



BioResources
& Technology

Volume #5

NEWSLETTER

2026
MID-YEAR



BIOGAS.CZU.CZ

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BioResources & Technology Division

CORE AREAS OF REASEARCH

- Bioenergy
- Bioeconomy
- Complexity
- Food Security
- Waste Management
- Sustainable Agriculture & Aquaculture
- much more...



<http://biores.tech/>



Our research and innovation objectives encompass a wide array of thematic, from the determination of the real impact of small biogas plants on the environment, climate change and society to bioresources technologies, including bioenergy, environmental aspects, food security, waste management, biotechnologies and more.

The global shift towards renewable energy and sustainable practices has reinforced the importance of holistic approaches to resource management. This underscores our commitment to fostering collaboration across these disciplines, enhancing our ability to address complex sustainability challenges. Interdisciplinary research is at the core of the BRT. Our team comprises environmental science, engineering, agriculture, and social sciences expertise.

The BRT is committed to applying our research findings to real-world challenges. Our team works with a broad range of stakeholders, including local communities, policymakers, researchers, NGOs, education centres, universities, etc. This expanded network enables us to scale our impact and effectively apply our research findings to real-world challenges. Because here at BRT, we strive to see our results in real-world applications!

BRT TEAM

CLICK HERE 



Behind every project, publication, and field mission is a diverse team driving BRT forward.

Together, BRT's team members bring the expertise, curiosity, and collaboration that turn ideas into action. Throughout the first half of 2026, their shared efforts continued to strengthen the division's research culture and support meaningful progress across applied sustainability, international cooperation, and practical problem solving.





MESSAGE FROM THE BRT FOUNDER & DIRECTOR

Dear colleagues, partners, students, and friends of BRT,

As we reach the midpoint of 2026, I am pleased to reflect on another dynamic and inspiring chapter in the development of the BioResources and Technology (BRT) Division. The first half of this year has demonstrated not only the strength of our scientific ambitions but also the power of collaboration and shared purpose. One of the most encouraging aspects has been the continued growth of BRT as an internationally recognised research division addressing some of today's most pressing challenges. Equally important, we have continued to translate research into practice, ensuring that our work creates tangible benefits for society.

“

BRT has always believed that excellent research cannot exist in isolation. Our identity is built on connecting science, education, innovation, and real-world impact.

What makes me most proud is not only the number of publications, projects, or partnerships we have achieved, but the people behind them. BRT has become a truly interdisciplinary, diverse and international community where experienced researchers, early-career scientists, doctoral candidates, and students work together with enthusiasm, curiosity, and mutual respect.

We strive to ensure that our research contributes to more sustainable and resilient societies. This integrated approach will continue to define who we are as we expand into emerging areas such as digital agriculture, AI-enabled decision support, circular bioeconomy, and nature-based solutions. Looking ahead to the second half of this year, our priorities remain clear: delivering high-quality scientific outputs, strengthening our international partnerships, supporting our researchers at every career stage, and increasing the societal impact of our work. We will continue investing in interdisciplinary collaboration, open science, and research excellence while remaining committed to addressing the global sustainability challenges that require both scientific rigour and practical solutions.

Finally, I would like to express my sincere gratitude to all our colleagues, students, partners, funding agencies, and supporters. Your trust, dedication, and willingness to collaborate make BRT what it is today. Every project completed, every publication published, every student mentored, and every partnership established is the result of collective effort.

I look forward to what we will achieve together during the remainder of 2026 and beyond. Thank you for being part of our journey.

And remember:
“Fearless minds, Endless potential”

PUBLICATIONS

During the first half of 2026, BRT researchers continued to advance applied scientific knowledge across the division's core research areas. From biogas and waste valorisation to sustainability, circular bioeconomy, and resource management, these publications reflect BRT's ongoing commitment to producing research that is both academically rigorous and relevant to real-world environmental and development challenges.

21 PUBLICATIONS
THUS FAR IN **2026**



[CLICK HERE](#)

Scan the QR code to explore BRT's latest publications and discover the research developments shaping our work in 2026.

