

College Of Agriculture, Engineering & Science

Areas of Expertise	Name	Email Address	Telephone Number	School / Discipline
Composite structures; Piezoelectric control for vibration damping; Nano mechanics; Optimal design	Adali, Sarp - Professor	adali@ukzn.ac.za	031 260 3203 082 433 3033	School of Engineering / Mechanical Engineering
Optimization; modelling, heuristics and metaheuristics solutions to real-world optimisation problems including space allocation, scheduling and assignment problems; computational Intelligence techniques; Swarm Intelligence, Artificial Intelligence	Adewumi, Aderemi, O – Dr	adewumia@ukzn.ac.za or dradewumi@gmail.com	031 260 1176	School of Mathematics, Statistics and Computer Science
Telecommunication networks; Radiowave propagation for communication; Transmission and radiocommunication systems; microwave and millimetric communication	Afullo, Thomas Joachim Odhiambo - Professor	afullot@ukzn.ac.za	031 260 2730 082 773 2204	School of Engineering / Electronic Engineering
Control Systems Engineering Instrumentation and Smart Grids	Agee, John – Professor	ajeej@ukzn.ac.za	031 260 9111 062 016 2350	School of Engineering / Electrical, Electronic & Computer Engineering
Electric Power Systems Real-Time Digital Simulation of Power Systems	Akshay, Saha - Dr	Saha@ukzn.ac.za	(031) 260 2725	School of Engineering / Electrical Engineering
Spatial modelling of land use change; Land use decision modelling; Geodetic engineering; Satellite navigation	Akombelwa, Mulemwa - Dr	akombelwa@ukzn.ac.za	031 260 7556 071 324 7093	School of Engineering / Land Surveying
Human parasitology, especially bilharzia & other worms; freshwater molluscs; parasites of non-human primates (baboons & monkeys)	Appleton, Christopher C - Professor	appletonc@ukzn.ac.za	031 260 1187 072 231 2386	School of Life Sciences

Non-viral gene (DNA) delivery into mammalian systems; liposomes & DNA delivery	Ariatti, Mario - Professor	ariattim@ukzn.ac.za	031 260 7981 083 611 9260	School of Life Sciences
Conceptual process design; chemicals & energy from renewable resources; research & development in chemical engineering; funding applications; mass transfer processes	Arnold, David - Professor	arnoldd@ukzn.ac.za dave.arnold@dalinyebo.co.za darn@saol.com	031 260 1574/ 1228	School of Engineering / Chemical Engineering
Computational mechanics; Finite element analysis; Financial Mathematics	Arunakirinathar, Kanagaratnam - Dr	aruna@ukzn.ac.za	076 841 2373	School of Mathematics, Statistics and Computer Science
Agricultural development economics and rural development, agricultural finance and farm management, agricultural production economics; natural resource economics; agricultural technology adoption.	Baiyegunhi, Lloyd James - Dr	baiyegunhil@ukzn.ac.za	033 260 5437 079 5546 833	School of Agricultural, Earth and Environmental Sciences / Agricultural Economics
Urban identity and Durban; cities and culture; mega-events	Bass, Orli - Dr	bass@ukzn.ac.za	031 260 7320	School of Agricultural, Earth and Environmental Sciences
Discrete mathematics, combinatorics	Bau, Sheng - Professor	Baus@ukzn.ac.za	033 260 5624	School of Mathematics, Statistics and Computer Science
Remediation of soil erosion; process geomorphology; environmental science; physical geography; EIA's related to landform-process interdependencies	Beckedahl, Heinz Reinhard - Professor	hbeck@ukzn.ac.za	033 260 5345 082 826 0565	School of Agricultural, Earth and Environmental Sciences
Lichenology; Bryology; Redox enzymes	Beckett, Richard - Professor	rpbeckett@gmail.com	033 260 5141	School of Life Sciences / Biodiversity
Transportation Engineering & Planning	Ben-Edigbe, Johnnie – Professor	ben-edigbe@ukzn.ac.za	031 260 2005 079 618 2387	School of Engineering
Metallurgical failures, testing & investigations; steels; mechanical failures, testing; stress analysis, finite element analysis, CAE and thermal analysis	Bemont, Clinton, Dr	bemontc@ukzn.ac.za	031 260 3207 083 289 9881	School of Engineering / Mechanical Engineering

