

PROGRAMME
(11 October 2022)

All presenters (including joint presentations) have \pm fifteen (15) minutes for their presentations with \pm TEN (10) minutes of consolidated questions at end of a session. Chairs have been given strict instructions to keep presenters to their allotted times or the Panels to finish on time allocated.

	Room-4 (SC106)
08h30-08h40	Dean`s Welcome and Opening of the Symposium
08h40-09h30	<i>Keynote Address 1:</i> Prof Patrick Berka Njobeh, Navigating your research visibility during and post COVID-19 pandemic: Publications

Symposium Rooms

Room-1 = SC 201

Room-2 = C12, Geography

Room-3 = Hydrology

Room 4 = SC106

Time (Session 1)	Room-1 (Chair: Dr Marshall Mdoka)	Room-2 (Chair: Dr CL Ndlangamandla)	Room-3 (Chair: Dr NSB Linda)	Room-4 (Chair: Dr N Mbatha)
09h35-10:50	Centrality Based Algorithms for Controller Placements in Software Defined Wide Area Networks, Mr. Adebayo Isaiah O (PhD, CS)	Drought assessment using standardised indices in north-eastern South Africa, Dr Fhumulani Mathivha (lecturer, Hyd)	Affordable & Viable Digitization of Hard Copy Survey Data, Anné Joubert (lecturer, NS)	Distribution and diversity analysis of cytochrome P450 monooxygenases in the fungal class of <i>mycoparasite</i>. Mr. Philasande Gamede (Hons, Bio&M)
	Contrasting health effects of <i>Bacteroidetes</i> and <i>Firmicutes</i> lies in their genomes: analysis of P450s, ferredoxins, and secondary metabolite gene clusters, Ms. Bridget Valeria Zinhle Nkosi (MSc, Bio&M)	Synthesis, structural and magnetic properties of $Cu_xMn_{1-x}Fe_2O_4$ ($0 \leq x \leq 0.8$) nanosized compounds. Mr Prince Phathizwe Majozi (MSc, Phys)	Comparative Analysis of Cytochrome P450 Monooxygenases in <i>Mycorrhizal</i> Fungi., Mr. Lungelo Miya (Hons, Bio&M)	Evaluating IoT secure modes with RPL in a mobile scenario, Mr. Celimpilo Siphamandla Langa (MSc, CS)
	Biological synthesis and characterization of copper nanoparticles using a bioflocculant from <i>Microbacterium paraoxydans</i> and its application., Ms. Nokwanda Promise Myeni (MSc, Bio&M)	Effect of long-term Selenium supplementation and estrus synchronisation protocols on reproductive indices of Merino ewes and the immunity of their lambs., Nokwanda T. Jiyane (MSc, Agric)	Exploring perception of pregnant women regarding their attendance of Ante-Natal Care at selected clinics in the Umzinyathi District Municipality KwaZulu-Natal, Mathaba, NT (MSc, NS)	Anti-aging potential of some fresh- water microalgae extracts, Miss Siphesihle Zamajobe Sithole (MSc, Bio&M)
	IoT Based Climate-Smart Agriculture for Rural Small-Scale Farmers, Miss Ayanda Zulu (MSc, CS)	Exploring the capability of high-resolution satellite imagery for mapping water quality of the micro-water bodies of informal settlements in South Africa. Mr Njabulo Mahlobo (MSc, Geo)	Bioaccumulation of microplastics in the brown mussel <i>Perna perna</i> and the rock oyster <i>Sacostrea cucullata</i> along the north coast of KwaZulu-Natal, South Africa, SC Mkhabela, (MSc, ZL)	Exploring the Mngqobokazi community perception of Phinda Private Game Reserve and Conservation. Mr. Simphiwe Lindinkosi Ricardo Gcina Xulu (PhD, Geo)

