

# INVITATION TO PRIS 2024

POSTGRADUATE RESEARCH & INNOVATION SYMPOSIUM

[pris.ukzn.ac.za](http://pris.ukzn.ac.za)

29 &  
30 OCT  
09h00 – 16h00

COASTLANDS  
MUSGRAVE

Energy Sustainability

UKZN's College of Agriculture, Engineering and Science (CAES) is hosting its **2024 Postgraduate Research and Innovation Symposium (PRIS)** in-person at Coastlands Hotel, Musgrave. CAES provides all postgraduate students from the Schools of (1) Agricultural, Earth and Environmental Sciences, (2) Chemistry and Physics, (3) Engineering, (4) Life Sciences and (5) Mathematics, Statistics and Computer Science an opportunity to showcase their research through oral or flash presentations.

## PROGRAMME

### DAY 1: Tuesday, 29 October

08h00 – 08h55	<b>REGISTRATION</b>
09h00 – 09h45	<b>OPENING PLENARY</b> MC: <b>Prof Neil Koorbanally</b> : Dean of Research Welcome: <b>Prof Nana Poku</b> : VC <b>Prof Glen Bright</b> : Dean and HOS, Engineering Keynote Speaker: <b>Dr Mteto Nyati</b> : Chairman of Eskom
10h00 – 11h20	<b>CONCURRENT ORAL PRESENTATIONS</b> Session 1: Agricultural, Earth and Environmental Sciences Session 2: Chemistry and Physics Session 3: Engineering Session 4: Life Sciences Session 5: Mathematics, Statistics and Computer Science
11h20 – 11h40	<b>TEA AND VIEWING OF INDUSTRY EXHIBITS</b>
11h40 – 13h00	<b>CONCURRENT ORAL PRESENTATIONS (CONT.)</b> Session 1: Agricultural, Earth and Environmental Sciences Session 2: Chemistry and Physics Session 3: Engineering Session 4: Life Sciences Session 5: Mathematics, Statistics and Computer Science
13h00 – 14h00	<b>LUNCH</b>
14h00 – 15h20	<b>CONCURRENT ORAL PRESENTATIONS (CONT.)</b> Session 1: Agricultural, Earth and Environmental Sciences Session 2: Chemistry and Physics Session 3: Engineering Session 4: Life Sciences Session 5: Mathematics, Statistics and Computer Science
16h30–17h30	<b>GUEST LECTURE: Dr Ntsapokazi Deppa</b> : Executive: Scientific Services, uMngeni-uThukela Water (Uuw)
18h00 – 22h30	<b>GALA DINNER</b> Keynote Speaker: <b>Prof Andrew Swanson</b> : Associate Professor, UKZN

### DAY 2: Wednesday, 30 October

08h00 – 08h55	<b>REGISTRATION</b>
09h00 – 11h30	<b>CONCURRENT FLASH BREAKAWAY PRESENTATIONS</b> Session 1: Agricultural, Earth and Environmental Sciences Session 2: Chemistry and Physics Session 3: Engineering and Mathematics, Statistics and Computer Science Session 4: Life Sciences Session 5: uMngeni-uThukela Water Chair in Water Resources Research and Innovation Research Symposium
11h10 – 11h40	<b>TEA AND VIEWING OF INDUSTRY EXHIBITS</b>
11h40 – 13h00	<b>CONCURRENT FLASH BREAKAWAY PRESENTATIONS</b> Session 1: Agricultural, Earth and Environmental Sciences Session 2: Chemistry and Physics Session 3: Engineering and Mathematics, Statistics and Computer Science Session 4: Life Sciences Session 5: uMngeni-uThukela Water Chair in Water Resources Research and Innovation Research Symposium
13h00 – 14h00	<b>LUNCH</b>
14h30 – 16h00	<b>NETWORKING SESSION: TEA AND COFFEE</b>
16h00 – 17h00	<b>CLOSING, PRIZE GIVING AND LUCKY DRAWS</b> <b>Prof Fhatu Mudau</b> : Acting DVC <b>Prof Neil Koorbanally</b> : Dean of Research <b>Dr Sally Frost</b> : PR Manager



#### KEYNOTE SPEAKER, PRIS: **Dr Mteto Nyati**

Dr Mteto Nyati is the chairman of Eskom. Previously, he was the Group Chief Executive of Altron and Chief Executive Officer of MTN South Africa.

Mteto is also the executive chairman of BSG, a homegrown consulting and technology company that specialises in strategy execution. In BSG he holds a 40% shareholding through his investment vehicle, Wazo Investments. Mteto authored the number one bestseller, *Betting on a Darkie*, a book about his life as a shopkeeper's son, family man and business leader at local and multinational corporates. He mentors and coaches senior executives including CEOs and up-and-coming business professionals. In 2021, the University of Johannesburg's College of Business and Economics awarded Mteto an honorary doctorate in IT Management. He is a Yale University World Fellow. He holds a BSc in Mechanical Engineering from the University of KwaZulu-Natal.



#### GUEST LECTURE, PRIS & KEYNOTE SPEAKER, Uuw SESSION: **Dr Ntsapokazi Deppa**

Dr Ntsapo Deppa is the Executive: Scientific Services for uMngeni-uThukela Water (Uuw) and holds a PhD in Chemistry from the University of Cape Town, focusing on research in medicinal, physical and analytical chemistry. She graduated with her MBA *cum laude* from the University of KwaZulu-Natal and began her career as a contract chemistry lecturer at the Vaal University of Technology. She proceeded to work as a chemist and later an Analytical Manager at Tongaat Hulett for nine years. She joined Uuw as the Laboratory Manager in 2016.



#### KEYNOTE SPEAKER, GALA DINNER: **Prof Andrew Swanson**

Prof Andrew Swanson is an Associate Professor at the University of KwaZulu-Natal and a professionally registered engineer. He specializes in high voltage engineering, having tested overhead line equipment with voltages up to 350 kV AC, 650 kV impulse, and 350 kV DC. His research interests include renewable energy, grid integration, energy storage, and the impact of grid connection on power quality, along with applicable standards. He has also worked as a consultant in the railway industry, focusing on 3 kV DC and 25 kV AC traction power systems, earthing and bonding, compliance with power quality standards, and low voltage systems for stations. He has collaborated with industry partners, graduated several postgraduate students, and published numerous papers in journals and conferences, both locally and internationally.

#### QUERIES

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