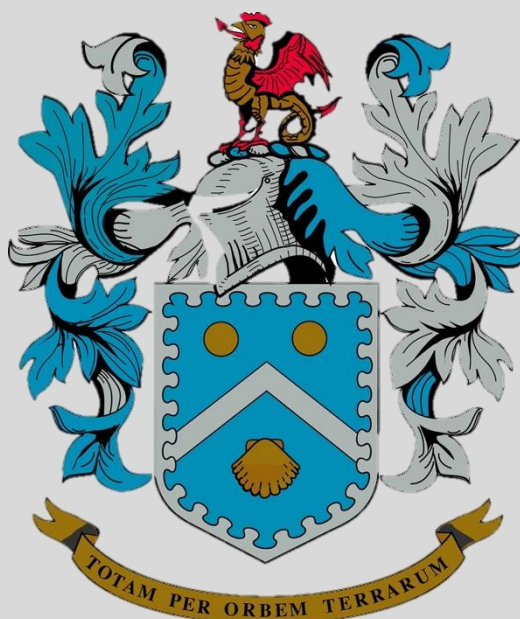


# Society of South African Geographers



2024 Student Conference

Potchefstroom

19-20 September

*30 Years of Change and Beyond:  
Geography, Democracy, Development,  
and Future Pathways*

## North-West University

The North-West University's Subject Group Geography and Environmental Studies warmly welcomes you to the 2024 SSAG Academic Conference, centered on the theme '30 Years of Change and Beyond: Geography, Democracy, Development, and Future Pathways.' As we gather to reflect on the significant shifts of the past three decades, this conference provides an opportunity to explore how geography has influenced democratic practices, development, and the directions we will take in the future. We look forward to the discussions and connections that will shape our understanding and actions moving forward. Welcome to SSAG 2024!

## A word on our sponsor

**esri South Africa**

Esri South Africa is the exclusive local distributor of Esri's world-leading ArcGIS technology in southern Africa, and over the past three decades has built a strong track record of success, developing long lasting relationships with our customers in both the public and private sectors.

We believe in sustaining, supporting and growing spatial awareness within the geospatial community by providing software technology, professional services, education, thought leadership and community support. It has been extremely rewarding to see our valued customers grow from map-making desktop users, to helping solve increasingly complex problems that improve service delivery, reduce environmental impact, and advance operational performance. The success of the worldwide GIS community is evidence of both the enormous contributions our field is making in multiple industries and the life-changing social value of GIS practices.

Through various initiatives, Esri South Africa seeks to inspire individuals to explore their potential. Our vision is to create exciting work opportunities for geospatial enthusiasts across all industries while continuing to grow and strengthen the GIS industry in South Africa. Training and capacity building through our Esri South Africa College allows individuals to achieve a qualification and reskill themselves to align with the latest technology trends.

Each presenter is allocated ten (10) minutes for their presentation, followed by two (2) minutes for questions. All questions will be addressed collectively at the end of each session. Session chairs will be tasked with ensuring that presenters adhere to their allotted times and that the sessions conclude within the scheduled timeframe.

### Thursday 19 September

Time	Building E4 – Room G44	Building E8 – Room G01	Building E8 – Room G35
11:00 – 12:40	Registration		
12:40 – 12:50	Welcoming – Conference Chair, Dr. Monray Belelie.		
13:00 – 13:10	Opening – Prof Livhu NemaKonde		
13:10 – 13:40	Keynote address: Prof. Roelof Burger - <b>“Building the Future: Practical Advice for Students on Geography, Environmental Change, and Social Justice”</b>		
13:40 – 14:00	Comfort Break (Diverge to Venues)		
14:00 – 15:30	<b>Session 1a: Climate Change, Species Distribution, and Adaptive Strategies: Insights from Southern Africa</b> Chair: <b>Dr. Nisa Ayob</b> <ol style="list-style-type: none"> <li>Can climate change alter the distribution of <i>Biomphalaria pfeifferi</i> in Bojanala District Municipality: North-West Province? (Mr. S Gura)</li> <li>The Impact of Climatic Factors on Temporal Mosquito Distribution and Population Dynamics in an Area Targeted for Sterile Insect Technique Pilot Trials (Ms. T Mazarire)</li> </ol>	<b>Session 1b: Urban and Rural Dynamics in South Africa: Housing, Economy, and Social Justice</b> Chair: <b>Dr. Munyaradzi Manjoro</b> <ol style="list-style-type: none"> <li>Informal rental housing in South Africa: The case of backyarding in Vanderbiljpark, Gauteng (Ms. E Motaung)</li> <li>Investigating the impact of load shedding on Small, Medium, and Micro Enterprises in Inanda, Durban (Ms. N Khuzwayo)</li> <li>Rural creative industries in South Africa: Evidence from Hartbeespoort and Parys (Ms. R Plaatjie)</li> <li>Small Town Blues: The socio-economic and spatial</li> </ol>	<b>Session 1c: Urban Challenges: Health, Safety, and Community Dynamics</b> Chair: <b>Dr. Nomfundo Sibiya</b> <ol style="list-style-type: none"> <li>Investigating rural-urban health disparities in South Africa (Ms. P Mokoroane)</li> <li>Impacts of perceived safety on off-campus student route choice to UWC (Mr. A Stanford)</li> <li>Investigating the Barriers to Public healthcare for Food Insecure patients in a Cape Town neighbourhood (Ms. S Weaver)</li> <li>Occupations as models of housing provisioning: The everyday and political role of collective labour in sustaining an occupation over time (Ms. K Fortuin)</li> </ol>

