



Higher Education and Training
Science and Innovation

Science Diplomacy for Economic Development: **HYDROGEN ECONOMY**

Biographies

05 – 06 DECEMBER 2022

TWO OCEANS AQUARIUM, V&A WATERFRONT,
CAPE TOWN - SOUTH AFRICA (HYBRID FORMAT)

OUR ORGANISERS



BIOGRAPHIES

HIGH LEVEL OPENING: SETTING THE SCENE



MS MOHAU PHEKO

CIO The Crop Lab, Former Ambassador to Canada and Japan

30 years of progressive professional accomplishments in the areas of economic planning, agriculture, international relations and trade, sustainable development, political economy, public health, gender budgets, economic and trade literacy, business planning, training and facilitation. Served on networks creating platforms for gender and feminist analysis of the global financial architecture. Created an economic and trade literacy manual for women. Participated in creating advocacy and training manuals to enhance women's understanding of how to enter global supply chains Futurist & Trend Analyst As a futurist, working with a network of sustainable engineers to explore applications of Blockchain technologies in agriculture.

In line with Society 5.0 working with Japanese academics/researchers to use artificial intelligence and observation data for evidence based policy making and implementation of the sustainable development goals. Smart Agriculture Collaborating on climate resistant smart agriculture start-up to grow protein based vegetables from African indigenous plants. The plan of the Crop Lab is to create flavours and colouring's from Africa's indigenous plants and flora. Work with several networks in the agriculture industry to increase the choice of functional foods that improve the nutrition value of food products for youth and children. Ms Pheko is also a member of Women in Green Hydrogen.



MS EUDY N. MABUZA

Senior Science and innovation representative, Brussels

Ms Mabuza has seventeen and half years of progressive experience in the Public Sector engaging and mediating with international agencies in an effort to increasing bilateral and donor relations towards the South African Science System. She has been dealing with a wide range of policy issues; long-term development planning, as well as specific innovative public capacity development issues.

She is currently serving as a Minister Counsellor: Science and Innovation at the Embassy of the Republic of South Africa in Brussels where she is seconded by the Department of Science and Innovation. Previously, she was the Chief of Staff (Head of Cabinet) to the Minister of Higher Education, Science and Innovation. She also served as a Minister Counsellor in Tokyo, Japan where she was able to leverage funding for research collaboration for the following major research projects: Infectious Disease Early Warning System (iDEWS), Development of New Ammonia Synthesis using Renewable Energy and Hydrogen under the Science and Technology Research Partnership for Sustainable Development (SATREPS) framework. Furthermore, Ms Mabuza was instrumental in the establishment of the Africa-Japan Collaborative Research (A-JCORE) platform.

She holds an Honours Degree in International Relations from the University of Pretoria, Bachelor of Social Sciences in Political Studies from University of Cape Town, and a Postgraduate Degree in Project Management from the Business School of the University of South Africa

BIOGRAPHIES



DR REBECCA MASERUMULE

Acting Deputy Director General: Technology Innovation at the National Department of Science and Innovation

The Technology Innovation Programme is responsible for promoting technology development and valorization of intellectual property emerging from the National System of Innovation. The Technology Innovation Programme is also responsible for promoting awareness and best practice in intellectual property for innovation with socio-economic impact.

Dr Rebecca Maserumule is also Chief Director: Hydrogen and Energy at the National Department of Science and Innovation (DSI) in South Africa. Her responsibilities include the implementation of the National Energy Science Technology and Innovation Plan that includes DSI energy flagship programmes of Hydrogen South Africa, Energy Storage RDI Programme, Renewable Energy Hubs and Spokes and the Coal CO₂ to X RDI Programme. The goal of the Energy Science Technology and Innovation Plan is to support South Africa towards a just and inclusive net zero carbon economic growth for societal wellbeing by 2050. The implementation of key policies in partnership with key stakeholders such as the Hydrogen Society Roadmap which was recently launched in February 2022 is core to her duties.

