

Lars J. Munkholm

This issue is dedicated to news on the ISTRO2022 conference. Guess that most of you look forward to a face-to-face international conference – for many it will be the first since 2019. I look very much forward to meet experienced ISTRO conference goers but not the least the young ones attending ISTRO conferences for the first time. To support the attendance of young researchers in these challenging (post) COVID1-19 times, ISTRO has increased the number of scholarships from 4 to 14 (see below). Please forward this to young colleagues who might be interested in applying. Also, remember to tell them that an ISTRO membership is mandatory for all applicants.

☞ ISTRO2022 22nd ISTRO International Conference - Update

New dates: 22-26 May 2022 Venue: Dublin, Ireland



Ireland has now opened for international travel. There are still some restrictions in place, but for people who have been vaccinated travel is now quite straightforward. Quarantine restrictions remain in place for people arriving from some countries. It is not possible to forecast exactly what restrictions will be in place next May, but all the signs are that Ireland will be fully open for business and we will be able to run a face-to-face conference successfully. The timelines for this conference are shortened compared to normal, but hopefully everyone can attend and present their work as normal.

Abstract submission for the 22nd ISTRO international Conference (now ISTRO2022) will open on 20th September 2021 with a submission deadline on 3rd December 2021. Acceptance notifications will be issued in late January. Go to www.istro2021.com for abstract submission details after 20th September.

Scholarships. ISTRO has increased the number and type of financial supports this year as detailed below. Application details can be found on the conference website, and also during the abstract submission process. If in doubt, email Nick.Holden@ucd.ie to receive a copy of the instructions.

The theme of the conference is ‘Soil and tillage and the transition to digital agriculture.’ We welcome contributions on basic and applied soil and tillage research, but we are looking for contributions related to digital agriculture technologies (data, sensors, networking, earth observation, recommender systems and so on) so please encourage colleagues and collaborators to consider presenting their work at ISTRO2022.

The conference is actively seeking sponsorship. If any ISTRO member can offer support, or leads for new sponsors, please contact Nick Holden as soon as possible at Nick.Holden@ucd.ie.

If any ISTRO member is interested in demonstrating their work during the conference field trip, the organising committee would be delighted to facilitate if it is possible. If you are interested in organising a demonstration activity in the field please contact Nick Holden as soon as possible at Nick.Holden@ucd.ie.

We look forward to seeing you all in Dublin in 2022.

☞ ISTRO2022 Scholarship call

ISTRO promotes engagement among scientists working with and researching soil tillage, field traffic and their relationship with soil, environment, land use and crop production. The conference is the opportunity for the community to meet each other, share their research, see application in practice and to stimulate new ideas. The theme of the 22nd ISTRO Interaction Conference is 'Soil and tillage and the transition to digital agriculture.' Recently there has been a rapid and significant introduction of digital data, computers, networks, connections sensors and models that are beginning to change how agriculture works, the skills needed by the farming industry and research required now and in the future. The conference will examine where we are, and the pathway forward for soil and tillage in the age of digital agriculture.

Funding supports

ISTRO offers financial support to support attendance at its international conferences. To address the unusual circumstances caused by the Covid-19 global pandemic, the number and type of supports will be increased to support those most in need of support to be able to attend the conference. The following scholarships and supports are available:

- 1 x \$2000 Cees van Ouwerkerk scholarship, open to young researchers from any country (under 40 on 1st January 2022). The scholarship will be awarded to an applicant who has demonstrated superior research accomplishments. Registration fees will be paid and the balance made available to cover travel and accommodation costs.
- 3 x \$2000 scholarships for young researchers, excluding those based in high-income countries (under 40 on 1st January 2022) (high-income countries can be found at <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>). Registration fees will be paid and the balance made available to cover travel and accommodation costs.

- 4 x \$1000 awards to support late-stage PhD students and recent PhD graduates based anywhere in the world who no longer have access to travel funds due to Covid-19 impacts on research funding. Registration fees will be paid and the balance made available to cover travel and accommodation costs.
- 6 x awards to cover registration fees for post-docs and new faculty (in position for <2.5 years prior to 1st January 2022).

