

European Plant Science Organisation
<https://epsoweb.org>

8th EPSO Plant Science Seminar

Brussels, 3.12.2021

We would like to announce the eighth of our European-wide seminar series by the European Plant Science Organisation (EPSO) and aimed at the Plant Science community and its stakeholders. Our aim is to provide a stimulating set of seminars once a month on a hot and/or emerging topic in plant science, giving the floor to both eminent world leaders and talented up-and-coming early career researchers.

TTT: The seminar will be held online each third Thursday of the month at three (CET).

On 16th December 2021 at 15:00 (CET) we will present three talks exploring the Future of Plant Nutrition



Prof Søren Husted, University of Copenhagen, Denmark

“Dissecting nutrient key-functionalities in metabolism to identify latent nutritional disorders in crops”

Søren's research deals with the mineral nutrition of plants and has provided new fundamental knowledge to the processes involved in acquisition of mineral elements and on the functional role of these elements in metabolism. Currently he has a strong focus on integrating nanotechnology with plant science to fundamentally understand how nanoparticles interact with plant tissue and how we can utilize this knowledge to build the next generation of more efficient fertilizers. Most recently, his group has clarified how phosphorus (P) ions are transported across the cuticle and how P deficiency influences proteins involved in linear electron transport between the photosystems. Besides scientific impact, his research has delivered innovation in the form of a handheld fluorescence spectrometer (patent no. 3049792). The device allows the P status of crops to be monitored directly in the field so that nutrients can be supplied according to the precise demand of crops.



Dr Antoine Martin, BPMP, CNRS, Montpellier, France

“Genomics of plant nutrition in the context of climate change”

Antoine is a CNRS researcher at BPMP-Montpellier, leading the group “Nitrate signaling and regulation by the environment”. His research aims at identifying and characterizing signaling mechanisms involved in plant adaptation to nitrogen availability, with a focus on the regulation of root nitrate sensing, transport and signaling 1, 2, 3, 4, 5. During this seminar, he will present current work describing the physiological and molecular aspects of the negative effect of elevated atmospheric CO₂ (eCO₂) on plant mineral nutrition, and especially root nitrate transport and assimilation. By inferring gene regulatory networks, and by exploiting genetic diversity, we investigate how eCO₂ alters major signaling pathways for plant mineral nutrition, in order to propose solutions to pave the way for climate-ready crops.



Dr Eva Oburger, Institute of Soil Research, University of Natural Resources and Life Sciences – BOKU, Vienna, Austria

“Phytosiderophore release of contrasting barley (*Hordeum vulgare*) lines grown in Zn and Cu deficient soils”

Eva holds a current ERC fellowship to investigate the links between plant metabolism, root exudation and rhizosphere processes to gain a better understanding of how belowground processes can contribute to a more sustainable crop production. She has developed sampling techniques to collect root exudates from soil grown plants and has expertise in root exudate analysis: targeted and non-targeted metabolomics, which she has developed in her PhD, Post-Doc research and visits overseas to University of South Australia, University of Riverside California and University of Bangor, UK.

The seminars will be hosted on Zoom and last approximately 1.5 hours. Numbers will be limited to 300 attendees and therefore please register early if you would like to join. There will be ample opportunities to ask questions and join the debate. So please join us to support this new and exciting initiative for European Plant Science by following this link just prior to the start of the seminar.

EPSO Members register in advance for this meeting:

https://zoom.us/meeting/register/tJ0pceuspzgrHNPSV6F62KQr6tDb_54V-PQk

After registering, you will receive a confirmation email containing information about joining the meeting.

In the coming months we will be on the lookout for talented plant scientists among the EPSO membership to present their findings and perspectives to the EPSO seminar series. If we approach you to talk, we hope you will be happy to support the initiative. This is a fantastic opportunity for **senior as well as early career researchers** to present their research to an international audience and to network with potential collaborators. If you wish to **suggest a theme for one of the spring seminars and / or nominate** yourself or one of your colleagues to give a seminar, we most welcome your suggestions. Please contact Tim George (tim.george@hutton.ac.uk) to provide your name and potential talk title.

We look forward to seeing you all for the next EPSO seminar on the 16th December 2021

Tim George, Alan Schulman and Marie-Theres Hauser
EPSO Plant Science Seminar Series Organising Committee

Contacts

Tim George, Hutton / UK & EPSO Board, tim.george@hutton.ac.uk

Alan Schulman, LUKE / FI & EPSO President, alan.schulman@helsinki.fi

Marie-Theres Hauser BOKU / AUT & EPSO Board, marie-theres.hauser@boku.ac.at

Useful links

EPSO breaking news: <https://epsoweb.org>

EPSO member institutes and universities: <https://epsoweb.org/about-epsso/epsso-members/>

EPSO representatives: <https://epsoweb.org/about-epsso/representatives/>

About EPSO

EPSO, the European Plant Science Organisation, is an independent academic organisation that represents more than 200 research institutes, departments and universities from 32 countries, mainly from Europe, and 2.700 individuals Personal Members, representing over 26 000 people working in plant science. EPSO's mission is to improve the impact and visibility of plant science in Europe, to provide authoritative source of independent information on plant science including science advice to policy, and to promote training of plant scientists to meet the 21st century challenges in breeding, agriculture, horticulture, forestry, plant ecology and sectors related to plant science. <https://epsoweb.org> | EU Transparency Register Number 38511867304-09