	<p>3. Assessment of climate change adaptation strategies among small scale holder farmers in Mangolong Village, Matatiele, South Africa. (Mr. T Mabaleka) <b>(5-minute talk)</b></p> <p>4. Wetlands as climate change mitigation infrastructure (Ms. A Ndlovu)</p> <p>5. An investigation into the presence and distribution of <i>Physa acuta</i> in the Modder River, Free State Province (Ms. M van Niekerk)</p> <p>6. Exploring ensemble ecological model for prediction wildlife rabies host distribution in northern South Africa (Ms. K Mogano)</p> <p>7. Evaluating machine learning algorithms for predicting the spatial distribution of Pom-pom weed (<i>Campuloclinium macrocephalum</i>) in The Cradle Nature Reserve (Ms. Z Ngcobo)</p>	<p>transformation of Despatch, a South African dormitory town (Ms. S Allers)</p> <p>5. Investigating the role of education in promoting social justice and equity in the former homeland of Qwaqwa (Ms. S Itholeng)</p> <p>6. Examining challenges in informal settlements: A case of Juju Valley Township, Limpopo Province (Ms. K Ngoepe)</p> <p>7. Villagers' response to chiefs selling traditional authority land (Ms. M Molele)</p>	<p>5. Unravelling the effects of business driven Gentrification on community identity and sense of place in Walmer, Gqeberha (Ms. S Molepo)</p> <p>6. Studentification in South Africa: Evidence from Mahikeng (Mr. R Patel) <b>(5-minute talk)</b></p> <p>7. Exploring the socio-spatial and rural transformation dynamics in the South African villages within the City of uMhlathuze (Ms. A Magwaza)</p>
15:30 – 16:00	Tea/Coffee & Group Photo		
16:00 – 17:30	<p><b>Session 2a: GIS and Remote Sensing in Environmental Management and Education in South Africa</b> Chair: <b>Dr. Nisa Ayob</b></p> <p>1. Land suitability analysis for new vineyard establishment using remote sensed data and XGBoost (Mr. C Mudima)</p>	<p><b>Session 2b: Sustainable Land Use and Resource Management: Agriculture, Ecosystems, and Mining in Southern Africa</b> Chair: <b>Dr. Henno Havenga</b></p> <p>1. Unraveling the relationship between soil nutrients and maize disease occurrence in Mopani District, Limpopo Province, South Africa (Ms. B Nkuna)</p>	<p><b>Session 2c: Environmental Monitoring and Management</b> Chair: <b>Ms. Oarabile Masekwameng</b></p> <p>1. Assessing the effectiveness of household solid waste management practices and their impacts on the local environment and communities: the case of Phuthaditjhaba in the free province of South Africa (Ms. P Pudumo)</p>



