



**29 – P30 January 2025, hosted by Tshwane University of Technology**  
RIVER MEADOW MANOR, IRENE 0062, SOUTH AFRICA

## MEET OUR KEYNOTE SPEAKERS



**Prof Sampson Mamphweli** is the Head of the Department of Science and Innovation's Energy Secretariat at the South African National Energy Development Institute. His role is to Science and Engineering National Energy Flagship Research Development and Innovation programmes. The programmes include the Coal CO<sub>2</sub> to X programme, the Renewable and Sustainable Energy Hub and Spokes Programme, Hydrogen South Africa and Energy storage.

Prof Mamphweli possess a PhD in Physics, he has published close to 100 research articles including four book chapters, he has accumulated more than 2000 research citations (Google scholar), He has supervised more than 26 Masters and PhD Students to completion. He was recognized by Stellenbosch University as Full Professor of Process Engineering and gave Inagural address in 2018. He was also recognized by the University of Fort Hare as Associate Professor in 2015, and he was winner of the University of Fort Hare's Vice Chancellor's emerging researcher medal in 2012. He graduated Masters with distinction from the University of Venda.

Prof Mamphweli is currently appointed as an Extraordinary Professor in Chemical Engineering by Stellenbosch University. He is also appointed by Durban University of Technology as an Honorary Research Professor.

He currently serves in various advisory committees and boards in the energy space, and he is a member of the President's Energy Crisis Committee workstream 7 that is dealing with data modelling and data repository.



**Dr Ozoemena Anthony Ani**, a Professor of Mechatronics and Agricultural Machinery, is the founding Head of Department of Mechatronic Engineering (2018-2023), Faculty of Engineering, University of Nigeria, Nsukka (UNN). He is the founder and Team Lead, Mechatronics Research Group, UNN; as well as the Research Team Lead for Energy Resource Assessment and Forecasting, World Bank Africa Centre of Excellence for Sustainable Power and Energy Development (ACE SPED) UNN. He is also the Pioneer Chair, Centre for Electric Vehicle Research and Development, UNN. Prof. Ani led the team that

produced a battery electric vehicle, Lion Ozumba 551 (online) which was inaugurated in July 2019. He was a visiting scholar to Michigan State University, USA in 2018, where he worked with a team in developing a solar recharged electric tractor.

Dr. Ani obtained his doctorate, year 2013, in Mechatronic Engineering with the Wheeled Mobile Robotics Laboratory, at the College of Mechanical and Electrical Engineering of Harbin Engineering University, China. He received his Master of Engineering in Agricultural and Bioresources Engineering from University of Nigeria, Nsukka in 2004 and Bachelor of Engineering in Agricultural Engineering from University of Ilorin, Nigeria, 1999. His research interest areas include: AI and Machine Learning Applications in Agriculture, Precision Agriculture, Robotics and Automation, Vehicle Mobility and Engineering, Electric Vehicles, Agricultural Machinery & Mechanization, Renewable Energy.

Dr. Ani was a Research Engineer at the National Center for Agricultural Mechanization, Ilorin, Nigeria from 2002 to 2005 before he joined the faculty as a lecturer in 2005. He is a registered Engineer with the Council for Regulation of Engineering in Nigeria (COREN) and the Editor of Nigerian Journal of Technology (NIJOTECH) which has been existing for over forty years. Dr. Ani has attracted and successfully implemented many research grants; he is currently a PI for a TETFUND National Research Fund focusing on cassava detection using deep learning.

He has to his credit over seventy academic publications in both international and national referred journals and conferences. He is a professional member of many reputable international and national professional organizations and a reviewer for many local and international journals. He has also participated in many national and community development projects, and currently leading a vehicle electrification project in Nigeria for both agriculture and transportation.

**VIEW FULL PROGRAMME AND REGISTER NOW**

<https://www.saiee.org.za/displaycustomlink.aspx?name=SAUPEC2025>