

How do publicly funded institutions contribute to sustainable socio-economic development?

an NSTF Discussion Forum in collaboration with the Science Councils and Statutory Bodies Sector

Day 1: 17 October 2023

Speakers' Biographies



09:10 –09:35

How does the WRC facilitate research that promotes sustainable development in the water sector?

Mr Tiyane Chauke currently serves as the Manager for International Projects and Partnerships at the Water Research Commission (WRC). He is responsible for the management and implementation of international programmes and projects at the WRC. He also manages the WRC international engagements, cooperation, partnerships (National and International), and promotion of the WRC in order to leverage opportunities and resources for South Africa (SA) and African water sector. Prior to joining the WRC, Mr Chauke was an Assistant Director at the Department of Science and Innovation (DSI), under the strategic partnerships Directorate. As such he was mainly responsible for project implementation and management between Europe and SA. Mr Chauke currently holds a BSc degree in Chemistry and Biochemistry from the University of Johannesburg, a postgraduate diploma in Future Studies from Stellenbosch University, a Master's in Business Administration (MBA) from Tshwane University of Technology (TUT) and he is currently pursuing a PhD in Technology and Innovation Management with the DaVinci Institute. Mr Chauke is a committed servant of the South African Public Service and continuously seeks to better the services, expertise, and knowledge he provides to his clients and the country. He has passion for translating science, technology and innovation products into economically viable instruments, hence his PhD studies.



09:35-10:00

How does the ARC drive research that promotes sustainable development in the food sector?

Prof Bongani Kaiser Ndimba, a son of a farmer, has a doctoral degree and post-doctoral training obtained from the University of Durham in England, United Kingdom as a fellow of the Association of Commonwealth Universities, British Council and the RSA NRF-Royal Society. Currently, he works as the Senior Research Manager (Director) of Infruitec-Nietvoorbij Institute (Head of the Institute for Deciduous Fruit, Vines and Wine Research) of the Agricultural Research Council (ARC) in Stellenbosch. The institute has more than 300 employees (permanent and seasonal) including students at more than 7 farms and campuses.

Prof. Ndimba is an Extraordinary Professor at University of the Western Cape (UWC) (2016 – to date). He was recently appointed by the DSI Ministry to serve as the RSA’s representative in the Council of Scientific Advisers (CSA) of the International Centre for Genetic Engineering and Biotechnology (ICGEB). He is also the National Contact Point (NCP) for the RSA and the European Union’s ESASTAP. Prof Ndimba previously worked as a Specialist Researcher heading the Proteomics Research & Services Unit of the ARC-UWC (2011-2014). To date, he has more than 50 peer-reviewed and popular publications and supervised dozens of Hons/MSc/PhD/Postdoc students. He is a co-investigator of many International Research Consortia. On the more personal side, he was born and raised in the Eastern Cape, eGqeberha and eNgqushwa, spending a significant amount of his upbringing working in the family farming and trucking businesses.

How do publicly funded institutions drive research that promotes sustainable development in the energy sector?



Dr Kittessa is a Physicist with over 15 years of experience in Renewable Energy Research, Development and Innovation. Kittessa received his PhD (2009) from the Nelson Mandela University and subsequently spent several years working as a post-doctoral researcher first for the University of Pretoria (UP) and then later in the CSIR National Laser Centre. (CSIR = Council for Scientific and Industrial Research) He is presently Principal Researcher & Research Group Leader for Energy Supply & Demand (ESD) Research Group (RG) within the Energy Centre at the Smart Places Cluster of the CSIR. The ESD RG underpins the Energy Centre's work in solar, wind, renewable energy production/supply forecasting, energy efficiency/demand response, and thermal energy optimisation inclusive of thermal energy efficiency, recovery and storage. The techno-economic viability of emerging and existing approaches to energy supply and

end-use efficiency are independently assessed to provide impartial advocacy to industry and consumers. He is involved in a number of initiatives of the Energy Centre, including the establishment of an Outdoor PV testing facility, defining the research agenda of the solar research, support to the South African government on solar energy research, development and innovation roadmap development as well as supporting the growing PV industry in SA. He has authored about 30 research papers, delivered presentations in various local and international conferences, runs several international collaborations, and is presently supervisor of 5 post graduate students.

Panel session: How do publicly funded institutions drive research that promotes biodiversity conservation?