Selected Articles



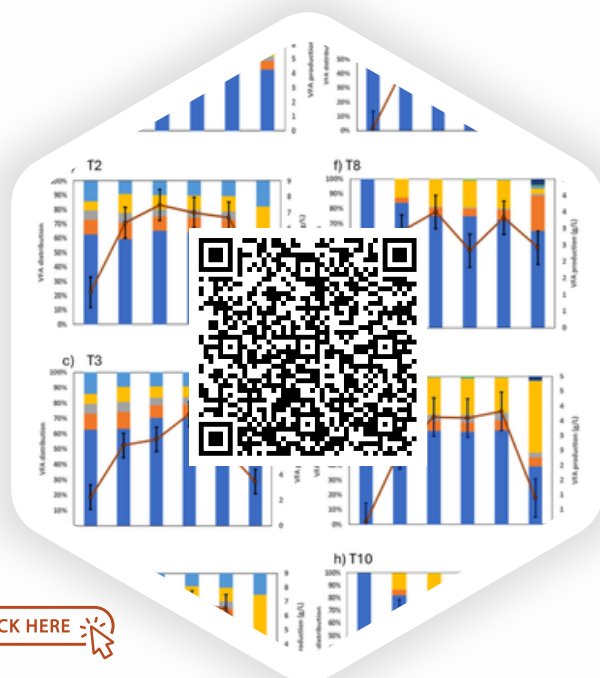
DIGESTATE FROM SMALL-SCALE BIOGAS PLANTS IN CENTRAL VIETNAM PRODUCED UNDER MESOPHILIC CONDITIONS: FRIEND OR FOE FOR LOCAL FARMERS?

BRT researchers published a new paper in *Biofuels, Bioproducts and Biorefining* on digestate from small-scale biogas plants in central Vietnam. Based on samples from 85 farms, the study examines microbial contamination, pathogen persistence, and elemental composition to assess the safe agricultural use of digestate by local farmers.

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THE EFFECT OF PRETREATMENT ON VFA PRODUCTION FROM TOFU AND TEMPEH WASTEWATER THROUGH ANAEROBIC DIGESTION BATCH

BRT researcher Dr. Lydia Mawar Ningsih and BRT director Assoc. Prof. Dr. Hynek Roubík co-authored a new paper in *Biofuels, Bioproducts and Biorefining* on VFA production from tofu and tempeh wastewater. The study highlights how pretreatment and anaerobic digestion can help transform food industry wastewater into valuable bio-based chemicals.



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BRIDGING BEHAVIOR AND POLICY: DETERMINANTS OF HOUSEHOLD BIOGAS ADOPTION IN WEST JAVA, INDONESIA

BRT director Assoc. Prof. Dr. Hynek Roubík co-authored a new paper in *Fuels* on household biogas adoption in West Java, Indonesia. Based on data from 201 dairy farming households, the study examines the socioeconomic, behavioral, and institutional factors influencing adoption, highlighting the importance of fuel-cost pressure, livestock ownership, training, and household perceptions.



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PROJECTS



During the first half of 2026, BRT continued to turn research into practice through a diverse range of collaborative projects. Spanning biogas systems, circular bioeconomy, biodiversity, open science, climate resilience, and data-driven decision-making, these initiatives reflect BRT's applied research focus and commitment to practical impact. Working with partners across regions, BRT projects continue to support sustainable agriculture, rural development, environmental management, and more resilient resource systems.



International Partnerships

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Scan the QR code to explore all our major projects!



Solutions Across Regions



Research in Practice

Horizon Europe Highlight

COMUNIDAD has successfully completed its project journey, closing with a positive final review and recognition by CORDIS. Through collaboration between partners in Europe and Latin America, the project supported the practical use of Copernicus, Earth Observation, and satellite-based services for agriculture, forestry, and rural development. By combining platform development, training, stakeholder engagement, and applied use cases, COMUNIDAD helped make satellite-based information more accessible, useful, and relevant for local decision-making.



