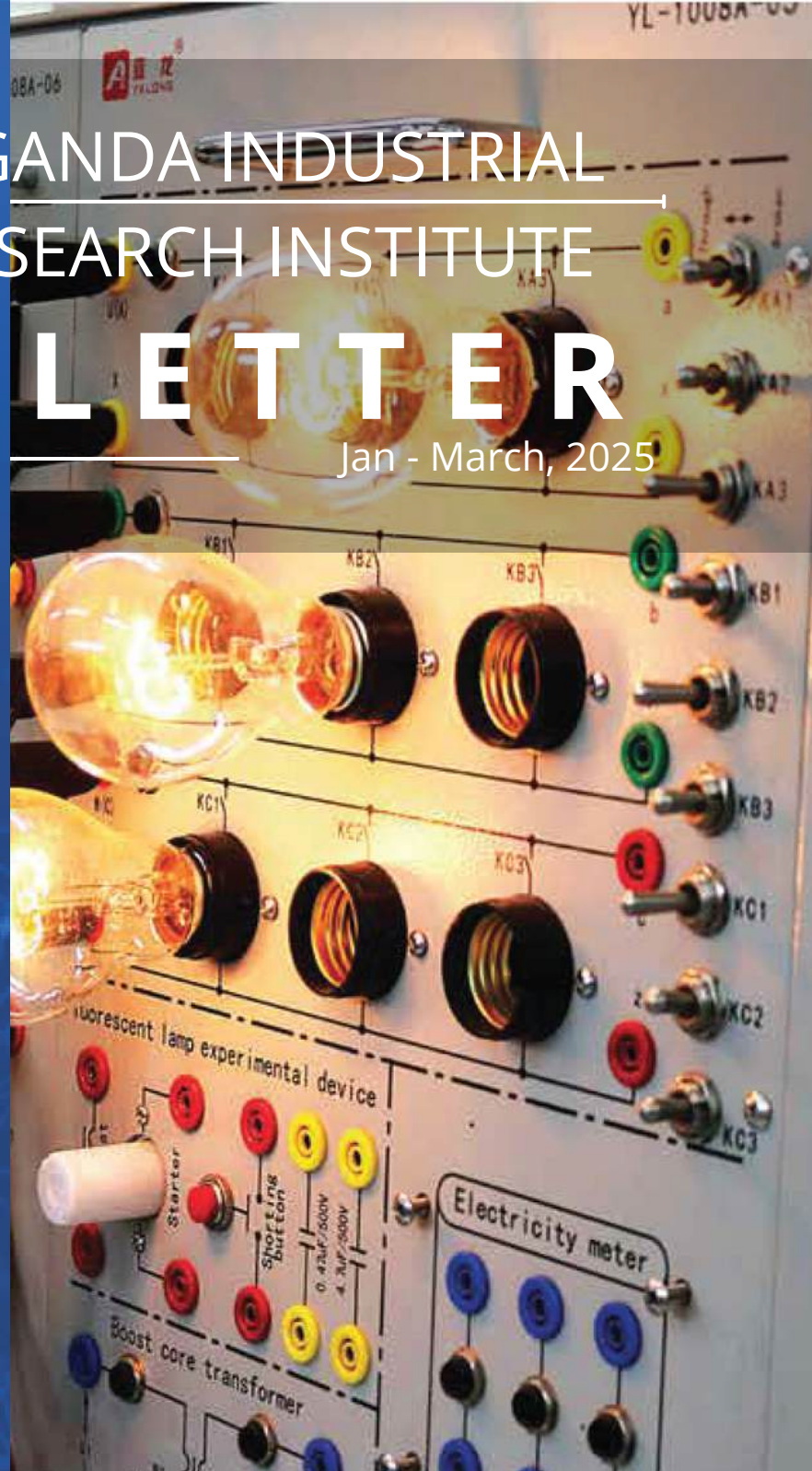




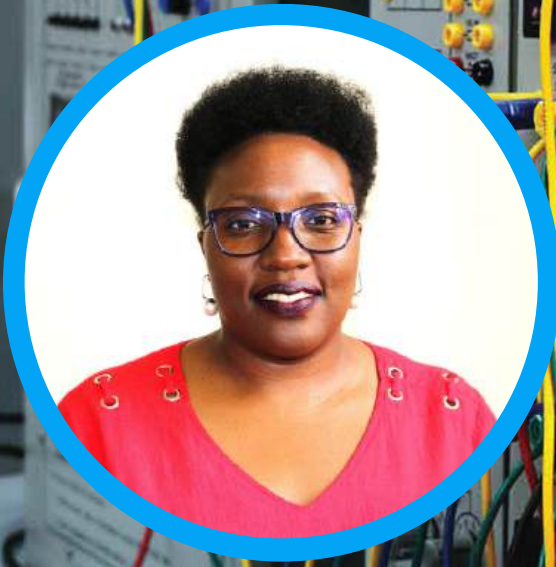
UGANDA INDUSTRIAL  
RESEARCH INSTITUTE

# NEWSLETTER

Jan - March, 2025



A Centre of Excellence in Research and  
Development (R&D) for the East African  
Community



## Editor's Note

### Dear Reader,

Greetings and welcome to the April 2025 edition of the #UIRI Newsletter, your source for key updates and insights on our journey so far.

