

Pressemitteilung**Leibniz-Institut für Agrartechnik und Bioökonomie e.V. (ATB)****Dino Trescher**

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<http://idw-online.de/de/news790676>Forschungs- / Wissenstransfer, Forschungsprojekte
Energie, Ernährung / Gesundheit / Pflege, Tier / Land / Forst, Umwelt / Ökologie
überregional**Embrapa & Leibniz ATB: Working together for more sustainable food systems**

The Brazilian Agricultural Research Corporation (Embrapa) and the Leibniz Institute for Agricultural Engineering and Bioeconomy (ATB) signed a Memorandum of Understanding (MoU). The aim of the agreement is to facilitate productive, high-impact research collaboration and to strengthen joint research activities and exchange. This closely relates to the sustainability of food systems envisaged in the United Nations 2030 Agenda, which currently faces numerous challenges in interlinked areas: sustainable food and nutrition security, livelihoods and growth, climate vulnerability and sustainable use of natural resources, and resilience and use of natural resources.


The current status of the planetary boundaries, limited available resources and grand challenges like global health, climate change, land and ecosystem degradation, along with growing population, require circular approaches and highly efficient resource use.

“Leibniz ATB and Embrapa form a research alliance to strategically direct and enhance our capacities and capabilities towards more sustainable and competitive agro-food and bioeconomy systems. Our joint research activities are designed to co-create new knowledge that drives technological solutions and innovation opportunities to develop solutions for the grand challenges that we are facing”, explains Dr. Guy de Capdeville, Executive Director of Research and Development at Embrapa, the international research partnership. “The alliance between Embrapa and Leibniz ATB combines dedicated teams and mutual strengths in creating knowledge and designing technological solutions for a circular agro-food and bioeconomy systems. The aims are: minimising the depletion of resources, encouraging regenerative practices, preventing the loss of natural resources and stimulating the reuse and recycling of by-products”, says Prof. Barbara Sturm, Scientific Director of ATB.

The parties shall cooperate in science and technology through joint projects in the fields of agricultural and environmental research and technology, for the purpose of broadening the existing knowledge base on sustainable agricultural development and institutional strengthening. The agreement covers areas where both institutions are active: natural resources and climate change, biotechnology, nanotechnology and geotechnology, biomass and green chemistry, agroindustrial technology, automation, precision agriculture, information technology and communication, livestock and plant production systems, food safety, nutrition and health, markets, policies and rural development.

In April 2022, collaboration starts with the first scientific cooperation projects (SCPs), namely between Leibniz ATB and Embrapa Dairy Cattle, one of the 43 Embrapa's Units. The forthcoming research collaboration is led by Prof. Barbara Amon, department Technology Assessment and Substance Cycles at ATB and Dr. Vinícius Pereira Guimarães, Embrapa Labex Europe. The focus of the SCP and exchange comprises five initial focal areas: Prevention of heat stress in dairy cattle; measures to reduce antibiotic use and assessment of antimicrobial resistance; opportunities and technologies for production and use of renewable energy on dairy farms; measures to mitigate GHG and N emissions from livestock systems; multicriteria-assessment of sustainability of integrated crop-livestock-systems for dairy cattle.

The Brazilian Agricultural Research Corporation (Embrapa) - Empresa Brasileira de Pesquisa Agropecuária - is a state-owned research corporation affiliated with the Brazilian Ministry of Agriculture, Livestock, and Food Supply. Its core is developing technologies, knowledge and technical-scientific information aimed at Brazilian agriculture, including livestock. Embrapa Dairy Cattle, one of the 43 Embrapa's Units, have delivered relevant scientific knowledge and products to the Brazilian society along its 45 years of activity. Currently, Embrapa Dairy Cattle has 265 employees and each year approximately 200 students, fellows, and trainees, mostly at the graduate level and enrolled in universities. Embrapa Labex Europe, based in Montpellier, France, supports scientific collaboration between Embrapa and European research institutions in areas such as biotechnology, animal and plant health, automation and precision agriculture, and food safety. www.embrapa.br/en



The Leibniz Institute for Agricultural Engineering and Bioeconomy (ATB) is a pioneer and a driver of bioeconomy research. ATB creates the scientific foundation to transform agricultural, food, industrial and energy systems into a comprehensive bio-based circular economy. ATB develops and integrates techniques, processes and management strategies, effectively converging technologies to intelligently crosslink highly diverse bioeconomic production systems and to control them in a knowledge-based, adaptive and largely automated manner. The institute conducts research in dialogue with society and for society - knowledge-motivated and application-inspired. ATB with its approx. 250 employees is member of the Leibniz Association, that connects 97 independent non-university research institutions that range in focus from natural, engineering and environmental sciences to economics, spatial and social sciences and the humanities. Leibniz Institutes address issues of social, economic and ecological relevance. www.atb-potsdam.de/en

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Prof. Barbara Amon



Dr. Guy de Capdeville, Embrapa and Prof. Barbara Sturm, Leibniz ATB, with the Memorandum of Understanding (MoU)
Jessica Lietze



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