

BUSITEMA UNIVERSITY

Pursuing Excellence

4th Annual Busitema University Science, Technology and Innovation Symposium (BUSTIS)

23rd – 25th September 2026

Faculty of Agriculture and Animal Sciences – Arapai Campus, Soroti City, Uganda

CALL FOR PAPERS AND INNOVATIONS

Conference Theme

“Coordinated Innovations in Science and Technology for Socio-Economic Transformation”

About the Symposium

In an era defined by rapid technological advancement, climate uncertainty, and the urgent need for inclusive socio-economic development, African nations need to strategically harness science, technology, and innovation (STI) to drive transformation. Science and technology institutions lie at the heart of this development process, serving as hubs for knowledge creation, technological innovation, and practical solutions that bridge the gap between research and real-world impact.

The 4th Annual Busitema University Science, Technology and Innovation Symposium (BUSTIS), hosted by the Faculty of Agriculture and Animal Sciences – Arapai Campus in Soroti City, Uganda, brings together scholars, researchers, educators, policymakers, practitioners, entrepreneurs, and innovators from across Africa and beyond. The Symposium is strategically aligned with Uganda’s National Development Plan IV, the United Nations Sustainable Development Goals (SDGs), and Africa’s Agenda 2063.

BUSTIS provides a platform for learning, collaboration, and exchange of ideas, insights, practices, and discourse on strengthening coordinated innovations in science and technology for sustainable socio-economic transformation across Uganda, Africa, and beyond.

Purpose

The purpose of the Symposium is to advance the strategic use of coordinated science and technology innovations as catalysts for socio-economic transformation, improved livelihoods, institutional resilience, and sustainable development in Uganda and Africa.

Specific Objectives

- Promote science, technology, and innovation as drivers of socio-economic transformation in Africa.
- Foster interdisciplinary research, dialogue, and collaboration among academia, industry, government, and civil society.
- Encourage knowledge exchange and technology transfer to address organizational, sectoral, national, and regional development challenges.
- Highlight best practices and emerging trends in climate-smart agriculture, sustainable engineering, digital transformation, health systems, and inclusive innovation.
- Provide a platform for students, researchers, and innovators to showcase their work and engage with leading experts.
- Highlight the role of artificial intelligence, 4IR technologies, and digital governance in accelerating Uganda’s development transformation.

- Strengthen university-industry-government partnerships for applied research and technology commercialization.

Symposium Thematic Areas

Authors are invited to submit abstracts, full papers, and innovation exhibits under the overall symposium theme, aligned with one or more of the following six (6) thematic areas:

Thematic Area 1: Innovations in Climate-Smart Agriculture, Environment and Natural Resource Management, Food Security and Rural Transformation

Sub-theme: Leveraging Science and Technology for Climate-Resilient Agriculture and Sustainable Natural Resource Management.

Objective: Promote the application of innovative technologies, research, and knowledge systems in advancing climate-smart agriculture, environmental sustainability, food security, and inclusive rural transformation.

Topics include: climate-smart agricultural technologies and practices; sustainable natural resource management and biodiversity conservation; food security, nutrition, and post-harvest innovations; agro-processing and value addition technologies; water resource management and irrigation technologies; soil health, fertilizer innovations, and land restoration; rural transformation and agri-entrepreneurship; policy, governance, and financing for climate-resilient agriculture; and community-based natural resource management.

Thematic Area 2: Sustainability innovation through STEM and Integrated Education

Sub-theme: Transforming Education and Skills Development through Science, Technology, Engineering, and Mathematics (STEM).

Objective: Advance the quality, relevance, and inclusivity of STEM education in Uganda and Africa through competency-based training, educational technology, and innovative teaching and learning methodologies.

Topics include: Competency-Based Education and Training (CBET) transformation in higher education; digital learning platforms and e-learning technologies; Technical and Vocational Education and Training (TVET) for industrial growth; teacher training and capacity building in STEM; science communication and public engagement; research-to-teaching linkages in higher education; inclusive STEM education for gender and social equity; global best practices in STEM and pedagogical innovation; and women and girls in STEM.

Thematic Area 3: Sustainable Engineering, Infrastructure and Industrial Automation

Sub-theme: Driving Industrial Growth and Infrastructure Development through Sustainable Engineering and Automation.

Objective: Explore how sustainable engineering, infrastructure development, and industrial automation can enhance productivity, promote green growth, and foster inclusive industrialization aligned with Uganda's NDPIV, Vision 2040, and the SDGs.

Topics include: renewable energy systems, solar technologies, and sustainable energy access; infrastructure development and smart cities; industrial automation, robotics, and mechatronics; energy efficiency; sustainable transport and mobility solutions; manufacturing innovation and industrial productivity; waste

management, circular economy, and environmental engineering; and policy frameworks for sustainable industrial development.

Thematic Area 4: Coordinated Science Technology and Innovation (STI) for Equitable Human Health Systems and Universal Healthcare

Sub-theme: Leveraging Science, Technology, and Innovation to Strengthen Health Systems and Achieve Universal Health Coverage.

Objective: Promote the application of science, technology, and coordinated innovation to strengthen health systems, advance universal healthcare access, and address priority disease burdens.

Topics include: digital health and health information systems; medical technology innovation and biomedical engineering; disease surveillance, prevention, and control; traditional medicine and integration with modern healthcare; health policy, governance, and health systems strengthening; mental health, community wellbeing, and health promotion; pharmaceutical innovation and supply chain management; and global best practices in health technology and innovation.

Thematic Area 5: Innovation, Governance, Entrepreneurship and Gender-Inclusive Transformative Systems

Sub-theme: Empowering Communities through Inclusive Innovation, Good Governance, and Entrepreneurship.