As we progress through the year, the Uganda Industrial Research Institute (UIRI) remains committed to advancing industrial innovation, research excellence, and skills development to propel Uganda's economic transformation.

In this edition, we reflect on our unwavering dedication to service, resilience in the face of challenges, and our pursuit of excellence. We highlight our strengthened industry collaborations and capacity-building initiatives that continue to empower local enterprises. Our commitment to fostering sustainable industrial growth remains steadfast, and we eagerly anticipate the opportunities that lie ahead.

Stay engaged with us through our social media channels as we work together toward a dynamic and innovative future.

**#WeAreUIRI**

## ABOUT UIRI

The Uganda Industrial Research Institute (UIRI) is a Government Parastatal Organisation that was established by an act of Parliament in 2002. The Institute is a competence and capability building centre that champions innovations and translates applied research results into practical application

## What We Offer

- [In-House Incubation](#)
- [Virtual Incubation](#)
- [Research And Development](#)
- [Value Addition And Product Development](#)
- [Skills Development](#)
- [Business Development Services](#)

# THIRD QUARTER MAJOR EVENTS




## UGANDA INDUSTRIAL RESEARCH INSTITUTE RESEARCH PUBLICATIONS



**Wilson Mambo**

SECTOR	ENERGY
RESEARCH TITLE	Comparative Performance Evaluation of Bioethanol Stove and Alternative Cooking Technologies in Domestic Setting: Implications on Cost, Time and User Perception
DOI	<a href="https://ejsti.org/index.php/EAJSTI/article/view/1011">https://ejsti.org/index.php/EAJSTI/article/view/1011</a>



**Thomas Okoth**

SECTOR	CHEMISTRY
RESEARCH TITLE	Levels of total aflatoxins in maize and groundnuts across food value chains, gender and Agro-ecological zone of Uganda
DOI	<a href="http://ir.sun.ac.ug/handle/123456789/77">http://ir.sun.ac.ug/handle/123456789/77</a>



**Jane Mayambala**

SECTOR	MUSHROOMS
RESEARCH TITLE	Growth Medium Optimization and Genetic Adaptation of a Wild Edible Agaricus Mushroom Species in Uganda,
DOI	10.21474/IJAR01/19390



**Loyce Kukunda**

SECTOR	PAPER
RESEARCH TITLE	Development and characterization of bio-sheets from sugarcane bagasse as a potential packaging material
DOI	<a href="https://link.springer.com/article/10.100/s13399-023-04689-6">https://link.springer.com/article/10.100/s13399-023-04689-6</a>

*A Lead Agency of Industrialization in Uganda*

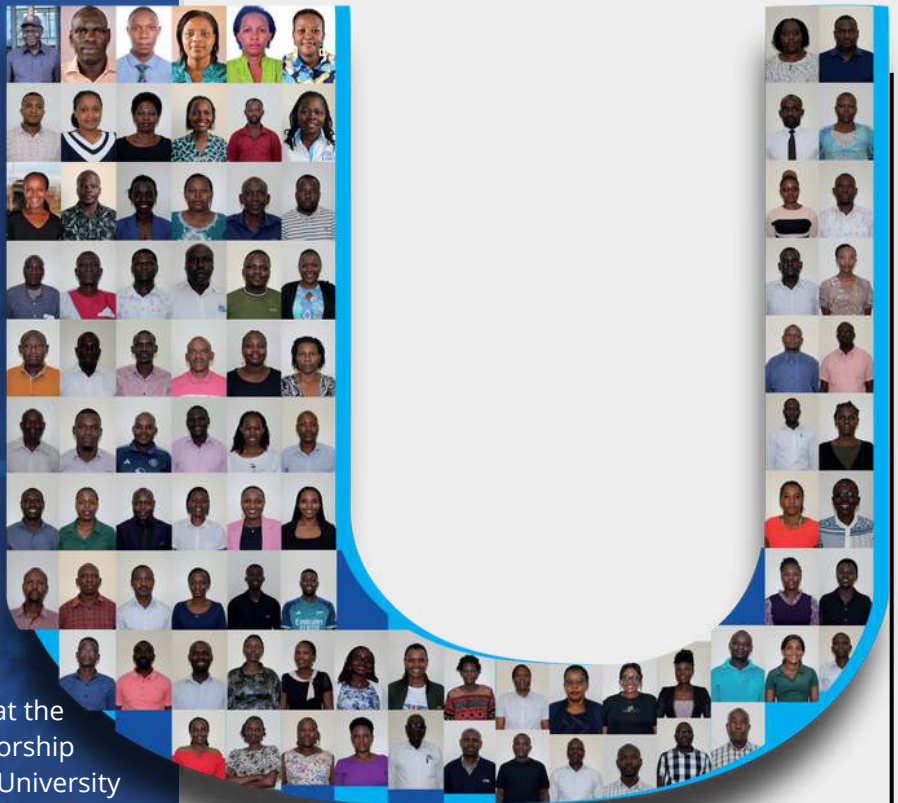
# Technology Transfer and Skills Development