	<ol style="list-style-type: none"> <li>2. Investigating the inclusion of GIS into the tertiary Geography curriculum in democratic South Africa (1994-2024) (Mr. K Kumalo)</li> <li>3. Evaluating the effectiveness of Flood Disaster Management Policies and the use of Remote Sensing and GIS in flood management: The case of Emfuleni Local Municipality floods in South Africa (Ms. Z Mbongo)</li> <li>4. A GIS and Remote sensing analysis of the empirical relationship between urban development, runoff generation, and river channel morphology in the Baakens river catchment area, South Africa (Mr. S Soya)</li> <li>5. Modelling the flood risk and vulnerability for low-income residential areas in the Tswaing local municipality: A Deelpan village case study (Mr. S Mkwanazi) <b>(5-minute talk)</b></li> <li>6. Mapping and classifying the geology of Gough Island by segmentation of surface features using Sentinel-2 imagery (Mr. B Sibisi) <b>(5-minute talk)</b></li> <li>7. Developing an operational object-relational GIS database of borehole water</li> </ol>	<ol style="list-style-type: none"> <li>2. An Examination of Sustainable Agricultural Practices in Agroecological Systems: A Case Study of Phuthaditjhaba, QwaQwa (Ms. B Mosikili)</li> <li>3. Determining optimal SAR parameters for quantifying above-ground grass carbon stocks in savannah ecosystems using a tree-based algorithm (Ms. R Maake)</li> <li>4. The Integration of Unmanned Aerial Vehicles (UAVs) and Machine Learning Techniques for Predicting Maize Yields for Enhanced Food Security: A Systematic Review (Mr. C Dlamini)</li> <li>5. Monitoring Land Use Land Cover Change at eZulwini, Kingdom of Eswatini (1998-2019) (Mr. L Shongwe)</li> <li>6. Smart field weighing lysimeter for the determination of actual evapotranspiration of irrigated crops in an arid environment (Mr P Ratshiedana)</li> <li>7. Mining industry and the pro-poor growth in South Africa: The case of platinum mining in Mogalakwena, Limpopo (Mr. K Kubiku)</li> </ol>	<ol style="list-style-type: none"> <li>2. Assessing the pollutant removal efficiency of Wetlands as post-treatment for Municipal wastewater (Ms. N Gwebu)</li> <li>3. Assessing Community Perception of Air Quality in an Industrialized Setting: A Case Study focusing on Richards Bay, KwaZulu-Natal (Ms. N Ncanana)</li> <li>4. Trend and Variability of Upper-Tropospheric Humidity over Southern Africa as Observed by Different Satellite Sensors (Mr. S Mabuza)</li> <li>5. The influence of mine rehabilitation on selected soil parameters and vegetation properties in Ngaka Modiri Molema District Municipality (Ms. L Thekiso)</li> <li>6. Spatio-temporal monitoring of soil moisture as an indicator of drought patterns in the Tyume catchment using remote sensing techniques (Ms. A Mkhwenkwana)</li> <li>7. Modelling of soil organic carbon at different soil depths of a woody encroached grassland using fused remotely sensed data and machine learning (Ms. S Mxo)</li> </ol>
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	resources in Mahikeng (Ms. T Moya)		
18:30	Cocktail function @ Botanical Gardens		