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Scan to learn more about
COMUNIDAD's impact



Funded by
the European Union

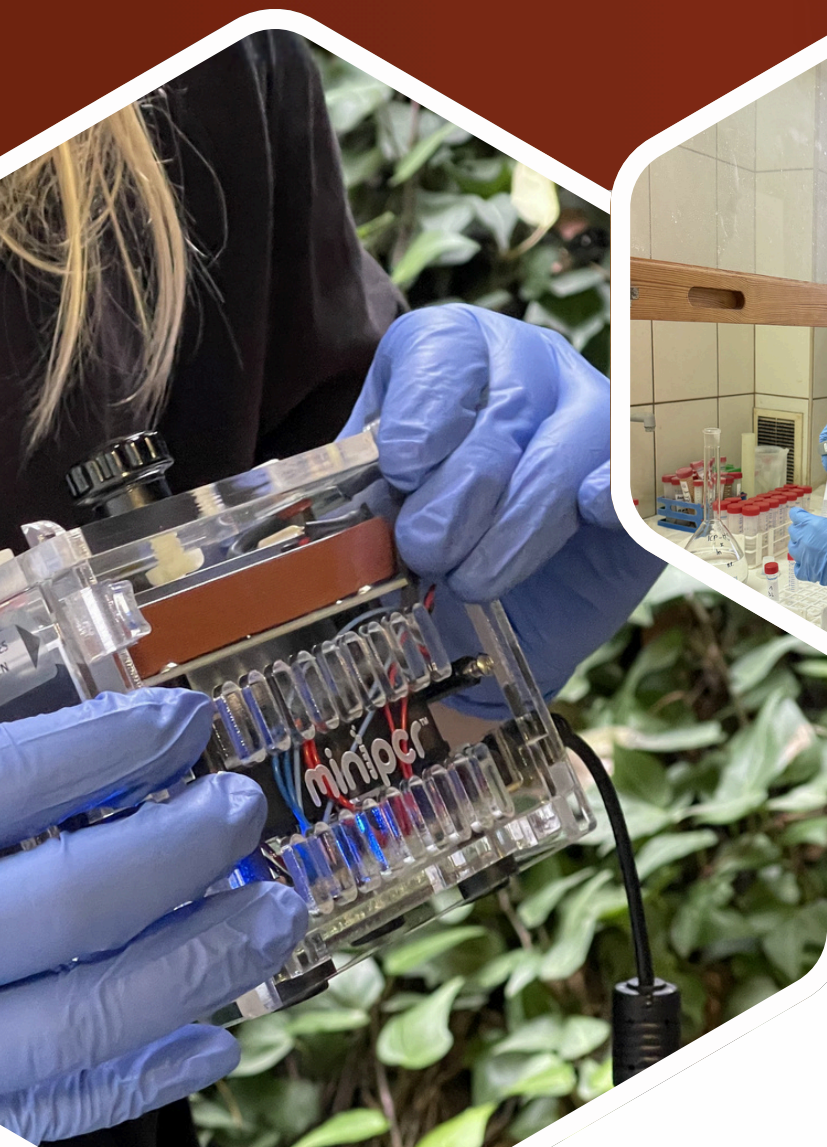


*Transforming Today's Data into
Tomorrow's Solutions*



NEWS

During the first half of 2026, BRT continued to share updates reflecting the BRT's active engagement in research, collaboration, and knowledge exchange. News highlights included project developments, publication achievements, international meetings, field activities, student and researcher involvement, and key milestones across BRT's work within CZU and with partners abroad. Together, these updates capture the breadth of BRT's activities and its ongoing contribution to applied research, sustainability, and international cooperation.

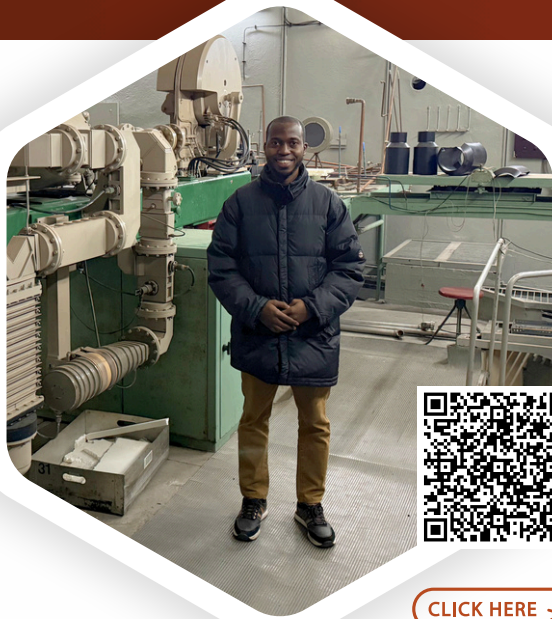


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Scan to explore the latest
BRT news and updates

Mid-Year Standouts



[CLICK HERE](#)

EXPLORING RADIOCHEMISTRY THROUGH AN ERASMUS+ TRAINEESHIP IN WARSAW

BRT PhD student AbdulAzeez Shobajo completed a one-month Erasmus+ traineeship at the Institute of Nuclear Chemistry and Technology in Warsaw. The experience strengthened his skills in radiochemistry, analytical procedures, biomaterial characterisation, and radiological safety, while broadening his perspective on responsible resource recovery and advanced material analysis.