11:30-12:15



Day 1 (17 Oct)

SANBI's role in research that promotes biodiversity conservation for sustainable socio-economic development

Dr Theresa Frantz has about 30 years work experience, with a Master's in Science; and Master's and PhD in Marine and Environmental Law. Her work experience is in the public sector as well as non-governmental organisation sector. She is currently the Chief Director for Biodiversity Research, Assessment and Monitoring at the South African National Biodiversity Institute (SANBI).

The early part of her career focused on research and management of marine living resources. This was followed by broadening her skills in the biodiversity sector. Having worked as a scientist and as a manager of scientists, she has a deep understanding of the development of scientific evidence to support decision making. She has experience in the development of national and international policy and laws, making her ability to operate at the science-policy interface a natural progression. Theresa is passionate about biodiversity and people. Supporting capacity development initiatives is a critical part of her legacy. She developed the leadership skills to lead passionate teams of scientists to fulfil the mandate and objectives of the organisation, while inspiring new cohorts of scientists.



Day 1 (17 Oct)

How do publicly funded institutions drive research that promotes environmental sustainability?

Dr Mary-Jane Bopape is the Managing Director of the South African Environmental Observation Network (SAEON), a business unit of the National Research Foundation (NRF). She holds a PhD in meteorology from the UP and did her postdoc at the University of Reading, UK. Prior to working at NRF, she worked at the South African Weather Service (SAWS) and CSIR. She led a weather modelling project to assist with the implementation of the Southern African Development Community (SADC) Cyber-Infrastructure Framework. She co-supervises postgraduate students in a number of South African universities. She is one of twenty-one 2019 Climate Research for Development (CR4D) fellowship grantees and a 2021 AIMS Women Fellow in Climate Change Science. She is a co-recipient of the 2008 World Meteorological Organization (WMO) award for young researcher. She served as the co-President of the South African Society for Atmospheric Sciences (SASAS) during the 2018-2020 term. She is on the National Institute for Theoretical and Computational Sciences (NITheCS) scientific advisory committee. She was listed as one of the most influential Africans of 2021 by the New African magazine.

Panel Session: The role of publicly funded institutions in research that enables sustainable development

12:15-13:00

Dr May-Jane Bopape- Representing SAEON (See above)

Dr Theresa Frantz- Representing SANBI (See above)

Panel discussion: The role of publicly funded institutions in research that enables development in the mining and manufacturing sectors

13:45-15:15



Mr Willem Meintjes had been serving in a variety of professional and management capacities in the private sector and government – initially in the consulting industry and most recently as part of the executive management team of the Council for Geoscience. Throughout his professional career thus far, Mr. Meintjes had been responsible for the conceptualization and delivery of a wide range of geoscience projects in the built environment for the benefit of society, professional team development and business- and strategic management through various prisms. He holds a Master of Science Degree in geoscience.



Mr Johan Strydom has been employed by the CSIR since 1982. He holds post graduate degrees in Engineering and in Technology Management from the UP. He served in several positions at CSIR, including Design Engineer, Systems Engineer, and Strategic Research and Innovation Manager. He currently serves as Acting Cluster Executive Manager of the CSIR Manufacturing Cluster.

Circular economy panel: How do publicly funded institutions promote the circular economy?

15:15-15:50



Organisation: MINTEK

With 18 years of experience in mineralogy, and qualifications in both geology and metallurgy. **Ms Marian Manuel** started her career at Mintek in 2005 as a scientist in training and has amassed a wealth of mineral industry and business development experience. Her professional memberships with the Geological Society of SA and the Southern African Institute of Mining and Metallurgical place her favourably to network throughout the mining value chain. In her current portfolio, she is responsible for two programmes: Minerals intelligence; and Tailings remediation and valorisation. Within the remediation and valorisation programme, she is pursuing her PhD at the University of Cape Town (UCT) in partnership with the Centre for Bioprocessing Engineering Research. Her study is focused on using nature-based technologies for the extraction of contaminants in tailings.



Organisation: CSIR

Prof Linda Godfrey is a Principal Scientist at the CSIR and Extraordinary Professor at NWU, SA, and holds a PhD in Engineering. With over 25-years of sector experience, she manages Circular Innovation South Africa and the Waste RDI Roadmap Implementation Unit on behalf of Government. She has provided strategic input to a number of local, regional and international waste and circular economy initiatives for the United Nations, European Union, World Bank, South African Government, business and academia. She lectures internationally on solid waste management and the circular economy in the context of developing countries. She has published extensively in the field.