida (local organising committee) (3' welcome speech)
- Ms. Aurore Degre, SOPHIE co-funder (10': presentation of SOPHIE history and report on the main points of SOPHIE previous annual meetings)
- Ms. Nopmanee Suvannang, GLOSOLAN chairperson (10': presentation of GLOSOLAN history and report on the main GLOSOLAN achievements)
- Self-presentation of the new member laboratories and participants

14:45 – 15:45. Interactions between soil hydro-physical characteristics and biological activity

- soil as an ecosystem: Ms. Amandine Erktan (Eco&Sol Montpellier ; IRD)
- water content and soil respiration: Mr. Naoise Nunan (IEES Paris ; CNRS)
- soil hydro-physical characteristics and macrofauna interactions: Mr Thomas Lerch (IEES Paris; UPEC)

15:45 – 16:45. Session 3: Presentation of GLOSOLAN Standard Operating Procedures (SOPs) related to soil hydro-physics and soil biological activity

- Ms. Lucrezia Caon/Mr. Filippo Benedetti FAO-GSP (10': presentation on the main perspectives about soil hydro-physical parameters and soil biological activity for the future of the Global Soil Partnership - GSP). Information on the 4 parameters used to assess the sustainability of soil management (production, bulk density, carbon content and soil respiration).
- GLOSOLAN on going Standard Operating Procedures (SOPs) in partnership with SOPHIE
 - Bulk density (Martine van der Ploeg, Aurore Degre)
 - Particle Size Distribution (Attila Nemes, Hanane Aroui Boukbida)
 - Soil moisture (Christian Hartmann)

General discussion: what role for SOPHIE and UMR-IEES inside GSP to produce SOPs on soil hydro-physics and soil biological activity.

16:45-17.45. **Session 4: Visit of the IRD-Bondy technical platforms** (details to be confirmed)

- soil hydro-physics platform (pressure plates for water retention curve, granulometry, shrinkage curve, etc...)
- Soil biological Platform (DNA extraction, respirometry, etc...)
- 'Alysés' platform (Xray diffraction, Environmental Scanning Electronic Microscope, etc...)

Minibus to the hotel

Dinner in Paris (transport by RER) (details will be provided later)

Day 2 – SOPHIE ring test: present and future

9h30 – 10:30. **Session 4 (to be continued). Visit of the IRD-Bondy Technical plateforms**

10:30 – 10h45. **Coffee break (tea, coffee et croissants...)**

10:30 – 11:00. **Session 5: Presentation on how SOPHIE ‘Ring Test’ was conducted** (Aurore Degré)

Description of (i) the samples, (ii) the exchange of samples (iii) the procedures that had to be used for the water retention curves. Presentation of the problem that occurred.

11:00 – 12:30. **Session 6: Statistical analysis of the results of the SOPHIE ring test** (Aurore Degré & Benjamin Guillaume)

- Presentation of the statistical analysis;
- What we learned so far? what hypothesis to explain the surprising results? what should/could be improved for the 2022 ring test?

12:30-14:00 Lunch break at IRD

14:00-15:30 Session 7. Alternative approaches of designing porous reference samples

Proceedings on alternative approaches of designing porous reference samples as hydro-physical models of soils for calibrating retention curve measurements. Gerben Bakker/Ad van Oostrum

General discussion: organising the ring test with these alternative reference material

15:30 - 16:45 **Session 8. General discussion:**

How to valorize the data: is it possible to prepare a collective publication to inform the scientific community of what was found about the hydro-physical analysis we ‘tested’?

- plan for the next Inter ring test
- how to work on innovative technologies?
- planning of the next meeting(s)
- how to connect/collaborate with GLOSOLAN and GSP?
- miscellaneous

16:45-17:00 **Closing speech**

Day 3 - Wrap up meeting.

Only for the SOPHIE steering committee, FAO delegation, invited participants & the IRD organising committee.

9h30 – 12:30. **Session 9. Perspectives on international development of SOPHIE & GLOSOLAN on soil hydro-physics laboratories**

14h00 – 17:30. **Session 10. Launching a global ring test on hydro-physical parameters under the umbrella of FAO.**