Rebecca holds a Ph.D in Mathematics with a focus on computational fluid dynamics from Rensselaer Polytechnic Institute in Troy, New York. Before joining the Department of Science and Innovation she worked for the Department of Mineral Resources and Energy as an Industrial Energy Efficiency Specialist and a Demand Modelling Specialist supporting the development of policies such as the Integrated Energy Plan and the National Energy Efficiency Strategy. Her early working career was spent as a senior researcher at the Council for Scientific and Industrial Research focusing on using models to analyse the impact of climate change on water resources.



NIENKE HOMAN

CEO, Impact Hydrogen

Nienke plays a leading role in the energy transition in the Netherlands, the European Union and beyond. She is an expert in industry, hydrogen and energy systems. She is a former Regional Minister in the Northern Netherlands and was in that role very involved in setting up the first Hydrogen Valley of Europe. Besides Impact Hydrogen Nienke is also a board member of the Green Hydrogen Organisation in Geneva.

BIOGRAPHIES

PANEL DISCUSSION: 9:45-10:30



MS FAHMIDA SMITH

Principal Market Development, Anglo American

Fahmida is a Chemical Engineer by profession and has been in the PGM mining industry for 25 years. The last 14 years of her career has been focused on Market Development, particularly on the hydrogen and fuel cell sector where she was responsible for the development of the first hydrogen fuel cell forklift and refuelling station in South Africa.

Fahmida leads Anglo American's Market Development work on the wider global hydrogen economy development, where she works closely with the South African Government as well as local and international industry players. Her current focus is on the development of a South African Hydrogen Valley and the first heavy-duty hydrogen freight corridor.

Fahmida also leads PlatAfrica which is a flagship market development jewellery design and manufacturing programme in South Africa. In addition, she leads activities in the battery & storage as well as MedTech opportunity areas.

Fahmida is Vice-chair and non-Executive Director of the African Hydrogen Partnership and a non-Executive Director of the Platinum Incubator.



MS ZANELE MAVUSO MBATHA

CEO Bambili Energy

Zanele has over 27 years of work experience in the renewable energy industry, mining industry and financial markets. Currently CEO of Bambili Energy a manufacturer of hydrogen fuel cell systems and their subcomponents. On behalf of Bambili, Zanele is: • Co-leading the development of the fuel cell industry • Co-developing the first Hydrogen Corridor in South Africa with South African and international corporations for the roll-out of hydrogen fuel cell trucks and buses • Co-developing the first Hydrogen Valley in South Africa with the South African Government and local and international corporations for hydrogen economic hubs • Lead the creation of the first Hydrogen fuel cell training programme in Africa that has graduated 35 engineers and technicians. Previously Head of Financial Markets at the SA Reserve Bank, the unit which manages country's foreign reserves and implements of South Africa's monetary policy. Former CEO of Incwala Resources, a platinum mining company in South Africa. Zanele was also a Co-founder and Director of Dema Group, a majority shareholder in Incwala Resources. A former Executive Director of Abt Associates Inc, where she co-established its regional office for southern Africa, where she was responsible for advising the South African government on the telecommunication and transportation sectors. Prior to Abt Associates, Zanele was an Investment Banker at Salomon Brothers and J.P. Morgan Inc., in New York City, USA. Zanele is a graduate of Mills College, Oakland, California, USA. Zanele has served as Non-Executive Director and Chairman on several Boards, including Lonplats, Hollard Insurance, Dema Group, Incwala Resources. Zanele was nominated as a Global Leader of Tomorrow by the World Economic Forum in 2011. Zanele was nominated as a African Leadership Fellow at the Aspen Global Leadership Network & African Leadership Initiative in 2020

BIOGRAPHIES



MS RILET DAVISON

Head Hydrogen Programme Management Global Market Hydrogen Development, Sasol Energy Business

Rilet is the Sasol Global Market Hydrogen Development, Head of Hydrogen Programme Management, and is leading the Business Development on the Boegoebaai Green Hydrogen Hub pre-feasibility study.

Rilet has over 18 years' experience in the petrochemical industry, leading operational improvement and business enablement teams and specialising in the development of end-to-end supply chains for small to mega-scale capital projects (incl. greenfield) in Africa and internationally. She is the holder of an MBA and an honours degree in Operations Research.



