

# Young Soil Scientists Day

March 15, 2024 Royal Academy of Sciences

Registration and poster sessions take place in the Atrium, Throne Building

Welcome and oral sessions take place in the Rubens auditorium, ground floor of the Palace

## *Poster Program – Morning break*

<b>10.40-11.15</b>	<b>Poster presentations</b>	
	<b>10.40 – 10.45</b>	Ting Zhang (ULiège) - <i>Soil ridging combined with biochar or calcium-magnesium-phosphorus fertilizer application: Enhanced interaction with Ca, Fe and Mn in new soil habitat reduces uptake of As and Cd in rice</i>
	<b>10.45 – 10.50</b>	Fien Vanongeval (KULeuven) - <i>Contribution of Sentinel-2 Seedbed Spectra to the Digital Soil Mapping of Soil Organic Carbon</i>
	<b>10.50 – 10.55</b>	Shengchang Huai (ULiège) - <i>Optimizing soil sample preparation and machine learning models for estimating soil total nitrogen with Vis-NIR spectroscopy</i>
	<b>10.55 – 11.00</b>	Carmen de Léon (UGent) - <i>Distribution of Pristine and Aged Polystyrene Microplastics in Soil Aggregate Fractions</i>
	<b>11.00 – 11.05</b>	Tao Sun (ULiège) - <i>Heavy metals drive microbial community assembly process in farmland with long-term biosolids application</i>
	<b>11.05 – 11.10</b>	Oluwadamilare E. Oloyede (UGent) - <i>Impact of reduced tillage and mulching on soil water balance and crop growth</i>
	<b>11.10 – 11.15</b>	Malaika Mariana Andrade Hernández (UGent) - <i>The Role of Nematodes in N<sub>2</sub>O Emissions from Agricultural Soils with Different N Fertilization</i>

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## Poster Program – Lunch break

<b>12.40-13.15</b>	<b>Poster presentations</b>	
	<b>12.40 – 12.45</b>	Jinshan Lian (ULiège) - <i>Trade-off between microbial carbon use efficiency and microbial resource limitations is regulated by root exudation under long-term nitrogen fertilization</i>
	<b>12.45 – 12.50</b>	Astrid François (UGent) - <i>Assessing the influence of capillary moisture supply on carbon mineralization in topsoil of Flemish croplands during a dry summer</i>
	<b>12:50 – 12.55</b>	Yilin Liu (ULiège) - <i>Direct-Seeding: A Promising Approach to Reduce Methane Emissions in Rice-Crayfish Ecosystems</i>
	<b>12:55 – 13.00</b>	Kaat Mertens (ILVO) - <i>Sensitivity analysis of the BeSOCC model</i>
	<b>13.00 – 13.05</b>	Yuqiao Long (ULiège) - <i>Mapping the spatiotemporal dynamics of cropland abandonment and recultivation across the Yangtze River Basin, China</i>
	<b>13.05 – 13.10</b>	Angelica Ramirez-Moguel (UGent) - <i>Soil phosphorus (P) mining in agriculture – Impacts on P availability, crop yields and soil organic carbon stocks in a 10-year experiment</i>
	<b>13.10 – 13.15</b>	Eric Lutete Landu (ULiège) - <i>Runoff retention structures effectiveness in controlling urban gully erosion in tropical cities, case of Kinshasa in DR Congo</i>

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## *Poster Program – Afternoon break*

<b>15.00-15.35</b>	<b>Poster presentations</b>	
	<b>15.00 – 15.05</b>	Elden Willems (KULeuven) - ‘From soils to fertilizers’: synthesis of layered double hydroxides from weathered soil of Madagascar
	<b>15.05 – 15.10</b>	Jasper Roussard (UAntwerpen) - Co-deployment of enhanced weathering and organic amendments for carbon sequestration in agricultural soils
	<b>15.10 – 15.15</b>	Nicolas Kovacs (ULiège) - Unravelling soil organic carbon (SOC) stability in Belgian floodplain
	<b>15.15 – 15.20</b>	Micaela Cosgrove (ILVO) - <i>C-Farms: Cropping on Industrial Waste to Create a Carbon Sink in Agricultural Soils</i>
	<b>15.20 – 15.25</b>	Hayyu Mahabbah (UGent) - <i>Comparing Four Nematode Exclusion Methods in Soil Samples: Heating vs Freeze-Thaw Cycles vs Gamma Irradiation vs Microwaving</i>
	<b>15.25 – 15.30</b>	He Zhang (ULiège) - <i>Changes in bacterial community structure and carbon metabolism in sandy soil under the long-term application of chitin-rich organic material and attapulgite</i>
	<b>15.30 – 15.35</b>	Guy Ilombe Mawe (ULiège) - <i>What controls the expansion of urban gullies in tropical environments? Lessons learned from cities in D.R. Congo with contrasting soil types</i>