Awardees will be selected based on:

- Academic merit
- Geographical spread (maximum 2 awardees per country)
- Need

Eligibility criteria

- An applicant must be an ISTRO member. If a non-member wants to apply, they should join ISTRO first, otherwise their application will not be considered.
- An applicant with access to finances to attend meetings (e.g., fully funded PhD students, post-docs, faculty with personal allowances) cannot apply for these supports (except for the Cees van Ouwerkerk scholarship). All applicants must declare their current status.
- An applicant must have a reasonable expectation of being able to travel to Ireland in May 2022 (i.e., fully vaccinated as recognised by the European Union, flights available, eligible for necessary visas).

An application must include:

- A letter of motivation mentioning the award they're applying for and their current position
- Documents that will allow their application to be evaluated by the ISTRO Board committee (e.g. two recent journal or conference publications, a curriculum vitae listing education and all publications, presentations and teaching activities).

- Abstract for a paper to be presented at the 2022 ISTRO Conference).

Nominations including supporting material must be submitted by e-mail to Lars J. Munkholm, Assistant Secretary-General (lars.munkholm@agro.au.dk) and to Jean Roger-Estrade, Chair of the evaluation committee (jean.roger-estrade@inra.fr) by December 31, 2021.

⌘ Upcoming Meetings and Events

-- 2021 --

September 2021

20th International and 9th Americas Conference organised by the International Society for Terrain-Vehicle Systems, September 20-23. Online. Webpage: <https://conference.istvs.org/>

II International and XV National Congress of Serbian Society of Soil Science "Soils Future Under Global Challenges". September 21 – 24, 2021, in Sokobanja, Serbia. Webpage: <https://congress.sdpz.rs/>

October 2021

3rd Annual Congress on Plant Science & Biosecurity, October, 7–9, 2021 in Osaka, Japan. Webpage: <https://plantbiology-biotechnology.com/>

1st EU Soil Observatory Stakeholders Forum including Young Soil Researchers Forum. October 19 – 21. Online. Webpage: <https://ec.europa.eu/jrc/en/event/other-event/euso-stakeholders-forum>

Global Symposium on Salt-Affected Soils, October 20 – 22, 2021, Online. **NEW DATE** Webpage: <http://www.fao.org/global-soil-partnership/resources/events/detail/en/c/1264612/>

November 2021

2021 ASA, CSSA, SSSA International Annual Meeting "A Creative Economy For Sustainable Development". November 7 – 10, 2021, in Utah, USA. Webpage: <https://www.acsmeetings.org>

1st International Joint Congress on Sustainable Management of Cultural Landscapes in the context of the European Green Deal, November 10-14, in Santo Stefano di Camastra, Italy. **NEW DATE** Webpage: <https://www.ecocycles.net/ESSC-EURECYS-Congress/>

December 2021

World Soil Day – Halt soil salinization, Boost soil productivity. December 5, 2021. Webpage: <http://www.fao.org/world-soil-day/en/>

Circular@WUR: Living within planetary boundaries. December 6-8 2021 at Wageningen Campus, Netherlands. Webpage: <https://www.wur.nl/en/Research-Results/Research-programmes/Research-investment-programmes/Circular-and-climate-neutral/CircularWUR.htm>

-- 2022 --

February 2022

International conference on Zero Greenhouse Gas Emission in High Productive Agriculture. February 22-24 2022 in Copenhagen, Denmark. Webpage: <https://conferences.au.dk/zea/>

March 2022

XXV Dokuchaev Conference for Young Scientists "Soil is life". March 1-3, 2022, in St. Petersburg, Russia. Webpage: <http://www.dokuchaevskie.ru/our-conferences/conference-2022?lang=en>

International Soil Classification Congress, March 25 – April 8, 2022, México. **NEW DATE**. Webpage: <http://iscc2020.org/>

May 2022

Global Symposium on Soil Fertility. May 2-5, 2022, in Rome, Italy. Webpage: <http://www.fao.org/global-soil-partnership/resources/events/detail/en/c/1309843/>

XXIII Latin-American Congress of Soil Sciences (XXII CLACS). May 22, 2022, in Florianópolis. Brasil. Webpage: <https://www.slcs.org.mx/>



22nd ISTRO International Conference on Agriculture: the role of soil and tillage research and innovation in the transition to digital agriculture, May 22-26, 2022, in Dublin, Ireland. Webpage: <http://istro2021.com/>



Global Conference on Sandy Soils – Properties and Management. May 30th to June 3rd, 2022, in Madison, USA. Webpage: <https://sandysoils.org/>

