

Preface

Welcome to the publication of selected articles from the 2nd edition of the Africa International Conference on Clean Energy and Energy Storage (AICCEES). In the pursuit of advancing clean energy and energy storage solutions for a sustainable future in Africa, AICCEES 2024 brought together an assembly of brilliant minds, innovative researchers, and industry leaders. This book is a testament to the vibrant exchange of ideas and knowledge that took place during the conference.

AICCEES 2024 in Retrospect

AICCEES 2024 served as a pivotal platform for researchers, practitioners, and policymakers to converge and deliberate on the latest developments in the field of clean energy. The conference aimed not only to showcase the current state of research but also to foster collaborations and inspire future breakthroughs.

Acknowledging the Contributors

We extend our deepest gratitude to all the authors who shared their insights, research findings, and expertise. Your dedication to advancing the discourse on clean energy is evident in the quality and diversity of the selected articles included in this compilation. We also acknowledge the Scientific Committee members who provided quality reviews that significantly improved the quality of the research papers.

Appreciation

A special appreciation goes to Tovero Energy Ltd, the driving force behind the organization of AICCEES 2024. Their commitment to fostering knowledge exchange and innovation was instrumental in the success of this conference. We also express our heartfelt thanks to the Conference Chairs, members of the Scientific Committee, and Keynote Speakers for their leadership, guidance, and contributions that shaped the conference agenda.

Recognition of Supporting Organizations

The success of AICCEES 2024 would not have been possible without the support of organizations that share our commitment to advancing clean energy solutions. We extend our appreciation to Transforming Energy Access Learning Partnership (TEA-LP), Modern Energy Cooking Services (MECS), CODAHEA, Energy Technology Institute, University of Port Harcourt, The Africa Center of Excellence in Future Energies and Electrochemical Systems (ACE-FUELS), and others who played a vital role in supporting the conference.

Looking Ahead

With this edition, we invite readers to explore the cutting-edge research and ideas that were presented at the second AICCEES meeting. May this compilation serve as a source of inspiration and a reference for those committed to the pursuit of sustainable and cleaner energy solutions. Thank you for being a part of this transformative journey.

Engr. Anthony Mbukobong Akpasoh
Tovero Energy Ltd

Acknowledgements

Tovero Energy Ltd sincerely thanks God Almighty for making the 2024 edition of the Africa International Conference on Clean Energy and Energy Storage a great success. Tovero Energy Ltd would like to thank the Conference Chairperson, Professor Roland Uhumwangho, the Conference Co-Chairpersons, Professor Sunday Oyedepo, Professor Fidelis Abam and Dr. Ogheneruona Diemuodeke, and the management of the University of Port Harcourt, who worked hard to make this conference what it is by providing scientific and logistical support.

Tovero Energy Ltd would like to express its appreciation to all members of the scientific committee for their tremendous efforts and contribution to the success of the 2024 Africa International Conference on Clean Energy and Energy Storage. Tovero Energy Ltd is grateful to be known as an organisation that amasses a highly qualified and competent team who relentlessly worked for months to make this conference successful in hopes of creating a well-rounded society.

We further express our sincere appreciation to our partners for their tremendous contributions to the 2024 edition of the Africa International Conference on Clean Energy and Energy Storage, Energy Access and Renewable Energy Programme of the University of Port Harcourt, Nigeria, Transforming Energy Access Learning Partnership (TEA-LP), Consortium for the Development and Advancement of Hydrogen Economy in Africa (CODAHEA), ASACCOV, The Africa Center of Excellence in Future Energies and Electrochemical Systems (ACE-FUELS), and Modern Energy Cooking Services (MECS).

We acknowledge the prominent role undertaken by the brilliant keynote speakers, Professor Youba Sokona, and Professor Ishola Foluke, the authors, moderators, and panel session members who contributed scholarly and industry knowledge to the success of the 2024 conference.

Conference Organisers

Conference Chairs

Professor Roland Uhunmwangho

Former Dean, Faculty of Engineering, University of Port Harcourt

Conference Chair

Professor Sunday Oyedepo

Faculty of Engineering, Bells University of Technology, Ogun State, Nigeria.

Conference Co-Chair

Dr. Ogheneruona Diemuodeke

Head of Department, Department of Mechanical Engineering,
Director of Energy Technology Institute, University of Port Harcourt,
Rivers State, Nigeria.

Conference Co-Chair

Professor Fidelis Abam

Faculty of Engineering and Technology, University of Calabar, Cross
River State, Nigeria.

Conference Co-Chair

Scientific Committee

S/N Name

Affiliation

- | | | |
|----|----------------------------------|---|
| 1 | Dr. Celestine Ebieto | University of Port Harcourt |
| 2 | Professor Tunde Bello-Ochende | University of Cape Town |
| 3 | Dr. Ibrahim Muritala | Founding Member, CODAHEA (Consortium for the Development and Advancement of Hydrogen in Africa). |
| 4 | Dr. Kehinde Ogunsola- Saliu | Matheko International Limited/ Center for Petroleum, Energy Economics and Law University of Ibadan. |
| 5 | Dr. Shoeb Syed | Head of Department, Mechanical engineering.
Department, PNG University of technology Lae Papua |
| 6 | Professor Okedu Kenneth Eloghene | University of Port Harcourt |
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| 13 | Dr. Adeleke Tunde | Bells University |
| 14 | Dr. Nwaokocha Collins | Olabisi Onabanjo University, Ago-Iwoye, Ogun State. |

Organising Committee

Dr. Veronica Akpasoh

CEO, Tovero Energy Ltd

Engr. Anthony Akpasoh

COO, Tovero Energy Ltd

Nathaniel Essien

University of Uyo

Peace Esuuk Ikpokonte

University of Ilorin

Editors

1. Prof. Roland Uhunmwangho
2. Prof. Sunday Olayinka Oyedepo
3. Dr. Ogheneruona Endurance Diemuodeke
4. Prof. Fidelis Abam
5. Dr. Veronica Akpasoh
6. Engr. Anthony Akpasoh

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