## Orbital Welding training



28 Technicians and Engineer Trainers from UIRI completed a 3-week intensive practical skills training on Orbital Welding using the state-of-the-art "Pipeline All-Position Automatic Welding Machine Model BH-PAW-150" by Expert Trainer Mr. Imran Dil Mohamud from Canada.

The Trainers are now equipped to improve pipeline welding efficiency, enhance quality and safety standards and transfer knowledge to other engineering professionals Thanks to this partnership Training of Trainers support from EACOP, Chu Kong Petroleum and Avanti Energy Services Limited.



### Women in STEM

UIRI Female Engineers presented at the 2024 Women in Engineering Mentorship Program organised by Kyambogo University to encourage and mentor women in science, Technology, engineering and mathematics (STEM).



## Skilling Communities

UIRI is keen to contribute to the 4 Pillars of Industrialisation by addressing appropriate technology and skilled human capital fit for the market needs. Through UIRI's skilling programs, many entrepreneurs and community groups have acquired practical industry skills including;

- Trainees graduated in Textiles, Fashion and Design led by Hon Nyamutooro Phiona, Minister of State for Minerals.
- 69 Trainees graduated in Textiles, Fashion and Design led by Hon Sylvia Bahireira Tumwekwase, Woman MP Kamwenge.
- Training of Trainers for 48 Youth from the Tooro Kingdom Youth Skilling Centre (Electrical Installations, Welding & Fabrication, Woodwork and Bakery).
- Women Entrepreneurs from Mukono District (Charcoal Briquette processing)
- 51 members of Nyarubungo Ward Bamboo Tree Growers, Mbarara City (Bamboo Value Addition, Preservation and Post-Harvest Handling)

## Collaborations



Academia meets Industry: Key Visit from Makerere University Dean and School Heads of Departments to bridge the gap between academia and industry for joint research projects and industrial innovations.

By John Odyek

# Makerere University, UIRI partner to support innovations

Makerere University and the Uganda Industrial Research Institute (UIRI) have agreed to collaborate on advancing research, translating applied innovations into practical applications and developing products to stimulate employment and boost Uganda's economy.

On Friday, Prof. Barnabas Nawangwe, the vice-chancellor of Makerere University, led a delegation to UIRI's offices at Namabwe Industrial Park in Mukono district.

This collaboration will enable Makerere researchers to access UIRI's facilities, gain exposure to business incubation programmes and benefit from the institute's objectives.

UIRI's goals include transferring appropriate technologies for industrial development, bridging the gap between academia and the private sector through commercialisation of research outputs and promoting raw material value addition and research into production processes.

UIRI has the capacity to train up to 200 trainees, providing hands-on learning and

PHOTO BY JOHN ODYEK



Nawangwe (left) and Kwesiga (right) during the tour of UIRI complex at Namabwe Industrial Park in Mukono district, on Friday. Looking on are staff from Makerere University and UIRI

innovation opportunities. Prof. Charles Kwesiga, the executive director of UIRI, emphasised the need for increased efforts to promote industrialisation, both in Uganda and across Africa.

"There are many ways UIRI and Makerere University can collaborate to make a real change," Kwesiga said. "We want to ensure

knowledge is transformed into viable, commercial products. We need to narrow the gap between what's learned in lecture rooms and actual, commercial products."

Kwesiga said creating products is only part of the equation and that producing competitive and affordable commodities is equally important.

He highlighted the need for investments in infrastructure, such as quality roads and technology for production lines, alongside training people in understanding the economics of production.

Nawangwe said Uganda's growing, unemployed youth population holds the potential to drive industrialisation if equipped with the right

## CAPACITY BUILDING

Prof. Charles Kwesiga, the executive director of UIRI, addressed the importance of building local capacity to maintain equipment.

He cautioned against relying on foreign experts for feasibility studies, pointing out that many international consultants focus too heavily on economic feasibility and neglect the practical implications of technology.