DR. ZWANANI TITUS MATHE

CEO, SANEDI

Titus, is a South African who is passionate about the development of Africa. He has an in-depth understanding of the various energy sources and technologies, their utilization and benefits. Titus has more than 25 years of industrial and academic work experience, of which 8 years has been spent at General Manager Executive level. He is currently a Chief Executive Officer at the South African National Energy Development Institute (SANEDI). Titus is busy with repositioning of SANEDI to play a crucial role in energy security.

Before joining SANEDI, Titus worked as a General Manager at Eskom in various roles including being a General Manager for Eskom RT&D, acting Senior General Manager for Group Technology, General Manager Generation Asset Management and General Manager Generation Engineering.

Titus is registered with the Engineering Council of South Africa (ECSA) as a professional engineer, a Member of the South African Institute of Chemical Engineers (SAICHE), a Member of the South African Institute of Mining and Metallurgy (SAIMM), a Fellow member of the South African Academy of Engineering (SAAE), a Council member of SAICHE, a member of various Academic Institutions Advisory Boards. He is also a former member of the Engineering Council, and a former Council for Built Environment (CBE) Council member.

BIOGRAPHIES

PANEL DISCUSSION: 10:30-11:20



NILS FLAATTEN

Group Manager: Corporate Strategy, Media and Stakeholder relations at the SABSI

He has fifteen years (15) executive management experience and during the last two decades his career has seen him worked in the European, Asian, and African markets. During this period, he has developed a very deep and rich network of business, governmental and civic leaders.

He specialises in strategy, business development, media relations, public and government affair and has previously served as CEO of Wesgro, Chairman of the Saldanha Bay IDZ Licensing Company and the Tshwane Economic development Agency



MS. RIRHANDZU MASHAVA

Deputy Director General, Integrated Transport Planning at the National Department of Transport

Ms. Rirhandzu Mashava is a Deputy Director General, responsible for Integrated Transport Planning at the National Department of Transport. Her jobs include, amongst others, the development of policies, advocating for Climate Change & global sustainability, driving innovation and research to improve the transport sector as well as oversee the development of transport funding mechanisms, and providing relevant economical advice. She holds a Master's Degree, specializing in Transport Economics and Logistics Management obtained from the University of Johannesburg. Rirhandzu has a solid technical background with a strong interest in achieving the goals of the National Development Plan, encouraging transport system integration, decarbonising the transport sector in alignment with the climate change prescripts, and a passion for strengthening the Southern African economy as well as development goals of the African Continent through sustainable development.



MS MAMPHOKHU KHULUVHE

Director: System Monitoring & Labour Market Intelligence, Department of Higher Education and Training

Ms Mamphokhu Khuluvhe is the Director for System Monitoring & Labour Market Intelligence at the Department of Higher Education and Training. She manages and oversees a major research project on Labour Market Intelligence which is a flagship intervention of the Department of Higher Education and Training to make the post-school education and training system more responsive to the needs of the labour market and to foster a demand driven approach to education & training. Before joining the Department of Higher Education and Training, she worked for the Department of Human Settlement responsible for the overall management of conditional grants; National Treasury responsible for monitoring and analysing the intergovernmental grant system for Local Government; and Statistics South Africa responsible for the publication of the financial census of municipalities.

PRESENTATIONS: LESSONS FROM ESTABLISHED VALLEYS AROUND THE GLOBE



MS DITSHEGO TSEBE

Technical Advisory Panel Member in the Gauteng Provincial Economic War Room

Currently serving as Technical Advisory Panel Member in the Gauteng Provincial Economic War Room, directly reporting to MEC Parks Tau in the Department of Economic Development. Responsible for advising on matters regarding implementation of the Growing Gauteng Together Strategy (GGTS 2030) Including development of investment intelligence, incentives for Gauteng Province, investment implementation and unblocking. Recently, she has been appointed as the Group Executive for the Gauteng Technology Investment Office with key focus areas including:
Investment in Data-centre clusters and physical management/ transmission infrastructure, Software Defined Vehicles, Financial Technology (FinTech) and Decentralised Finance (DeFi), Online worker pools focused on Mass-scale data-labelling and data-management, Work From Home opportunities and GBS roles. Ms Tsebe previously she served as the Lead for South Africa's first Country Investment Strategy (CIS) in the Investment and Infrastructure Office (IIO) in The Presidency. She also formally served as a representative of Infrastructure South Africa (ISA) in Infrastructure Investment and unblocking policies of the public sector regulatory framework, she has an in depth understanding of policy formulation processes within government together with the ability to synthesize and analyse information from widely divergent views. She possesses a high ability for conceptualization and design of policy and policy implementation. Leaning heavily on her broad experience in the policy and regulation and in the development space; having served as a Director of Social Policy at Business Unity South Africa, a Programme Manager at the Cyril Ramaphosa Foundation and Research Analyst at Mswiss Finance and Investment.