Time (Session 2)	Room-1 (Chair: Dr ML Mathunjwa)	Room-2 (Chair: Dr A Van Biljon)	Room-3 (Chair: Dr NP Biyela)	Room-4 (Chair: Dr GM Mengistie)
11h00-12h10	Comparative analysis of cytochrome p45o monooxygenases in fungi group of brown rot fungi., MR. SIFISO FORTUNE Khathwane (Hons, Bio&M)	The challenges caused by Covid-19 pandemic in teaching and learning: Higher education Miss Simphiwe Mthethwa (MSc. Geo)	A practice theory for blended learning in nursing education at rural comprehensive universities in South Africa, Ms. Fiona Singh (lecturer, NS)	Genome-wide annotation and comparative analysis of cytochrome P450 monooxygenases in the fungal subphylum <i>Taphrinomycotina</i>, Mr. Sithembele Memela (Hons, Bio&M)
	Detection Of Distributed Denial of Service (DDoS) Botnet Attack on IoT Devices using Machine Learning,, Mr. Minenhle Philani Khumalo (Hons, CS)	Assessment of spatio-temporal variability of agricultural droughts in uMkhanyakude District Municipality, KwaZulu-Natal, Miss Jabulile Mzimela (lecturer, Geo)	Variation in shoot, peduncle and fruit growth of <i>Lagenaria siceraria</i> landraces from northern KwaZulu-Natal and Limpopo, South Africa, Lungelo Given Buthelezi (lecturer, BT)	Comparitive analysis of cytochrome P450 monooxygenases in the fungal class <i>sordariomycetes</i> Ms. Yethenjiwe Fikiswa Thwala (Hons, Bio&M)
	Transitioning FRW model with perfect fluid in $f(R, T)$ gravity theory, Siwaphiwe Jokweni (PhD, MS)	Dam Breach Analysis of the Wagendrift Dam Under Changing Climate Regimes. Miss Kyleen Loganathan (Hons, Hydro)	Indigenous knowledge on the uses and morphological variation among <i>Strychnos spinosa</i> morphotypes at Oyemeni area, KwaZulu-Natal, Zoliswa Mbhele (MSc, BT)	In silico characterization and molecular evolutionary analysis of cytochrome P450 monooxygenases in the bacterial phylum <i>Chloroflexi</i> Mr. Mazwi Mzulwini (Hons, Bio&M)
	Comparison of Chaplygin gas and Bulk Viscosity, <u>Mr Mfanafuthi Siyabonga Msweli</u> (MSc, MS)	Analysis of Short and Long – term Shoreline Change Dynamics of Richards Bay, South Africa. Miss Bongiwe T Mtshali (Hons, Hydro)	Internet of Things - Deep Learning-Enabled System for Detection of Pandemic Diseases, Ajagbe S. Adeola (PhD, CS)	Genome Data Mining Annotation and Phylogenetic Analysis of Cytochrome P450s in the Fungal Subphylum <i>Mucoromycotina</i> Mr. Vusisizwe Sduduzo Ntuli (Hons, Bio&M)

Time (Session 3)	Room-1 (Chair: Dr L Millard)	Room-2 (Chair: Dr MA Nkomo)	Room-3 (Chair: Mr CT Thethwayo)	Room-4 (Chair: Miss MSN Makhathini)
12h10-13h10	Effect of Ruthenium dopant on the sensitivity of alpha iron oxide ($\alpha\text{-Fe}_2\text{O}_3$) to Flammable and Hazardous Gases . Mr Ntokozo Cebekhulu (MSc, Phys)	In silico analysis of Cytochrome P450 and secondary metabolites in the bacterial phylum <i>Deltaproteobacteria</i> , Ms. Andiswa Chonco (Hons, Bio&M)	Potential <i>In vitro</i> anti-diabetic activity of honeybush, Mr. Mkhwanazi Qiniso (MSc, Bio&M)	<i>In-vitro</i> honeybush tea activity on multidrug resistant <i>Pseudomonas aeruginosa</i> and <i>Klebsiella aerogenes</i> strains isolated from wounds of hospitalized diabetic patients in Zululand Region, KwaZulu-Natal province of RSA., Mr. Elia Xolisa Mantshi (MSc, Bio&M)
	<i>In vitro</i> Antioxidant, Antimicrobial, and Beta-lactamase Inhibitory Activity of Crude Extracts of Some Freshwater Cyanobacteria , Mr. Akayagboke Ikhane (MSc, Bio&M)	Genome data mining, annotation and phylogenetic analysis of cytochrome P450 in the fungal subphylum <i>Ustilaginomycotina</i> , Ms. Andile Ngema Hons, Bio&M)	The <i>in vitro</i> antidiabetic activity of root extracts of <i>Maytenus procumbens</i> , Ms. Minenhle Mncube (MSc, Bio&M)	Enablers to utilisation of E-Learning in nursing education during Covid-19 in South Africa: A Scoping Review , Mgobhozi Nhlanhla, (PhD, NS)
	WRF-Chem Simulations of Atmospheric Mercury over Southern Africa. Mr Njabulo Ndumiso Mkhwanazi (MSc, Phys)	Comparative Analyses of Cytochrome P450 Monooxygenases in subphylum <i>Pucciniomycotina</i> , Ms. Nokubonga Chili (Hons, Bio&M)	Evaluating the potential hepatotoxic effects of <i>Lessertia frutescens</i> and <i>Echinacea purpurea</i> Ms. Sthembile Sithole (MSc, Bio&M)	Biosynthesis, characterization and application of copper nanoparticles using bioflocculant from <i>Kytococcus sedentarius</i> as a reducing agent, Minenhle Peculiar Deo-volente Sibisi (MSc, Bio&M)
	Isolation, Identification and Characterization of bioflocculant- producing bacteria from activated sludge of Vulindlela wastewater treatment plant , Ms Nkanyiso C. Nkosi (PhD, BioM)	In silico characterization and molecular evolutionary analysis of cytochrome P450 monooxygenases and secondary metabolites identification in the bacterial phylum <i>Planctomycetes</i> , Mr. Phindokuhle Siyabonga	Genome-wide Annotation and Comparative Analysis of Cytochrome P450 Monooxygenases in the Fungal Subphylum <i>Glomeromycotina</i> , Mr. Sifiso Lindokuhle Thethwayo (Hons, Bio&M)	An unprecedented number of cytochrome P450s are involved in secondary metabolism in <i>Salinispora</i> species., Mr. Nsikelelo Allison Malinga (MSc, Bio&M)

