The Institute of Soil Science and Plant Cultivation, Department of Bioeconomy and Systems Analysis is looking for PhD student in the Doctoral School of Quantitative and Natural Sciences.

Proposed subject: Sustainability of innovative organic food systems

FOODLEVERS

Research area and project description:

Organic farming in UE is still in its infancy in terms of the share in utilized agricultural area (8.5%), in Poland organic production account for only 3.5% (EUROSTAT). One of the objective of the Green Deal Strategy and of specific objectives of Farm to Fork Strategy and Biodiversity Strategy is target of 'at least 25% of the EU's agricultural land under organic farming and a significant increase in organic aquaculture by 2030'. Within the Action Plan for the Development of Organic Production, announced in March 2021, European Commission propose set of measures for improving the contribution of organic farming to sustainability and for fostering short trade circuit minimizing climate change impact.

The research led by IUNG within FOODLEVERS project within the H2020 ERA_NET COFUND network, (https://susfood-db-era.net/main/FOODLEVERS) will be helpful in order to complete the actions above. The project FOODLEVERS ('Leverage points for organic and sustainable food systems') focus on how organic and sustainable food systems with long and short distribution chains contribute to reconnecting producers and consumers, more efficient resource use from farm to fork and the economic, environmental, social and governance dimensions of the system's sustainability. The considered case studies are innovative and sustainable organic farms.

The aim of the studies is to perform environmental sustainability analysis of innovative organic farms using Life Cycle Assessment (LCA) and farm sustainability tool (PGTool), allowing for identification of sources of environmental threats in whole productive cycle and their evaluation in

the next step. Apart from standard environmental criteria of LCA, novel indicators for human nutrition, biodiversity and social wellbeing will be included. Analysis to be carried out in SimaPro software using "cradle-to-grave" approach – it means through whole food system (from external inputs manufacture through crop/livestock production and products processing up to consuming and recycling). The assessment will be made for main cash products of FOODLEVERS case study pilot farms (Germany, Italy, Poland, UK, Romania, Finland) and typical organic farm models for each country. Doctoral thesis is to be the part of analysis jointly conducted by IUNG-PIB and Reading University (UK). Consultations and mentoring of British scientists will be provided.

Terms and conditions:

- The PhD project will take place for 48 months (from 01.10.2021) at the Department of Bioeconomy and Systems Analysis, Institute of Soil Science and Plant Cultivation, Poland under PhD supervision of dr hab. Alina Syp asyp@iung.pulawy.pl
- The PhD project is financed within H2020 ERA_NET COFUND project FOODLEVERS. For application details (documents, procedures, deadlines) please go to website of the Doctoral School of Quantitative and Natural Sciences.
- PHD course will be held in English and Polish at the Maria Skłodowska Curie University in Lublin
- Language of PhD thesis: English or Polish
- Deadline for submission of application form is midnight **31 August 2021**
  https://rejestracja.umcs.pl/Rekrutacja/KatalogKierunkow.aspx
  https://www.umcs.pl/en/limits-and-dates-of-admission,21512.htm

- Details of offer (formal requirements, evaluation rules) can be found here:
  https://www.umcs.pl/en/formal-requirments,21510.htm
  https://www.umcs.pl/en/detailed-rules-for-the-evaluation-of-the-candidates,21517.htm

Qualifications and specific competences:

- Applicants to the PhD position must have a relevant Master's degree in agronomic, economic, environmental sciences, environmental engineering or similar.
- Proficiency in the English language is required, as well as good communication skills, both oral and written. The ideal person has good collaboration skills and is also able to work independently.

Contacts:

Applicants seeking further information are invited to contact: Dr Robert Borek, rborek@iung.pulawy.pl