She currently continues her work in the Presidency in the Project Management Office under Operation Vulindlela aimed at accelerating structural reforms in the digital economy and has successfully led the finalisation of the development of the Draft By Law for Deployment of Electronic Communications Facilities at municipal level currently gazetted for public comment. Ms Tsebe possesses an Honours degree in Political Science and International Relations and is currently a candidate for Master of Philosophy (M.Phil) in Development Finance at the University of Stellenbosh Business School. Thesis being on "Exploring the possibility of a Micro Pension Fund for South Africa". She has completed Certificate Programmes in Project Management, Senior Management, pre-entry programme with National School of Government. In addition to this, has completed a Foundation Course from the Infrastructure and Projects Authority in the United Kingdom, for Business case development for infrastructure projects and International Infrastructure Guidance practitioner course She has also completed courses in Risk Management, Monitoring & Evaluation and Impact Assessment and a SAB Certificate in Leadership Skills and a separate one in Facilitation Skills.

BIOGRAPHIES



GEERTE DE JONG

Manager: HEAVENN

Geerte de Jong is the program manager for HEAVENN since August 2022. Geerte previously worked on various projects regarding renewable energy and sustainability. She worked at local environmental NGOs in projects regarding onshore and offshore wind energy. At the University of Groningen she worked on decarbonizing the university's energy use. And at the local government she worked on various large projects regarding renewable energy and European projects. As the program manager she is responsible for helping the 31 HEAVENN partners reach their goals and milestones and creating a working hydrogen value chain together.



DR. KOTANI, MOTOKO

Executive Vice President (Research), Tohoku University

Executive Vice President (Research) of Tohoku University, Professor and Principal Investigator of the WPI Advanced Institute for Materials Research (WPI-AIMR) and Professor, Mathematical Institute, Graduate School of Science at Tohoku University. Motoko Kotani specializes in geometry, especially, discrete geometric analysis. She received the 25th Saruhashi Prize for her contribution to Discrete Geometric Analysis on crystal lattice. She served as an executive member of the Council for Science, Technology and Innovation, the Cabinet Office, the former President of the Mathematical Society of Japan. She is a member of the Science Council of Japan and a member of Board of Governors, Okinawa Institute of Science and Technology School Corporation. She served as Executive Director of RIKEN. She has been elected as President-Elect of ISC, assuming the Presidency at the next General Assembly in 2024.



PROFESSOR STEPHEN CUMMINGS

Pro Vice Chancellor for Research and Innovation, Teesside University

Professor Cummings joined Teesside University in 2016 and is responsible for Teesside's research and innovation portfolio. Prior to his appointment as Pro Vice-Chancellor he was Dean of the School of Science & Engineering at Teesside before taking up the role of Dean of the School of Health & Life Sciences in 2019, where he led the development of a more innovative curriculum offer and nurtured the growth of research across multi-disciplinary base areas.

Since joining the University in 2016 Professor Cummings has led on a number of key strategic projects to cement the University as an anchor institution in the Tees Valley. These include the development of the National Horizon Centre, a centre of excellence for skills and research development to support bio-manufacturing and bioprocessing industries. The Net Zero Industry Innovation Centre, a research and innovation offer to support the developing hydrogen and decarbonisation economy in Teesside and Teesside University's socio-economic campus project aligned to Treasury North at Darlington.

