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UNIVERSITY

Knowledge is Wealth/Akili ni Mali (*Sapientia divitia est*)

10th International Research Conference Proceedings

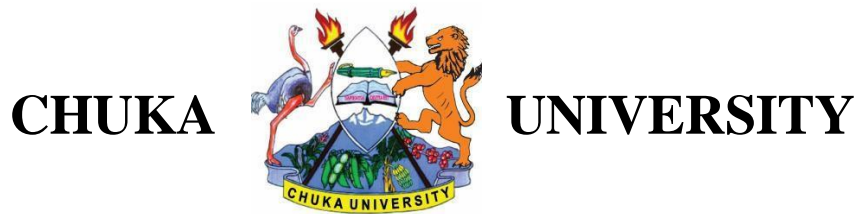
THEME: MAINSTREAMING RESEARCH, INNOVATION AND TECHNOLOGY TRANSFER
AND COMMERCIALIZATION FOR SUSTAINABLE ECONOMIES (MRIT-TCSE)

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Conference Proceedings
5th and 6th October, 2023

Chuka University is Inspiring Environmental Conservation for Better Life



Knowledge is Wealth/Akili ni Mali (*Sapientia divitia est*)

Conference Proceedings

Tenth International Research Conference

Dates
5th - 6th October, 2023

Theme:
“Mainstreaming Research, Innovation and Technology Transfer and Commercialization
for Sustainable Economies (MRIT-TCSE)”

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CHUKA UNIVERSITY FUNDAMENTAL STATEMENTS

Motto: Knowledge is wealth

Slogan: Inspiring Environmental Sustainability for Better Life

Philosophy: Quality education, training, research, extension, environmental sustainability, and entrepreneurship lead to social cohesion, human integrity and economic development

Vision: A Premier University for the provision of quality education, training and research for sustainable national and global development

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- a) Freedom of Expression
- b) Integrity
- c) Sustainability
- d) Teamwork
- e) Excellence and Professionalism
- f) Confidentiality

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PREFACE

Chuka University is a chartered Public University located in Eastern Kenya. The University held the 10th Annual International Research Conferences from 5th to 6th October 2023. The Theme of the Conference was: “**Mainstreaming Research, Innovation and Technology Transfer and Commercialization for Sustainable Economies (MRIT-TCSE)**”

Innovative research remains a key player in achieving sustainable quality of life for humanity. The 10th Chuka University Conference aimed at fostering transformation of innovative research into enterprise outputs to meet the contemporary societal needs. The conference theme was in line with the UN Sustainable Development Goals and Global Economic Agenda blueprints such as Education for Sustainable Development, and Global Citizen Education. Together with the subthemes, it aspired to link scholars, researchers, industrialists and policy-makers to establish firm partnerships for development.

The objectives of the Conference were:

1. To apprise technology-transfer and commercialization of research innovations for sustainable economies.
2. To display research innovations, and entrepreneurship opportunities in the face of current economic crises.
3. To influence policy through evidence in research innovations commercialization in meeting societal needs.
4. To share novel research outputs that will contribute to sustainable livelihoods and economies for transformative societies.

The conference was organised around seven subthemes:

1. Climate Change and Real Solutions through Advanced Climate Justice
2. Science, Engineering and Technology
3. Education and Training
4. Hospitality and Business
5. Health for Sustainable Economies
6. Law, Humanities and Social Sciences
7. Agriculture and Environment

The conference attracted over 233 abstracts from Kenya and beyond, comprising academicians, policy makers, researchers, industry players, NGOs, and CBOs among others, from both public and private sectors. Many universities in Kenya and allied institutions were represented in this conference.

There were plenary sessions and networking opportunities with conference participants. The organizers invited several key lead speakers from pertinent industry sectors to curtain-raise the various breakout sections. The best upcoming scientists (Early Career Researcher) in male and female categories were also awarded at the closing ceremony.

Rappouteur reports compiled in these proceedings offer an informative summary of the pertinent issues canvassed during the conference. The full manuscripts submitted have been packaged into proceedings and the highest quality ones will be upgraded for review and publication in the Chuka University *Journal for Environmental Sustainability Enhancement Research (JESAR)* by March, 2024.

We were glad to have hosted you at Chuka University and we hope you found the conference informative and enjoyable.

Professor Gilbert Nduru

Ag. Deputy Vice-Chancellor (Academic, Research & Student Affairs), Chuka University

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