Kwesiga cited the failed Lake Katwe Salt Factory project in Kasese district, where machines imported from abroad failed to process local raw salt, underscoring the need for locally adapted solutions.

knowledge, skills and attitudes.

He noted that many innovators face challenges in accessing affordable financing, which hinders their ability to scale their ideas.

## Media Relations



"We need to integrate AI into the curriculum; Machine learning is more efficient than human processes"  
Prof Charles Kwesiga, Executive Director UIRI



Ms. Orishaba encouraged Ugandans to join UIRI and leverage its resources to further their innovations. Emphasizing the institute's commitment to serving the nation, she urged entrepreneurs to "innovate, not evaporate." Innovation is a prerequisite for Economic growth



# UGANDA INDUSTRIAL RESEARCH INSTITUTE



*"A Lead Agency in Industrialisation of Uganda"*

## Driving Value Addition through Innovation



*Transforming bamboo into treasures! Unique and eco friendly products processed at the IURI bamboo facility.*

The Uganda Industrial Research Institute (IURI) is at the forefront of transforming Uganda's industrial landscape through innovation and value addition. Established in 2002, IURI serves as a pivotal government-owned research institution dedicated to fostering industrial development by promoting applied research, technology transfer, and entrepreneurship.

IURI's role in Value Addition, entails converting raw materials into high-quality products that can thrive in both local and international markets. The institute's research and development focus on enhancing productivity and competitiveness across various sectors, particularly in food processing, textiles, ceramics, Bamboo, by leveraging innovative approaches, IURI aims to elevate the standard of

Ugandan products, making them more marketable and competitive.

IURI provides an extensive array of services designed to facilitate value addition including;

- Innovative Product Development: Crafting new products that meet market demands.
- Product Testing: Ensuring quality and compliance with industry standards.
- Technology Transfer and Development: Bridging the gap between research and practical application.
- Skills Training and Capacity Building: Empowering local entrepreneurs with relevant skills.
- Access to State-of-the-Art Equipment: Providing facilities for advanced manufacturing processes.
- Business Incubation: Nurturing startups in



*IURI's dairy processing technology: Adding value to milk for sustainable growth.*



*The essential oils distillation technology at IURI.*

various industry sectors to enable thrive in a competitive entrepreneurship space.

- Business Development and Advisory Services: Offering strategic guidance to enhance business operations.

These initiatives have significantly impacted Uganda's industrial sector, leading to numerous success stories that have resulted in job creation. Collaborating with various stakeholders, including small and medium-sized enterprises (SMEs), large industries, and government agencies, IURI develops innovative solutions that enhance the value of Ugandan products. A notable highlight of our collaborations is the partnership with Riela, a German-based company that manufactures innovative equipment

for value addition to agricultural products. This strategic alliance underscores IURI's dedication to driving innovation and technology transfer in the agricultural sector, enabling Ugandan farmers and agribusinesses to access world-class solutions that enhance their productivity and competitiveness.

As a center of excellence recognized within the East African Community, IURI emphasizes sustainable growth through long-term strategies by bridging the gap between academia, government, and industry to ensure that innovations are effectively translated into economic value.

Through its comprehensive approach to research, development, and capacity building, IURI stands as a vital player in Uganda's journey towards rapid industrialization, driving economic growth and improving livelihoods.

### MOBILE GRAIN CLEANER AND DRYING RIELA



Address Plot 42A Mukabya Road, Nakawa Industrial Area, P.O. BOX 7086 Kampala, Uganda.  
Tel: +256 414286245 Web: www.iuri.gov.ug X: @IURI\_UG Facebook: Uganda Industrial Research Institute

IURI participated in the 2025 Harvest Money Expo showcasing technological innovations for agriculture alongside international partners RIELA and seeking to connect with innovators, entrepreneurs and stakeholders in the agriculture sector.

Mr. Asuman Ratib IURI's Director of Product Development appeared on Sanyuka TV, shedding light on the Institute's pivotal role in innovating for sustainable development



## Gallery

UIRI Hosted a delegation of students and faculty members from the High Military School of Algeria to explore UIRI's cutting-edge research facilities.

UIRI hosted Traders from the President's initiative which aims to promote local manufacturing and reduce importation to promote Uganda's industrialisation agenda.



UIRI hosted 133 senior soldiers from National Leadership Institute, Uganda Police, Uganda Prisons, ISO, ESO Wazalendo Sacco and the Uganda Peoples Defence Forces.



UIRI Staff won Best Performance Team in the end of year 2024 Corporate Games Uganda!

Plot 42A Mukabya Road, Nakawa Industrial Area,  
Kampala, Uganda  
+256-414-286-245  
info@uri.go.ug  
marketing\_all@uri.go.ug



#We Are  UIRI