BIOGRAPHIES



JORGO CHATZIMARKAKIS

CEO, Hydrogen Europe

Jorgo Chatzimarkakis has been working at Hydrogen Europe since 2016. He currently holds the position of CEO of the association. He previously covered roles in the planning department of the Foreign Office of Germany, at Infineon Technologies and was Member of the European Parliament (2004-2014) inter alia in the ITRE Committee (Industry, Technology, Research and Energy) where he could contribute to lay the cornerstone for the first and the second Joint Undertaking on hydrogen and fuel cells. He was awarded Hydrogen Person of the Year at the World Hydrogen Awards 2022, "as a major player promoting hydrogen in Europe and world-wide, accelerating collaboration and industry development". Jorgo was born in Duisburg, Germany. He holds German and Greek nationality, and a degree in political science from the University of Bonn.

ACCELERATING HYDROGEN ECONOMY: PANEL DISCUSSION 14:00-15:00



MR MAHARANDRA ROOPLALL

Industry Strategic Planner, IDC

Mahandra Rooplall is an industry strategist and industry planner. Mahandra Rooplall previously worked as a Project Investment Specialist focusing on energy economics, project development, risk management, project management and business development. In his career, Mahandra has advised State Owned Entity Clients, Lenders to Power Projects and Independent Power Producers in an Owner Engineering, Lenders Technical Advisory, Programme Management and Risk Management capacity. Mahandra also worked in the petrochemical and energy for 11 years undertaking investment analysis and risk management on major investments, business development on green field projects, project management on multidisciplinary projects and design of plant optimization systems. Mahandra has a degree in Electronic Engineering and an MBA. Mahandra is registered as a professional engineer (PrEng) and as a project management professional (PMP).



TSHEPO NTSANE

Transactor: Sustainable Finance and ESG Advisory, RMB

Tshepo is a skilled engineer, having spent more than 11 years in the petrochemical industry where he focused on the development of sustainability technical solutions. • He joined RMB, through the Class Of programme, in 2021 and was placed in Future Market and Sustainability, where he was instrumental in the identification of new opportunities within the green economy, development of new products for the bank, and revision of the bank's ESG frameworks and policies. • Since joining the Sustainable Finance and ESG Advisory team, Tshepo provides technical expertise on sustainable finance solutions, including driving the bank-wide carbon market development and green economy initiative, with a focus on green hydrogen and its derivatives. • Tshepo's sustainable finance experience includes green loans, sustainability-linked loans, carbon financing, including the first carbon loan for RMB, and supporting the development of ESG advisory solution.

BIOGRAPHIES



MS NADEGE HOPMAN

Deputy Head of the regional representative for South Africa and the Indian Ocean, EIB

Nadège is the deputy head of the regional representation for Southern Africa and the Indian Ocean at the European Investment Bank in Pretoria.

She focuses on public sector projects with a keen interest in the nascent green hydrogen economy and its potential triple dividend of economic growth, fight against climate change and increased security of supply.

She worked in sustainable development finance both at the Agence Française de Développement (AFD) in Paris while on secondment and at the EIB since 2012.

Before devoting her work to investment and development finance, she worked with Schlumberger for 12 years mostly in Africa and the North Sea. She held various positions in the field and went on to lead technical teams on some first-of-a-kind CO2 storage projects in Europe.

She has co-authored several papers both on technical and on psychology-related topics.

Nadège holds a Masters in Civil Engineering, a Masters in Geophysics, an MBA from INSEAD and a BSc in Psychology. She is currently completing an MSc in Social Psychology.



MS. MOJABENG MANTHATA

Acting Head - Energy, Environment & ICT , DBSA

SPEAKER



MATTHIJS SOEDE

Mission Innovation Clean Hydrogen Mission director European Commission

Studied at the Delft University of Technology and has a PhD in Chemical Engineering. He began his career at the Ministry of Economic Affairs in the Netherlands, as specialist in international research cooperation. In 2008 he joined the European Commission in DG Research and Innovation as policy officer in Industrial Technologies and moved to Clean Energy Transition being responsible for offshore renewables. Since 2021 member of the MI Clean Hydrogen Mission co-leads team and appointed as Mission Director.