### Friday 20 September

Time	Building E4 – Room G44	Building F1 – Room 201 (Senate Hall)	Building E4 – Room G47
08:00 – 09:30	<b>Session 3a: GIS &amp; Remote Sensing for Environmental and Urban Analysis</b> Chair: <b>Dr. Munyaradzi Manjoro</b> <ol style="list-style-type: none"> <li>Using Remote Sensing to map and monitor impacts of river sand mining: A case of the Elands River, Phuthaditjhaba, South Africa (Mr. B Mosiea)</li> <li>Enhancing the Estimation of Equivalent Water Thickness in Neglected and Underutilized Taro Crops using UAV acquired Multispectral Thermal Image data and Index-Based Image Segmentation (Ms. H Snethemba)</li> <li>Inter-Seasonal Estimation of Grass Water Content Indicators Using Multisource Remotely Sensed Data Metrics and the Cloud-Computing Google Earth Engine Platform (Ms. Masenyama)</li> <li>The Spatial Trends in The Development of Shopping Malls in Pretoria (Ms. W Buthelezi)</li> <li>Discriminating Vachellia Karroo from cohabiting</li> </ol>	<b>Session 3b: Rainfall Patterns and Drought Management</b> Chair: <b>Dr. Henno Havenga</b> <ol style="list-style-type: none"> <li>Socio-economic impacts of drought and disaster Management policies and practices in Makgalaneng Village: Maluti-A-Phofung Municipality (Mr. MF Makhetha)</li> <li>Assessing the Performance of daily Rainfall data from the ASCAT Soil Moisture Observations Estimated using the SM2RAIN Algorithm Over South Africa (Mr S. Nyameni)</li> <li>Innovative Trend Analysis and Anomaly Detection of Rainfall Anomaly Index over the Eastern Cape, South Africa (Ms. N Zamlana)</li> <li>Spatio-temporal analysis of recent cut-off lows events over southeastern regions of KwaZulu-Natal, South Africa (Ms. T Maphumulo)</li> <li>Evaluating South African Weather Services Seasonal Forecasts in KwaZulu-Natal, South Africa (Ms. T Vilakazi)</li> <li>Influence of weather variability on agricultural droughts in Queenstown, Eastern Cape province, South Africa (Ms. B Makosi)</li> <li>Spatiotemporal characteristics of heatwaves</li> </ol>	<b>Session 3c: Environmental Management and Waste Impacts</b> Chair: <b>Ms. Ncobile Nkosi</b> <ol style="list-style-type: none"> <li>The Identification and Quantification of Solid Waste Generated on the University of the Western Cape Campus (Dr. S Geysman)</li> <li>Impacts of solid waste dumping sites on surface water quality of Crocodile River system (Ms. M Mkhonto)</li> <li>Assessing a circular economy model for single-use food packaging, case study of Gcwalisa Alexander (Mr. NU. Sukumani)</li> <li>Greenhouse Gases Management Strategies and Practices by Small-Scale Farmers: Review of Barriers and Challenges to Adoption (Ms. V. Tsheleza)</li> <li>Sustainable Extraction of Helium Gas and Environmental Implications in the Free State, South Africa (Mr. LB Sokhela)</li> <li>Assessment of the Ongoye community's perceptions on herbal medicine: Effectiveness,</li> </ol>

	<p>vegetation using in-situ hyperspectral data and simulated multispectral bands (Ms. S Gcayi)</p> <p>6. Exploring RapidEye Derived Spectral Information in Estimating Aboveground Carbon Stock in Urban Reforested Environments (Mr. B Mlambo)</p> <p>7. Evaluating the Capability of the PlanetScope Sensor in Discriminating Lantana Camara in iNhlazuka (Ms. M Manyaka)</p>	<p>in the Western Cape province, South Africa: 1983-2023 (Ms. M Mathopa)</p>	<p>safety, and preferences relative to conventional treatments (Mr. SW Mdziniso)</p> <p>7. How does water hyacinth affect water quality in Bronkhorstspuit dam? (Prof. B Radijeje)</p>
09:30 – 09:45	Comfort Break and Poster Presentations		
09:45 – 11:15	<p><b>Session 4a: Evaluating Environmental Impact: Strategies, Policies, and Community Engagement</b> Chair: <b>Dr. Nomfundo Sibiya</b></p> <ol style="list-style-type: none"> <li>1. The effectiveness of environmental impacts assessments (EIAs) in addressing problems in the developing and developed projects (Mr. S Mvelase)</li> <li>2. Assessing a circular economy model for single use food packaging, case study of Gcwalisa Alexandar (Mr. N Sukhumani)</li> <li>3. Impact of Urban Greening Projects in Promoting Environmental Justice: A Case Study of KSD Local Municipality in Eastern Cape, South Africa (Ms. A Zweni)</li> <li>4. Assessing enforcement strategies to combat illegal waste: a case</li> </ol>	<p><b>Session 4b: Water Quality and Pollution: From Microplastics to Wastewater Management</b> Chair: <b>Dr. Stephen Opiyo</b></p> <ol style="list-style-type: none"> <li>1. Impacts of White River wastewater treatment works on the surface water quality in Mbombela Local Municipality, Mpumalanga Province (Ms. M Mamabolo)</li> <li>2. Microplastics and heavy metals in Fish species found in the lower Vaal River (Ms. K Ledwaba)</li> <li>3. Assessment of microplastics and heavy metals in benthic sediments in the Lower Vaal River and their relationship with benthic invertebrates (Ms. T Mereotlhe)</li> <li>4. Factors contributing to water scarcity in Schweizer Reneke, in South Africa (Mr. K Bankies)</li> <li>5. Characterization and reactivity assessment of natural organic substrates for biological reduction of</li> </ol>	<p><b>Session 4c: Sustainability, Settlements, and Climate Adaptation in South Africa</b> Chair: <b>Mr. Nkateko Shivuri</b></p> <ol style="list-style-type: none"> <li>1. <i>Investigating Waste Management Practices and Sanitation in Off-Campus Student Accommodation at the University of Zululand (Mr. S Sokhela)</i></li> <li>2. <i>Assessment of the Ongoye communities perceptions on herbal medicine: Effectiveness, safety, and preferences relative to conventional treatments (Mr. SW Mdziniso)</i></li> <li>3. <i>Investigating the growth and development of Ethafeni as a rurban settlement (Ms. I Mbonambi)</i></li> <li>4. Optimization techniques and integration with green infrastructure for rainwater harvesting: The</li> </ol>