Avocado fruit physiology, colour of horticultural crops	Bertling, Isa - Professor	bertlingi@ukzn.ac.za	033 260 5099	School of Agricultural, Earth and Environmental Sciences/ Horticultural Science
Cellulose chemistry & wood science; electroanalytical chemistry, analytical chemistry	Bissessur, Ajay – Mr	bissessura@ukzn.ac.za	031 260 7012 084 549 9069	School of Chemistry and Physics
Survey Design and Data Analysis; Experimental Designs; Time Series Analysis and Modelling	Bodhlyera, Oliver – Mr	bodhlyerao@ukzn.ac.za	033 260 5613 073 890 5071	School of Mathematics, Statistics and Computer Science
Solar energy, aerospace technology	Brooks, Michael – Mr	brooks@ukzn.ac.za	031 260 7667	School of Engineering / Mechanical Engineering
Classification & biology of solitary wasps; general entomological matters (excluding pest control)	Brothers, Denis John – Professor	brothers@ukzn.ac.za	033 260 5106	School of Life Sciences / Biological & Conservations Sciences
Nonlinear analysis; Optimization; Generalized functions, Functional Analysis; Mathematical Physics, relativistic quantum field theory; Quantum information theory	Brüning, Erwin - Professor	brununge@ukzn.ac.za	031 260 7683	School of Mathematics, Statistics and Computer Science
Sanitation; Urban and industrial water & effluent management; Water chemistry; Biological wastewater treatment processes; Cleaner production;	Buckley, Chris – Professor	buckley@ukzn.ac.za	031 260 3131 082 806 7251	School of Engineering / Pollution Research Group
Plant taxonomy and systematics; African orchids	Bytebier, Benny – Dr	bytebier@ukzn.ac.za	033 260 5145	School of Life Sciences
Action learning and research for participatory agricultural extension; sustainable rural livelihoods (with a particular interest in livelihoods theory and asset-based development for stimulating agricultural activity and social cohesion); trans-disciplinary approaches in research and mixed methodology research; appropriate technology (emphasis on food processing and preservation).	Caister, Karen – Dr	caister@ukzn.ac.za	033 260 5121	School of Agricultural, Earth and Environmental Sciences

Grassland science; rangeland ecology and management; plant-animal interactions	Chamane, Sindiso - Miss	Chamane@ukzn.ac.za	033 260 5508	School of Life Sciences
Biofilms (proteomics, characteristics); antimicrobial resistance (susceptibility testing, gene hunting, fluoroquinolone resistance); aquaculture disease and treatment (aeromonas & flabobacterium); mobile genetic elements (plasmids, transposons, integrons); bacterial genotyping	Chenia, Hafizah, Yousuf – Dr	cheniah@ukzn.ac.za	031 260 7796 083 229 8018	School of Life Sciences
Hydrology & hydrological modelling; design flood estimation; remote sensing and hydrology, satellite rainfall and ET	Chetty, Kershani Tinisha – Ms	chettyk@ukzn.ac.za	033 260 6027	School of Agricultural, Earth and Environmental Sciences
Molecular physics; Laser physics; Optics; Access teaching & research	Chetty, Naven - Dr	chettyn3@ukzn.ac.za	033 260 5660 072 129 5525	School of Chemistry and Physics
Applied statistics, Time series analysis, Principal component analysis, financial modelling	Chifurira, Retius - Mr	Chifurira@ukzn.ac.za	031 260 8732	School of Mathematics, Statistics and Computer Science
Time series analysis, Economic & Financial Modelling, Applied statistics.	Chinhamu, Knowledge - Mr	Chinhamu@ukzn.ac.za	031 260 3012 071 983 1660	School of Mathematics, Statistics and Computer Science
Mathematical biology – mathematical modelling of infectious diseases (both in-host and population dynamics)	Chirove, Faramunashe - Dr	chirovef@ukzn.ac.za	033 260 5784 078 204 7846	School of Mathematics, Statistics and Computer Science
Food security, organic farming, small-scale farmer constraints and participation in the agricultural value chain	Chitja, Joyce – Dr	chitjaj@ukzn.ac.za	033 260 6171 083 673 9436	School of Agricultural, Earth and Environmental Sciences
Power Electronics and Drives Artificial Intelligence	Chitra, Venugopal– Dr Lecturer	venugopal@ukzn.ac.za	(031) 260 2720	School of Engineering / Electrical Engineering
Poultry science; monogastric nutrition	Ciacciariello, Mariana – Dr	ciaccm@ukzn.ac.za	033 260 5479	School of Agricultural, Earth and Environmental Sciences
Water resources modelling; water resource accounting; agricultural engineering	Clark, David John – Mr	clarkd@ukzn.ac.za	033 260 5485	School of Engineering / Bioresources Engineering