BIOGRAPHIES

PANEL ON SOCIO-ECONOMIC IMPACT 6TH



YERSHEN PILLAY

CHIETA CEO

Yershen Pillay is the chief executive officer (CEO) of the Chemical Industries Education & Training Authority (CHIETA), a statutory body which facilitates skills development in the South African chemical industries sector. Pillay has a Master's in Business Administration (MBA) from the Gordon Institute of Business Science at the University of Pretoria. He completed his Bachelor of Social Science (BSocSc) in Political Science and Economics. He then went on to complete a Postgraduate Diploma (PG Dip) in Business Administration.

Pillay has held various prominent positions throughout his career, including being the Executive Chairperson for the National Youth Development Agency and being the president of the Pan African Youth Union. He has also served as board member for various organisations including being an Advisory Board Member at the African Energy Leadership Centre which is part of the WITS University Business School. He currently serves as board member for the South African Forestry Company (SAFCOL) and Airports Company South Africa (ACSA).

Mr Pillay has presented various papers at international and local fora including recent papers on the green hydrogen economy, climate change and immigration, and collaboration models for skills development authorities. He is ranked among the Top 100 African Economic Leaders under the age of 40 by the Institute Choiseul in France and received the CEO Innovation Award in 2021 for his efforts in driving innovation in skills development and training.

From April to November 2020, Pillay was the Director of Stakeholder Management for the Department of Higher Education and Training (DHET). He has been the CHIETA CEO from October 2020 to date.



DR GUGU MCLAREN USHEWOKUNZE

Head of Economic inclusion

Gugu McLaren-Ushewokunze is the Head of Economic Inclusion at the National Business Initiative (NBI). Her responsibilities include developing and implementing the NBI's strategy to engage business in driving our most challenging social issues with the aim of addressing inequality, exclusion and inequity. She has more than 15 years' experience in the field of social and sustainable development, having worked across sectors, with the bulk of her career within the corporate sector driving the development and implementation of sustainable development strategies. She holds a MSocSc in Gender and Development from the University of Cape Town.

BIOGRAPHIES



MR BONGA MAKHANYA

Founder and executive Chairman

Bonga Makhanya is the Executive Chairman of South African Youth Economic Council , youth led advocacy and lobby group. The South African Youth Economic Council has done extensive work with the Department of Mineral Resources and Energy on the Just Energy Transition through creation of various policy conferences and imbizos to formulate a strategy on created broader youth participation in the energy sector and in the JET. Other stakeholders include the Presidential Climate Commission whom we have worked with well on this JET. Bcom(Economic Sciences) Graduate from Wits University and currently enrolled for Postgraduate Studies at Wits University in Bcom(Economics) Honours program. Activist, Academic Writer and public intellectual that focuses on policy and economic analysis in the public domain. Written pieces for News24, EyeWitness News and IOL. Regularly offer economic analysis and economic opinions on tv stations such as Newzroom Afrika , SABC News, eNCA



MS NIKKI GRIFFITHS

Social Impact Lead, RMB

Nikki is the Social Impact Lead within the RMB Sustainable Solutions team having worked in the area of social impact and social investment for over 16 years. At RMB, Nikki's focus is on providing expertise into the design and implementation of social sustainable finance solutions Her experiences ranges from designing social impact strategies for clients to the management and disbursement of social impact funds. Nikki has worked with clients from renewable energy, mining and financial services to understand and enhance their social impact through a variety of delivery mechanisms. Prior to joining RMB, Nikki was the COO of Tshikululu Social Investments.



MS ANN ABHEIDEN

Director, Impact Hydrogen

Ann Abheiden is co-founder and director at Impact Hydrogen. At Impact Hydrogen Ann Abheiden serves as a Director for making Impact where she puts to use the knowledge she gained when working as a strategy consultant in the energy and manufacturing sector and combines those skills with her working experience at NGO's in sustainable development. Ann has a lot of experience in leading large multi-lateral projects and programmes.