	<p>study of KSD local municipality (Mr. L Ntlangula)</p> <p>5. Investigating the impacts of sewage disposal on Mzimvubu Estuary, Port St Johns (Ms. S Mvinjwa)</p> <p>6. Exploring Expected Roles and Responsibilities of Waste Pickers and Homeowners in the Waste Picker Integration Process: A Case Study (Ms. S Fraser)</p> <p>7. Exploring the kwaMbonambi community perception towards the environmental impacts of Richards Bay Minerals (Ms. SU Fakude)</p>	<p>sulphate in acid mine drainage (Ms. T Mnguni)</p> <p>6. The spatial distribution and abundance of microplastics in the benthic sediment of Kamfers Dam in the Northern Cape (Ms. B Raphuthing)</p> <p>7. An assessment of the relative contribution of Land use Land cover and climate change on ecosystem services. A geospatial view of Mthatha River catchment, South Africa (Mr. O Xayimpi)</p>	<p>case of Eastbourne, KZN, South Africa (Mr. TS Nkosi)</p> <p>5. Evaluation of CORDEX-Africa Regional Climate Models in simulating seasonal rainfall characteristics in South Africa: preliminary results (Mr. PL Moumakwe)</p> <p>6. Analysis of Nighttime Lights over the Cities of Cape Town, Durban, and Johannesburg, South Africa (Ms. Z Mncube)</p> <p>7. Development of Sustainable Tourism Indicators applicable to the Eastern Cape Wild Coast of South Africa (Ms. M. Nkamisa)</p>
11:15 – 11:45	Tea/Coffee and Poster Presentations		
11:45 – 13:15	<p><b>Session 5a: Indigenous Knowledge, Livelihoods, and Biodiversity</b>            Chair: <b>Dr. Munyaradzi Manjoro</b></p> <p>1. Exploring indigenous knowledge in biodiversity restoration, in Gasekgopo Village, Limpopo Province, South Africa (Ms. M Mohale)</p> <p>2. Sustaining small-scale livestock-based livelihoods and entrepreneurship in drought-prone kwaBiyela through Indigenous Knowledge System (Ms. SN Mfeka)</p> <p>3. Application of Intensity Analysis and Prediction of Bush Encroachment Dynamics Using Cellular</p>	<p><b>Session 5b: Wetland and Hydrological Studies</b>            Chair: <b>Dr. Stephen Opiyo</b></p> <p>1. Assessing changes in the hydrological regime of lacustrine wetlands in the Maputaland coastal plain, South Africa (Ms. N Ndlovu)</p> <p>2. Investigating the vertical stratification of selected water parameters at Kamfers Dam, Kimberley (Ms. T Abrahams)</p> <p>3. Effects of land use and land cover data resolution on hydrological modelling using SWAT: A case study of the Swartkops river catchment (Mr. L Loni)</p> <p>4. Spatiotemporal analysis of Kroondal mine activities on surface water quality in the Hex</p>	<p><b>Session 5c: Urbanization, Housing, and Social Justice</b>            Chair: <b>Mr. Nkateko Shivuri</b></p> <p>1. Detecting urban green spaces in the city of Mbombela, Mpumalanga Province, South Africa (Mr. HT Mahori)</p> <p>2. Transformation of rural housing landscapes in Mbombela Municipal (Mr. C Mathebula)</p> <p>3. Investigating the role of education in promoting social justice and equity in the former homeland of Qwaqwa (Ms. SI Itholeng)</p> <p>4. Validation of the AI-Generated Building Footprint Datasets and their Utility in Characterizing various building types in South Africa (Ms. S Maluleke)</p>