	Room-4 (SC106)
13h10-14h00	Lunch C1: Department of Geography and Environmental Studies
14h00-14h35	<i>Keynote Address 2: Prof Gueguim Kana, Re-thinking the postgraduate research and supervision model - lessons from COVID-19 pandemic</i>

Time (Session 4)	Room-1 (Chair: Miss J Mzimela)	Room-2 (Chair: Dr CL Ndlangamandla)	Room-3 (Chair: Dr NSB Linda)	Room-4 (Chair: Dr N Mbatha)
14h40-16h30	Effect of the Duration of Progesterone Treatment on Synchronising Oestrus Outside the Natural Breeding Season in Merino Ewes, Nhlakanipho. S. Zulu (MSc, Agric)	The effect of metformin and hydrochlorothiazide on the hepatic metabolism of ivermectin , Ms. Mtambo Thuli (MSc, Bio&M)	Production and Characterization of a Bioflocculant from <i>Pichia kudriavzevii</i> MH545928.1 and Its Application in Wastewater Treatment Mr. Phakamani H. Tsilo (PhD, Bio&M)	Effect of selenium supplementation on semen quality parameters, scrotal circumference and testicular size of Zulu rams, Mthobisi S. Ngcobo (MSc, Agric)
	Effect of Carrier-Gas on the Sensitivity of Double-Substitution Spinel to Flammable Gases and Volatile Organic Compound. Mr Sunday Ayodeji Ogundipe (MSc, Phys)	Dermo-cosmeceutical evaluation of <i>Strychnos madagascariensis</i> and <i>Litsea glutinosa</i> fixed oils, Nokwanda, L. Ntshangase (MSc, Agric)	Study of defects in semiconductors due to radiation damage using positron annihilation techniques. Miss Lumkile Ngwazi (MSc, Phys)	<i>Phytochemical Profiling, Cytotoxicity Assessment and Molecular Mechanism of Action of “uMhlabelo” Traditional Methanolic Extracts</i> , Mr. Kwandile Simphiwe Mbhele (MSc, Bio&M)
	Oestrous response and fertility of Merino ewes following two synchronization protocols, Sibonelo M. Hlatshwayo (MSc, Agric)	Effect of nitrogen fertilizer application and plant population on growth and yield of <i>Solanum scabrum</i> , Sindi Ndlovu (MSc, Agric)	ASSESSING THE NUTRITIONAL STATUS OF CHILDREN UNDER 60 MONTHS LIVING IN THE INFORMAL SETTLEMENTS OF INANDA AREA, ETHEKWINI MUNICIPALITY Mbalenhle Mkhize (PhD, Agric)	Cut-off Lows over South Africa: An in-depth review. Mr. Nkosinathi Goodman XULU (PhD, Geo)
	Some <i>in vitro</i> biological (hypoglycemic and antibacterial) activity of red honeybush tea Kombucha crude extracts. Mr. Ewert N	Title: Positron annihilation study of defects in H+ implanted silicon. Miss. Thuthukile Nomvelo Ngema (MSc, Phys)	Centrality Based Algorithms for Controller Placements in Software Defined Wide Area Networks, Mr. Adebayo Isaiah O. (PhD, CS)	Green synthesis and characterization of copper nanoparticles using a bioflocculant and its application in wastewater

Time (Session 4)	Room-1	Room-2	Room-3	Room-4
	Effect of goat manure on growth and yield of <i>Cucurbita argyrosperma</i> , N Zondo (MSc, Agric)	Diversity and evolution of cytochrome P450 monooxygenase in Archaea, PE Ngcobo (Hons, Bio\$M)	Genome-wide comparative analysis of P450s and their role in secondary metabolism in the bacterial class Betaproteobacteria, S Msweli (Bio&M)	Correlation of host cell gene expression with autophagy flux differences in <i>Mycobacterium tuberculosis</i> infected macrophages over time, Mr. Martin Naicker (MSc, Bio&M)
				Self-assessment chatbot for COVID-19 prognosis using deep learning based Natural Language Processing (NLP), <u>Ms. Eyethu Kwenzeka</u> <u>Inamandla Thwala (MSc, CS)</u>
Awards and Closing of the Symposium				

POSTER PRESENTATIONS		
NAME & SURNAME	DEPARTMENT	TOPIC
Mthokozisi B. Xulu	Zoology	The sensitivity of <i>Grandidierella lignorum</i> to contaminant and non-contaminant parameters (SDS and Photoperiod). , (MA)
Nsikelelo Allison Malinga	Biochemistry and Microbiology	An unprecedented number of cytochrome P450s are involved in secondary metabolism in <i>Salinispora</i> species. , (MA)
Bongumusa Nxumalo	Computer Science	Web services to bring rural and townships businesses onto the Web, (Hons)
Mukelo Fortune Mlambo	Computer Science	Detection Method for Identifying Malware, (Hons)
Xoliswa Xaba	Hydrology	Evolution of hydro-geochemical processes of groundwater in a coal mine in South Africa., (Hons)