BIOGRAPHIES



MR MICHAEL ELLIS

Manager: Science and Communications, SASSTA

Michael is a science communication manager at the South African Agency for Science and Technology Advancement (SASTA), a business unit of the National Research Foundation (NRF). He leads a dynamic team who develop science communication strategy and who coordinate various science communication programmes and resourcing in South Africa. He has led the collaborative development of the NRF Engaged Research framework and has over a decade of experience in implementing science engagement and communication initiatives. Michael has served on the management teams of the Cape Town Science Centre and Sci-Bono Discovery Centre in Johannesburg. He is responsible for the implementation a participatory-action research grant programme, a science journalism internship, the South African Science Lens, FameLab SA and the national science debating initiative, amongst others national science engagement programmes. Michael has an MSc (Entomology), BSc Hons and a BSecEd (Sci) from the University of Pretoria.

OPENING AND INTRODUCTION



DR PHILEMON MJWARA

Director General OF THE Department of Science and INNOVATION

Dr Philemon Mjwara holds a BSc, MSc and PhD from the University of the Witwatersrand. His academic career includes serving as professor of Science and Technology Policy at the University of Pretoria, and Physics lectureships at the universities of the Witwatersrand, South Africa and Fort Hare. Dr Mjwara has published and presented numerous papers on physics, technology analysis and technology foresight processes.

His professional experience includes working as a director in the former Department of Arts, Culture, Science and Technology, serving on the National Advisory Council On Innovation (NACI) and Group Executive for Research and Development and Strategic Human Capital Development at the Council for Scientific and Industrial Research (CSIR).

As part of his many contributions, Dr Mjwara led a team that conducted the South African Technology Foresight project. The outputs of the project were presented to President Thabo Mbeki in 2000. His project approach led to a number of institutions from other parts of the world inviting the core team members to share their knowledge at conferences in Japan, Austria and Hungary.

He was also asked to participate in the development of scenarios for South Africa for the years 2004 to 2014. This was run from the office of the President. Dr Mjwara currently serves as the Director General of the Department of Science and Innovation (DSI), a position he has held since April 2006. His responsibilities include the development and implementation of South Africa's science, technology, and innovation policy. He also serves on various advisory councils and review boards, including the Board of the World of Platinum of South Africa and the Square Kilometer Array Organization.

BIOGRAPHIES



STEPHEN QUEST

The Director-General of the Joint Research Centre (JRC)

Stephen Quest: the Director-General of the Joint Research Centre (JRC) as of 1 May 2020. Prior to this, he was the Director-General of the Directorate-General for Taxation and Customs Union (TAXUD) and the Director-General for Informatics (DIGIT), driving the digital transformation of the Commission. His career spans more than 30 years in the European civil service, and has included work on the EU budget, social and environmental policy and four years as Assistant to the Secretary-General. As Director-General, Stephen is particularly focused on modernising organisational culture and promoting innovation within the Commission, both as regards the use of technology and empowering and involving staff in decision-making. He is particularly passionate about communication and the interface between policy and technology.



MR ANTONY PHILLIPSON

British High Commission

Mr Antony Phillipson took up his appointment as British High Commissioner to the Republic of South Africa in July 2021. Antony joined the Civil Service in 1993 and has held a number of posts in Her Majesty's Government. Antony holds a degree in modern history from the University of Oxford. Previous roles include: • Principal Private Secretary to the Secretary of State for Trade and Industry • Counsellor at the Embassy in Washington • Prime Minister's Private Secretary for Foreign Affairs • Head of the FCO Iran Coordination Group • High Commissioner to Singapore • Director (EU External), European and Global Issues Secretariat, Cabinet Office • Director of Trade and Partnerships in the Department for Exiting the European Union (DexEU)

BIOGRAPHIES



DR DEON CLOETE

South African Institute for international Affairs

Dr Deon Cloete is the Head of the Futures Programme at the South African Institute of International Affairs (SAIIA), where he leads the institute's work on strategic foresight, systemic innovation and anticipatory governance to help improve long-term decision-making for policymakers, industry and civil society. His research interests span both complexity-based and futures-informed approaches to systemic change, innovation and transformative African futures by re-imagining complex systems change and the roles of cross-scale change agents. He is responsible for leading SAIIA's futures-informed research on strategic foresight, policy and planning decision support for leaders, decision-makers, policymakers, and multilateral institutions. He is an experienced facilitator of interpersonal, organisational and large-scale transformative change with a focus on 'systems change co-creation.' He researches and consults local, national, regional, continental, and global stakeholders in the education, mining, transport, and energy sectors, but also a wide range of development agencies, research groups and organisations. Deon is a research associate at the Centre for Sustainability Transitions at the School of Public Leadership, Stellenbosch University and has presented his research internationally. Deon is also a guest lecturer at various institutions and a speaker at a variety of platforms on Complex Adaptive Systems, Systemic Change, Organisational Development and Systemic Design, Futures Literacy, Strategic Foresight, Anticipatory Governance, Systems Entrepreneurship, and Systemic Innovation.