	<p>Automata Model (Ms. N Mncwabe)</p> <p>4. Exploring Everyday practices and temporalities of SMEs operating in informal settlements: A case study of Dinaweng in Bloemfontein (Ms. M Moleboheng)</p> <p>5. Investigating factors affecting the hydrological processes in the Kouga River Sub-basin (Ms. A Vumazonke)</p> <p>6. Investigating how water challenges in the Limpopo catchment, South Africa are affected by its management (Mr. P Modiba)</p> <p>7. Validation of the AI-Generated Building Footprint Datasets and their Utility in Characterising various building types in South Africa (Ms. S Mululeke)</p>	<p>River catchment (Ms. P Pitso)</p> <p>5. Modelling The Impacts of Wetland Degradation on Catchment Hydrology Using the SWAT Model in The Tsitsa River Catchment, Eastern Cape (Ms. T Nkali)</p> <p>6. Investigating water resource management techniques in King Sabatha Dalindyebo local municipality (Mr. S Xasa)</p> <p>7. Investigating the influences of climatic factors on wetlands distribution in protected areas with geospatial data analytics (Ms. C Moyo)</p>	<p>5. Investigating the growth and development of Ethafeni as a rural settlement (Ms. IS Mbonambi)</p> <p>6. Climate Justice in the Energy Transition: Exploring the Fairness and Equity of the Just Transition Process in South Africa (Mr. BB Mputle)</p> <p>7. Development of Sustainable Tourism Indicators applicable to the Eastern Cape Wild Coast of South Africa (Ms. M. Nkamisa)</p>
13:15 – 14:40	Lunch (own account)		
14:00 – 15:30	<p><b>Session 6a: Environmental Hazards and Water Management</b></p> <p>Chair: <b>Dr. Abdulaziz Yakubu</b></p> <p>1. Assessing flood vulnerability in eThekwin Municipality, in KwaZulu-Natal through GIS</p> <p>2. Assessing the development of the largest gully network using digital surface models (Ms. L Jeje)</p> <p>3. An Assessment of the dissemination of flood and early warning information: A case of</p>	<p><b>Session 6b: GIS, Modelling, and Environmental Assessments</b></p> <p>Chair: <b>Dr. Stephen Opiyo</b></p> <p>1. Assessing flood vulnerability in eThekwin Municipality, in KwaZulu-Natal through GIS (Mr. M Takalani)</p> <p>2. An analysis of the activities triggered during the screening phase of the EIA process: a comparative study between the Free State and Gauteng provinces (Mr. M Mathiso)</p> <p>3. Modelling the Distribution of <i>Bulinus africanus</i> in South Africa: An Ensemble</p>	<p><b>Session 6c: Urbanization, Housing, and Social Justice</b></p> <p>Chair: <b>Ms. Oarabile Masekwameng</b></p> <p>1. Spatio-Temporal Analysis of Land Use Land Cover Transition Using Google Earth Engine: A Case of Tende Coal Mine, Somkhele in KwaZulu Natal, South Africa (Mr. T Jiyane)</p> <p>2. Mapping the biodiversity of springs in South Africa using geospatial methods (Mr. CR Tyrer)</p>

	<p>Caleb Motshabi, Bloemfontein (Mr. L Makhubela)</p> <p>4. Examining disaster management system for flood risk reduction in Ladysmith (Mr. S Mabaso)</p> <p>5. Comparing the management plan for wetland conservation between Prince Edward Islands and South Georgia Island (Mr. N Makhavhu)</p> <p>6. An evaluation of household solid waste management practices: A case study of Matsikeng, Maluti-A-Phofung local municipality, Free State (Mr. K Moloi)</p> <p>7. Quaternary glacial and interglacial variation: a comparative literature review between South Africa and two sub-antarctic islands (Ms. E Carr)</p>	<p>Modeling Approach Integrating MaxEnt and BRT (Mr. T Nkwe)</p> <p>4. Validation of the AI-Generated Building Footprint Datasets and their Utility in Characterising various building types in South Africa (Ms. S Mululeke)</p> <p>5. Evaluating the geospatial distribution of waste disposal sites within Mabopane, in the City of Tshwane (CoT), South Africa (Mr. D Calitz)</p> <p>6. An assessment of South Africa's Black majority as a key factor in spatial planning policies and integration developments in urban and rural areas: A case of the Mangaung Metropolitan Municipality (Mr. K Mathibela)</p>	<p>3. Characterizing the Biomass Burning Emissions Using Sentinel-5P and Reanalysis Data: Towards the Development of a Novel Biomass Burning Air Quality Index for South Africa (Mr. SJ Khumalo)</p> <p>4. Quantifying the influence of woody encroachment on soil organic carbon across Bisley Nature Reserve using PlanetScope data (Mr. S Mthiyane)</p> <p>5. Assessing agricultural drought using the Standardized Precipitation Evapotranspiration Index, in Mpumalanga Province (Mr. H Baloyi)</p> <p>6. Assessment of land and energy usage in cities using night light detected from remote sensing spaceborne satellites (Mr. AS Xulu)</p> <p>7. Enhancing the Estimation of Equivalent Water Thickness in Neglected and Underutilized Taro Crops using UAV acquired Multispectral Thermal Image data and Index-Based Image Segmentation (Ms. HS Ndlovu)</p>
15:30 – 16:00	Closing		