June 2022

ISCRAES 2022 “International Symposium on Climate-Resilient Agri-Environmental Systems”. June 7 – 10, 2022, in Dublin, Ireland. Webpage: <https://www.iscraes.org/>

July 2022

22nd World Congress of Soil Science – Crossing boundaries, changing society. July 31st to August 5th, 2022, in Glasgow, UK. Webpage: <https://22wcss.org/>

August 2022

ESAF2022: 15th international conference of the East and Southeast Asia Federation of Soil science societies (ESAFS). August 22 - 26, 2022, in Kuala Lumpur, Malaysia. Webpage: <https://www.esafs-support.com/>

September 2022

16th International Conference on Soil Micromorphology. September 4 – 8, 2022, in Krakow, Poland. Webpage: <http://www.icosm2020.sggw.pl/>

2nd Central European ISTRO Conference (CESTRO) “Trends and challenges in soil-crop management”. September 8-10, 2022, in Brno, Czech Republic. Webpage: <http://istro.cz/>

5th International Interdisciplinary Conference on Land Use and Water Quality: Agriculture and the Environment. September 12-15, 2022, in Maastricht, Netherlands. Webpage: <https://www.luwq2022.nl/>

RAMIRAN 2022 “Managing Organic Resources in a Changing Environment”. September 19 – 21, 2022, Cambridge, UK. Webpage: <https://www.ramiran2020.org/>

October 2022

10th International Symposium on Forest Soils. October 17-22, 2022, in Hangzhou, China. Webpage: <http://isfs2021.csp.escience.cn/dct/page/1>

9th IASSC “International Acid Sulfate Soils Conference”. November, 2022, in Adelaide, Australia. Webpage: <https://biological.adelaide.edu.au/acid-sulfate-soil/iassc/>

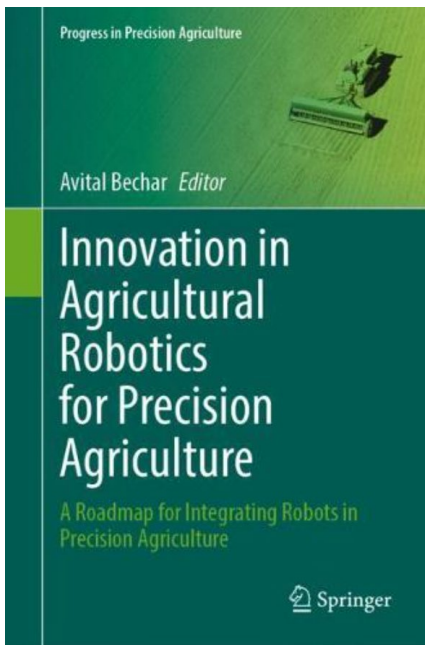
-- 2023 --

March 2023

3rd Global Soil Biodiversity Conference. March 13 – 15, 2023, in Dublin, Ireland. Webpage: <https://gsb2021.ie/>

New Books

Innovation in Agricultural Robotics for Precision Agriculture. A Roadmap for Integrating Robots in Precision Agriculture
Editors: Avital Bechar

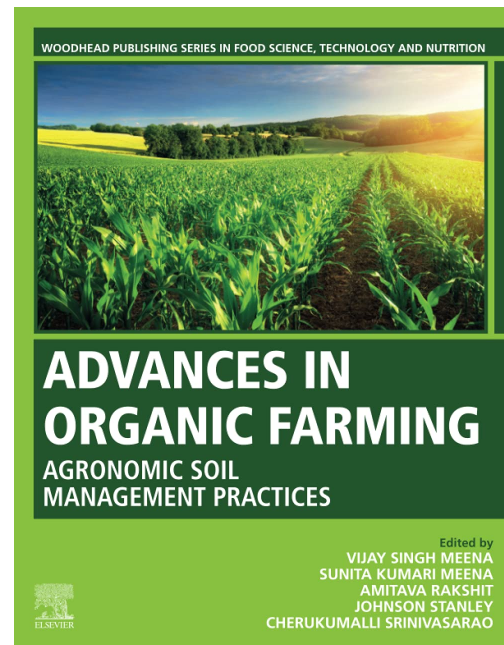


This book provides a review of the state-of-the-art of agricultural robotics in different aspects of PA, the goals, and the gaps. The book introduces the area of Agricultural Robotics for Precision Agriculture (PA) specifically the conditions and limitations for implementing robots in this field and presents the concepts, principles, required abilities, components, characteristics and performance measures, conditions, and rules for robots in PA.