DR ANTHONY GEWER

Dr Anthony Gewer has for the past 22 years provided strategic and technical support to government, donors, industry and institutions, around strengthening pathways for successful youth labour market transitions. During this time he has worked with leading NGOs in the areas of vocational skills development and youth employability. He is currently Senior Programme Manager in Economic Inclusion at the National Business Initiative (NBI), responsible for the Installation, Repair and Maintenance (IRM) Initiative, a national programme to expand opportunities for employment creation across the formal and township economy, with a particular focus on the green economy.

Through his extensive work in TVET and skills development, Anthony has designed interventions to address employment-oriented curriculum, institutional management, teaching and learning, entrepreneurship and workplace learning. He has written and presented extensively on labour market transitions and youth employability in a developing context. He has a PhD in Education Policy with a specific focus on vocational education and the transition from school to work.

BIOGRAPHIES

KEYNOTE ADDRESS: MINISTER OF HIGHER EDUCATION, SCIENCE AND INNOVATION



DR BONGINKOSI EMMANUEL "BLADE" NZIMANDE

Minister of Higher Education, Science, and Innovation

Dr Bonginkosi Emmanuel "Blade" Nzimande was appointed the Minister of Higher Education, Science and Innovation in South Africa on the 30th May 2019. Amongst his responsibilities, he led projects and initiatives in the fight against Covid-19, including the establishment and funding of the genomic surveillance project that led to the discovery of variants of Covid-19.

Dr Nzimande also led the launch of the Hydrogen Society RoadMap, the establishment of the Inter-Ministerial Committee (IMC) on Science, Technology & Innovation (STI), as well as leading the effort of the development of a COVID-19 local vaccine for South Africa.

He was the Minister of Transport from 27 February 2018 to 25 May 2019 and the Minister of Higher Education and Training from May 2009 until 17 October 2017.

Dr Nzimande has served as a member of the National Executive Committee of the African National Congress (ANC) from 1994 till 2017, and again from 2019 up to the present. He was a General Secretary (GS) of the South African Communist Party (SACP) from July 1998 until 16 July 2022 and appointed the National Chairperson of the Party from July 2022.

Dr Nzimande served as Member of Parliament and Chair of the Portfolio Committee between 1994 and 1999. Prior to the establishment of a democratic South Africa in 1994 Dr Nzimande had served in various roles as an anti-apartheid activist, in academia, community organizations and non-governmental organizations supporting the democratic labor movement.



DR NKOSINATHI SISHI

Director General, Department of Higher Education and Training

Dr Nkosinathi Sishi is the Director-General for the Department of Higher Education and Training in South Africa. He has 36 years of experience at different spheres of government and state-owned enterprises holding various positions in the Executive and Senior Management Services (SMS) of the public service.

Careers/Positions

- Head of Entity (A): Trading Entity of the National Department of Transport Drivers License Trading Account (DLCA)
- Deputy Director-General: Governance Councils: Office of the DG (National Department of Transport)
- Group CEO: Passenger Rail Agency of South Africa (PRASA)
- Deputy Director-General: Public Entity Oversight (National Department of Transport)
- Deputy Director-General: Planning, Policy and Strategy (Department of Higher Education and Training)
- Superintendent-General: Head of Department (HOD) of Education (KwaZulu- Natal Provincial Government)
- Chief Director: Educational Measurement, Assessment and Public Examinations (Department of Basic Education)
- Director: National Examinations and Assessment (Department of Basic Education)
- He was also a Chief Education Specialist, DCES, Lecturer, Principal, Teacher