BRT COORDINATES BIO-CAPITAL CONSORTIUM MEETING IN BUCHAREST TO ADVANCE THE PROJECT'S NEXT PHASE

BRT coordinated the BIO-CAPITAL Consortium Meeting in Bucharest, bringing partners together for strategic discussions, technical exchange, and collaborative planning. The meeting focused on strengthening work package integration, operationalising project workflows, advancing use case harmonisation, and preparing the project's tools and outputs for the next phase of implementation.



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DESALSEA CONSORTIUM MEETING HELD AT FTZ TO ADVANCE SUSTAINABLE DESALINATION RESEARCH

FTZ welcomed deSalSea project partners to Prague for a consortium meeting focused on sustainable forward-osmosis seawater desalination. Partners reviewed progress, aligned upcoming experimental activities, and strengthened collaboration, while BRT presented its work on the project's sustainability assessment framework and Life Cycle Assessment methodology.

First Place Win at the Anthropocene Case Competition 2026

BRT won first place at the Anthropocene Case Competition 2026, an international student challenge organised by the Hungarian University of Agriculture and Life Sciences (MATE) in cooperation with Bonafarm Csoport. Competing against teams from more than 20 countries, the BRT team advanced through multiple rounds before reaching the Grand Final in Gödöllő, Hungary.

The competition challenged participants to develop practical solutions for utilising by-products from Bonafarm's poultry business. BRT's winning concept applied circular economy thinking, technical analysis, and business strategy to propose a high-value pathway for transforming poultry by-products into a protein resource.



CLICK HERE

Scan to read their first-hand account of the experience!

From 80 teams across 20+ countries to first place, an example of applied research, circular thinking, and teamwork in action.



MATE
HUNGARIAN UNIVERSITY OF
AGRICULTURE AND LIFE SCIENCES

Bonafarm[®]
CSOPORT

Meet the winners



VIKTORIIA CHUBUR

Team Mentor
Researcher & BRT Laboratory Manager

With expertise in environmental protection technologies, anaerobic digestion, biogas production, and laboratory analysis, Viktoriia brings both applied research knowledge and practical technical experience to the team. As team mentor, she guided the development of science-based, realistic, and technically feasible solutions for sustainable by-product management.



ABDULAZEEZ SHOBAJO

PhD Student & Junior Researcher

Specialised in sustainability assessment, bioresources, life cycle assessment, and environmental impact evaluation, AbdulAzeez focuses on transforming waste and by-products into value-added biobased solutions within circular bioeconomy frameworks. During the Bonafarm MATE Case Competition, he contributed through life cycle thinking, resource-efficiency analysis, and by-product valorisation strategies, helping assess proposed solutions from environmental and sustainability perspectives.



ANTOINE BERCY

PhD Student & Junior Researcher

With a multidisciplinary background in bioengineering, wildlife management, programming, and biogas technology, Antoine works across environmental technologies, renewable energy, and technical process development. During the Bonafarm MATE Case Competition, he contributed expertise in biogas systems, waste management, and process design, supporting feasible circular solutions for by-product valorisation, resource recovery, and sustainable processing systems.



PAULA A. CASTRO M.

Masters Student & Research Assistant

With an interdisciplinary background in veterinary medicine, animal production, and applied biological research, Paula focuses on sustainable animal production systems that are economically viable, environmentally responsible, and aligned with stronger animal welfare frameworks. During the Bonafarm MATE Case Competition, she contributed by connecting animal production, sustainability, and welfare perspectives to support practical strategies for animal-based value chains.



The four leaders behind BRT's first-place win. Bringing together diverse expertise and a shared passion for sustainability, the team combined knowledge, creativity, and determination to turn challenges into opportunities.

INTERNSHIP PROGRAM

Scan the QR code to learn more and apply!



