



NSTF

S.E.T. for socio-economic growth

Speakers Biographies

Motivational Talks Programme

10 February

Online event on Zoom



Morning session: 11:00-11:30
**EVERY professional was once an
AMATEUR**

Dr Gillian Arendse

Manager: Communication and Stakeholder Relations, iThemba Labs

He is a well-known and loved presenter at many an Educational event; whether a school, conference or symposium. He is an experimental nuclear physicist (by training), motivator (by choice and conviction), and a general all-rounder committed to use his gifts and talents to impact the lives of every person with whom he interacts. His passion to leave people better than he found them is fuelled by a need to be challenged on a daily basis.

He is currently employed by the NRF-iThemba LABS as Manager: Communication and Stakeholder Relations; a position he took up on 1 July 2020. iThemba LABS offers unique capabilities in the field of accelerator-based science and technology on the African continent, and in the Southern Hemisphere, to advance knowledge, transform lives and inspire a nation, through research, training and expertise.



Morning session: 11:30-12:00
Scientists are needed everywhere!

Prof Carolina Ödman

Associate Professor and Associate Director: Development and Outreach, Inter-University Institute of Data Intensive Astronomy, University of the Western Cape

She is Associate Professor at the University of the Western Cape, South Africa and Associate Director, Development and Outreach at the Inter-University Institute for Data Intensive Astronomy (IDIA). Trained in physics at EPFL in Switzerland, she holds a PhD in cosmology from Cambridge University, UK.

She has done research in several fields of physics and developed educational programmes based on science from early childhood to postgraduate training. She has

	<p>also worked in a financial technology start-up. She now focuses on researching and bringing a development agenda to science. Her work has earned her numerous awards nationally and internationally. Most recently, she was awarded the 2021 South32-NSTF Science Communication Award.</p>
 <p>Morning session: 12:00-12:30 Studying at University and making the right choices for your future career</p>	<p>Prof Stephanie Burton Professor: Biochemistry; and Professor: Future Africa; and Immediate Past Deputy Vice-Chancellor (DVC): Research and Postgraduate Education, University of Pretoria (UP)</p> <p>She is Professor in Biochemistry, in the Faculty of Natural and Agricultural Sciences, and a professor at Future Africa at the University of Pretoria (UP), and the immediate past Vice-Principal for Research and Postgraduate Education at UP, having served in that role from 2011 to 2020.</p> <p>Professor Burton is the President and a Fellow of the Royal Society of South Africa (RSSA), Vice-President of the Academy of Science of South Africa (ASSAf), a Research Fellow for Universities South Africa (USAf), the Chairperson of the Future Earth Regional Office for Southern Africa (FEROSA) and a member of the Governing Council of Future Earth. She holds an MSc in Organic Chemistry (1990) and a PhD in Biochemistry (1994) from Rhodes University. Her academic career started in Biochemistry and Biotechnology at Rhodes University, and then as Professor in Chemical Engineering at the University of Cape Town. She served as Director of Postgraduate Studies and Director of the Biocatalysis and Technical Biology Group at Cape Peninsula University of Technology before her appointment to the UP Executive.</p> <p>Her research interests are in sustainability, applied biochemistry and biotechnology, and she has published widely and supervised numerous postgraduate students.</p> <p>Professor Burton has a strong interest in research ethics and integrity, and she is recognised for her leadership and expertise in research strategy, research management, and performance, postgraduate training, innovation activities, open science and science communication initiatives, and internationalisation programmes. She is currently coordinating national projects on mentoring and capacity development for early career academics. She serves on several national and international bodies related to research and doctoral training.</p>



Morning session: 12:30-13:00
From classrooms under trees to unlocking the future through science

Prof Azwinndini Muronga
Theoretical Physicist and Executive Dean: Faculty of Science, Nelson Mandela University (NMU)



Afternoon session: 14:30-15:00
Being a Contributor in SET and Innovation Fields: An Engineer's perspective

Mr Segomotso E Kelefetswe
Founder and CEO: Outlook Foundation

- Founder and CEO of Outlook Foundation and is passionate about Youth development
- A professionally registered Civil Engineer and a member of South African Institution of Civil Engineers (SAICE).
- He has about 20 years of experience, in the study, design and construction of dams inclusive of dam safety surveillance within and outside the borders of South Africa; project management and executive managerial experience
- He is currently employed by Trans Caledon Tunnelling Authority (TCTA) as a Project Engineer
- He is the past chairperson of South African Institution of Civil Engineering's Water Engineering Division (Now a Treasurer), board member for TUT's Engineering Faculty's Advisory Committee and MANCO member of the South African Council on Large Dams (SANCOLD). He has also served in a Professional Advisory Committee at ECSA.
- He obtained his Bachelor of Science in Engineering degree at Wits University in 2002 and his Masters in Engineering Management studies at University of Pretoria in 2020. He also completed Construction Management Programme (CMP) certification in 2015 at Stellenbosch University.
- Segomotso has motivated and mentored many young people as well as being invited to speak as a guest speaker at various youth events not limited to, National Olympiads awards gala evenings, National Science Week celebrations, South African Agency for Science and Technology Advancement (SAASTA) role Modelling campaigns,

	<p>church youth activities, community development programmes and at various schools. He is also involved in mentoring many young professionals especially in the engineering sector and through Outlook Foundation involved in mentorship programme for the Department of Public works bursary holders.</p>
 <p>Afternoon session: 15:00-15:30 What is the STEMulator and how can you become involved?</p>	<p>Ms Kgaugelo Pule NSTF/STEMulator Research Assistant</p> <p>She is passionate about education and being a communication strategist at heart and she loves developing concepts that reap real solutions. Her sole intention is to be part of a cutting-edge industry that is involved in various pioneering initiatives that empower societies.</p> <p>Her NSTF role is researcher for the STEMulator. In her spare time she runs an NPC called Open Home Africa, which is an initiative that encourages families/singles to open their home up as places of safety for vulnerable children to have forever homes.</p>