Online Presentations: Microsoft Teams ([Teams Presentations Link](#))

Friday 20 September 2024

09:00 – 12:00

Chair: **Dr. Lindumusa Myeni**

1. *Analysis of Nighttime Lights over the Cities of Cape Town, Durban and Johannesburg, South Africa* (Ms. Z Mncube)
2. *Investigating the Role of Citizens in the Coproduction of Basic Services: A Case Study of Loskop, Estcourt* (Ms. K Mvelase)
3. *The problem of the discretionary Enhanced People's Housing Process (EHP) in the Ruohemoh housing project* (Mr. J Jacobs)
4. *Exploring the Thermal Comfort in Library Settings: The Case of Wartenweiller Library* (Ms. T Earnest)
5. *Exploring the Perceptions of Medical Practitioners and the Public Regarding the Timing of the Influenza Season in Gauteng* (Ms. P Molefe)
6. *Thermal Stress Risk to Construction Workers in South Africa* (Ms. Z Zintwana)
7. *Examining the Validity of Tourism Climate Indices for Application in South Africa* (Ms. C Kganane)
8. *Waste Picking in Suburbia: A Case Study of Soneike, Cape Town* (Ms. M Lottering)
9. *The Influence of Land Cover, Land Use and Geology on Water Quality of the Kariega River, Eastern Cape* (Ms. S Mkhaye)
10. *Water Processing and Supply in a District Municipality in the Eastern Cape Province during the Loadshedding Crisis* (Ms. T Mangesi)

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## Posters

Poster Exhibition in the foyer of Building E4 from the onset of the conference and its duration:

1. *Analysing the impact of tourism development on small town sense of place: a case of Vredenburg, South Africa*: **Ms F Van Boven**
2. *Machine-learning algorithms for mapping LULC of the uMngeni catchment area, KwaZulu-Natal*: **Mr O Bhungeni**
3. *Analysing challenges of accessibility, usage, and management of public green open spaces in Cape Town's Northern Suburbs*: **Mr I Hirwa**
4. *Spatio-temporal monitoring of soil moisture as an indicator of drought patterns in the Tyume catchment using remote sensing techniques*: **Ms A Mkhwenkwana**
5. *Modelling the long term salinization of the Cape Flats Aquifer*: **Ms E Plato**
6. *Assessment of poor waste management in informal settlement: A case study of Greenfield, Hammanskraal*: **Ms L Nkoana**
7. *Quantifying the effects of an El Niño event on savannah grass using MODIS and Sentinel-2 MSI images*: **Ms KE Raseroka**
8. *Using Hotspot Analysis to Geo-visualise Criminal Activity in Saldanha Military Area*: **Ms T Tlhekwe**

9. Enhancing maritime surveillance in Saint Helena Bay using a multisource approach:  
**Mr JM Mametja**
  10. Spatio-temporal analysis for monitoring urban expansion: A case study of Middelpos township in Saldanha from 2004-2024: **Mr NL Monyamane**
  11. Assessment of Livelihood Opportunities: Land Use and Livelihood Diversification in the King Dalidyebo local municipality: **Ms A Mhlawe**
  12. Critiquing the Capitalist Organisation of Tourism: Investigating the Commodification of Bree, Kloof and Long Street in Cape Town, South Africa: **Ms M Niyodusaba**
  13. Rainfall variability and water resources in the Eastern Cape Highlands: 1983-2023: **Ms S Mkhencele**
  14. Suitable landfill site selection in response to changing waste generation in Mahikeng: **Mr T Tawane**
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