Objective: Explore how innovation ecosystems, good governance, and entrepreneurship education can drive inclusive and transformative socio-economic development, with particular emphasis on gender equity, youth empowerment, and institutional capacity.

Topics include: innovation ecosystems and start-up development; entrepreneurship, MSME growth, and financial inclusion; gender-inclusive innovation and women in STEM; youth empowerment and skills for the future of work; digital governance, transparency, and accountability; social innovation and community-driven development; intellectual property rights and technology commercialization; and policy learning and governance for inclusive transformation.

Thematic Area 6: Artificial Intelligence and Fourth Industrial Revolution (4IR) Technologies

Sub-theme: Harnessing Artificial Intelligence and Emerging Technologies for Africa's Development.

Objective: Investigate the opportunities, challenges, and ethical considerations of deploying artificial intelligence and 4IR technologies across agriculture, health, education, governance, and industry in Uganda and the broader African context.

Topics include: artificial intelligence and machine learning applications; big data analytics and data-driven decision making; blockchain technology and digital trust; the Internet of Things (IoT) and smart systems; cybersecurity, privacy, and ethical AI; digital inclusion, accessibility, and equity; automation and the future of work in Africa; global benchmarking and best practices in 4IR technologies; and 4IR technologies for industrial transformation and manufacturing in Uganda.

Papers addressing other emerging dimensions of coordinated science, technology, and innovation for socio-economic transformation that are clearly connected to the overall symposium theme are also welcome.

Who Should Submit

The Call is open to scholars, researchers, educators, policymakers, practitioners, entrepreneurs, innovators, students, and other stakeholders from Africa and beyond who are working on issues relevant to science, technology, and innovation for socio-economic transformation.

Interdisciplinary and comparative contributions are particularly encouraged, as are papers, case studies, policy briefs, and innovation displays that combine rigorous academic analysis with practical, evidence-based solutions.

Submission Guidelines

Abstracts

Authors are invited to submit abstracts for oral presentations, poster presentations, and innovation exhibits. Abstracts should:

- Be in English, less than 350 words, and prepared in MS Word format, Times New Roman style, font size 12, and 1.5 spacing.
- Clearly state the background/problem statement, objectives, methodology, key findings or anticipated outcomes, and conclusion.
- Demonstrate practical application of science, technology, and innovation for socio-economic transformation.
- Address local, regional, or global development challenges with evidence-based solutions.
- Highlight innovation, digital transformation, or inclusive growth solutions aligned with the symposium thematic areas.
- Indicate the thematic area under which the submission falls.
- Include a maximum of 5 keywords.
- Include the title, author(s), affiliation, contact email, and thematic area.

Selected submissions will be featured as oral presentations, panel discussions, or poster exhibitions. All abstract submissions will undergo peer review following international best practices in interdisciplinary engagement and knowledge dissemination.

Full Papers

Authors of selected abstracts will be invited to submit full papers for presentation and potential publication in the Discover Life Journal Topical Collection (Special Issue). All submissions will undergo the journal's standard editorial and peer review process.

Innovation Exhibits

Innovators and entrepreneurs are invited to exhibit prototypes, products, technologies, and solutions at the Symposium innovation showcase. Innovation submissions should include:

- A brief innovation abstract (a maximum of 350 words) describing the innovation, the problem addressed, and its impact potential.
- Photos or diagrams of the innovation (if applicable).
- Details of the development stage and commercialization potential.

Selection Criteria

All abstract, full-paper, and innovation-exhibit submissions will undergo peer review following international best practices in interdisciplinary engagement and knowledge dissemination. Authors of accepted submissions will be notified and invited to present their work, either as oral presentations, poster exhibitions, or innovation displays, at the Symposium.

Important Dates

Milestone	Date
Call for Abstracts Opens	17th June 2026
Submission Deadline for Abstracts	23rd August 2026
Notification of Successful Abstracts	31st August 2026
Submission of Revised Abstracts	11th September 2026
Symposium Dates	23rd – 25th September 2026

Registration and payment details

Account Details

- Account Name: Busitema University Grants
- Account Number (UGX): 9030020828616
- Account Number (USD): 9030020829353
- Bank Name: Stanbic Bank (U) Ltd, Tororo Branch

Kindly scan and email proof of payment for the attention of the Symposium Secretariat.

Publication Opportunities

The Symposium is intended not only as a forum for scholarly and innovation exchange but also as a platform for translating research into practical solutions and disseminating high-quality scholarship on coordinated science, technology, and innovation for socio-economic transformation.

Selected full papers presented at the Symposium will be considered for publication in the Discover Life Journal, under a dedicated Topical Collection (Special Issue). All submissions will undergo the journal's standard editorial and peer review process.

Selection for symposium presentation does not automatically guarantee publication. Papers considered for publication will be subject to the applicable editorial and review requirements of the Discover Life Journal.

Ready to Submit Your Abstract?

Prepare your abstract in English following the guidelines above, select the most relevant thematic area, and complete the official online submission through the Symposium portal by 23rd August 2026.

Submit here: <https://bustis.busitema.ac.ug/>

Enquiries

For correspondence and enquiries regarding submissions or the Symposium, please contact:

Secretariat	Chairperson, Organizing Committee
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About Busitema University

Busitema University is a leading public university in Uganda, committed to excellence in teaching, research, and community engagement. With a strong focus on science, technology, and innovation, the university strives to produce graduates and research outputs that contribute to national and regional development. The Faculty of Agriculture and Animal Sciences at Arapai Campus in Soroti City serves as a centre of excellence for agricultural research, innovation, and community outreach in Eastern Uganda.

We look forward to your participation in the 4th Annual Busitema University Science, Technology and Innovation Symposium (BUSTIS)!

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