More information on this book:

<https://www.springer.com/gp/book/9783030770358>

Advances in Organic Farming. Agronomic Soil Management Practices. 1st Edition
Editors: V. S. Meena, S. K. Meena, A. Rakshit, J. Stanley, C. Srinivasarao



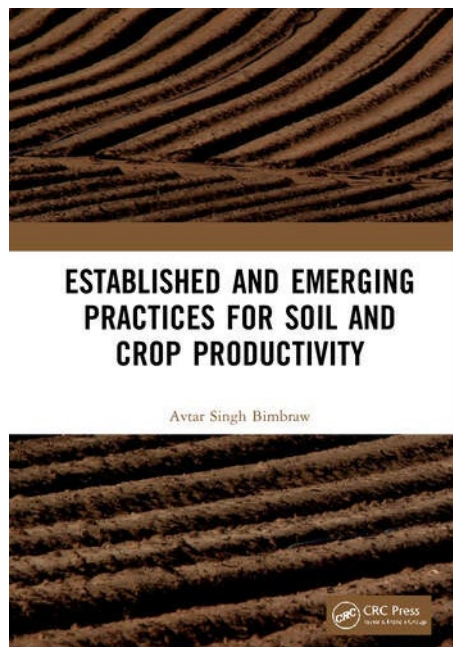
Advances in Organic Farming: Agronomic Soil Management Practices focuses on the interactions between soil-plant-microbe-environment elements in a functioning ecosystem. It explains sustainable nutrient management under organic farming and agriculture, with chapters focusing on the role of nutrient management in sustaining global ecosystems, the remediation of polluted soils, conservation practices, degradation of pollutants, biofertilizers and biopesticides, critical biogeochemical cycles, potential responses for current and impending environmental change, and other critical factors.

More information on this book:

<https://www.elsevier.com/books/advances-in-organic-farming/meena/978-0-12-822358-1>

Established and Emerging Practices for Soil and Crop productivity.

Editors: Avtar Singh Bimbraw



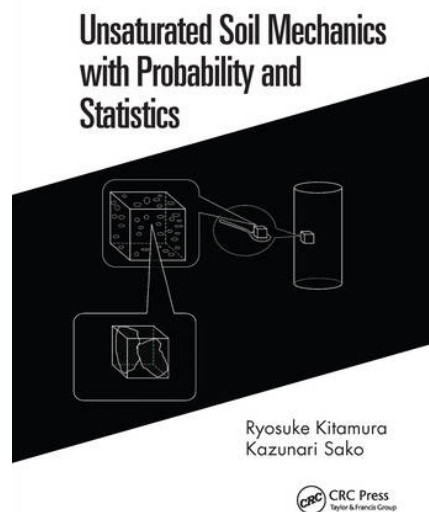
The book explains the various existing, emerging and environmentally viable technologies for the sustainable and profitable crop productivity. The book also focusses on climate change, hurricanes and tropical storms, natural resources management, crop diversification, crop resource management, cropping systems, farming system, management of land use resources, conservation agriculture, crop residue management, renewable energy, precision agriculture, integrated nutrient management, integrated pest management.

More information on this book:

<https://www.routledge.com/Established-and-Emerging-Practices-for-Soil-and-Crop-Productivity/Bimbraw/p/book/9781032060200>

Unsaturated Soil Mechanics with Probability and Statistics.

Editors: R. Kitamura, K. Sako



This book is particularly focused on the mechanical behaviour of dry, partially saturated and full saturated sandy soil, as much of the physicochemical microscopic characteristic of a clayey soil is still not clear. It explores the inter-particle forces at the point of contact of soil particles and the resultant inter-particle stresses, instead of the total stress and effective stress which are studied in mainstream soil mechanics. Deformation and strength behaviour, soil-water characteristic curves, and permeability coefficients of water and air are then derived simply from grain size distribution, soil particle density, void ratio and water content.

More information on this book:

<https://www.routledge.com/Unsaturated-Soil-Mechanics-with-Probability-and-Statistics/Kitamura-Sako/p/book/9781032177489>

ISTRO INFO is the newsletter of the **International Soil Tillage Research Organisation**. (www.istro.org).

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