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Aissa Neyra



Chin Hui Ween



Marina Salel



Kshitij Agrawal



Katie Jacobs



The BRT Internship Program welcomes students and early-career researchers from around the world to gain hands-on experience within the BRT. Working alongside researchers and team members, interns contribute to activities ranging from laboratory-based research and science communication to project coordination and stakeholder engagement. Through this international exchange, the program supports practical skill development, mutual learning, and broader perspectives on the global sustainability challenges shaping research today.

NEW FACES AT BRT

During the first half of 2026, BRT welcomed new colleagues. Bringing diverse skills, expertise, and perspectives, these new team members contribute to BRT's interdisciplinary environment and support the division's work in science communication, applied research, project coordination, and international collaboration. Scan the QR codes to learn more about each person!

Postdoctoral Researcher
Bojana Petrovic



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Digital Communications
& Design Specialist
Aissa Neyra



CLICK HERE 

Project & Financial Manager
Michaela Šrubařová



CLICK HERE 



MCYR 2026

Building on a Global Research Community

Czech University of Life Sciences, Prague
8-9 October, 2026

The MCYR conference offers a dynamic platform for early-career researchers to present their work, exchange ideas across disciplines, and take part in meaningful scientific dialogue. Designed to foster an open and supportive environment, the conference encourages constructive feedback, collaboration, and professional development. Beyond research presentations, MCYR also creates valuable opportunities for networking, helping participants connect with peers, experts, and institutions that may inspire future partnerships and support their academic and professional growth.

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THIS YEAR'S SUB-THEME: *"Research Innovation to Action: Pathways Toward Resilience in a Risk-Prone World"*

Animals & Ecology

Plants & Agriculture

Climate & Sustainability

Technology & Innovation

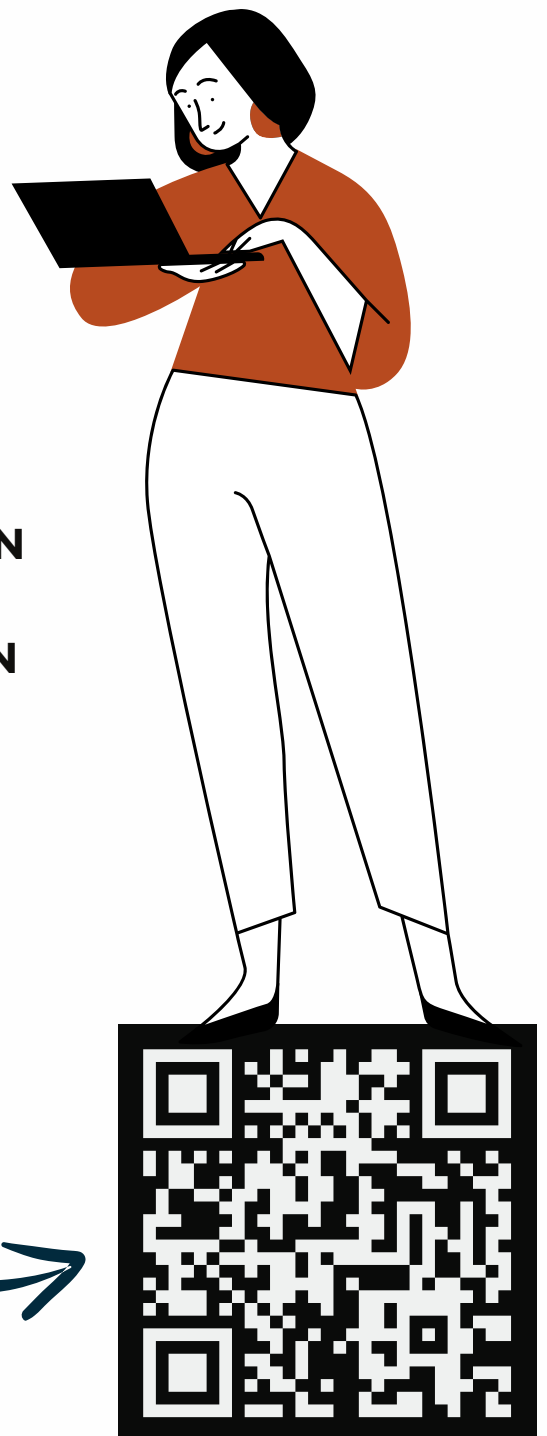
Society & Culture

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Endless potential”***