Agrometeorology; environmental physics; micrometeorology; soil physics/soil water relations; soil-plant-atmosphere system	Clulow, Alistair Mr	clulowa@ukzn.ac.za	(033) 260 5510	School of Agricultural, Earth and Environmental Sciences
Biochemistry, including protein purification and characterisation, antibody production and characterisation; Proteolytic enzymes/proteases (mammalian and protozoan); African animal and Human Trypanosomiasis; Talks on Postgraduate supervision and dissemination of research; Animal ethics	Coetzer, Theresa Helen Taillefer – Professor	coetzer@ukzn.ac.za	033 260 5463	School of Life Sciences
Space physics; Lightning; Wave-particle interactions; Terrestrial Gamma-ray Flash (TGF)	Collier, Andrew - Dr	collierab@gmail.com	031 260 1157 083 381 3655	School of Chemistry and Physics
HVAC/HVDC Power Transmission Systems Electric Power System Analysis; Smart Grids Grid Integration of RE using Power Electronics Special Electric Machinery – LIMs, LSMs.	Davidson, Innocent - Dr	Davidson@ukzn.ac.za	031 260 7024 073 932 9525	School of Engineering / Electrical Engineering
Hydrogeology; hydrogeochemistry & water pollution; environmental isotope hydrology; environmental geology	Demlie, Molla Bekele – Dr	demliem@ukzn.ac.za	031 260 7380 072 050 6319	School of Agricultural, Earth and Environmental Sciences / Geological Sciences
Energy management, energy efficiency and demand side management; motion control, power electronics and variable speed drives automation; power systems; business & strategic plan development	Diana, Gregory - Mr	giana@ukzn.ac.za	031 260 1030 078 451 5277	School of Engineering / Electrical, Electronic & Computer Engineering
Condensed matter physics; magnetic properties of materials; Mossbauer spectroscopy	Dlamini, Wendy Bonakele - Ms	dlaminiw@ukzn.ac.za	031 260 3028 079 887 6053	School of Chemistry and Physics
Electric machine design (particularly induction machines and brushless permanent magnet machines, condition monitoring, renewable energy systems, wave energy conversion.	Dorrell, David - Professor	dorelld@ukzn.ac.za d.g.dorrell@gmail.com	031 260 2730	School of Engineering / Electrical Engineering

Terrestrial vertebrates including ecophysiology; thermoregulation; nutrition; small mammals; ornithology; urban ecology; conservation of frogs, tortoises, Nile crocodiles, birds & mammals. Science education.	Downs, Colleen – Professor	downs@ukzn.ac.za	033 260 5217 082 920 2026	School of Life Sciences
Animal science; animal breeding & genetics; population & quantitative genetics	Dzomba, Edgar F – Mr	dzomba@ukzn.ac.za	033 260 5434 073 090 2850	School of Life Sciences
Computer science education; programming competitions; internet technologies	Els, Rosanne – Mrs	rosanne@cs.ukzn.ac.za	033 260 5662	School of Mathematics, Statistics and Computer Science
Engineering Geology, Landslide hazard assessment, Rock engineering	Ferentinou Maria – Dr	Ferentinou@ukzn.ac.za	031 260 8781 079 994 7204	School of Agricultural, Earth and Environmental Sciences / Geological Sciences
Plant tissue culture; secondary plant products; biotechnology; plant physiology; biology teaching	Finnie, Jeffrey - Professor	Finnie@ukzn.ac.za	033 260 5151	School of Life Sciences
Pro poor tourism and local economic development; social impact assessments with the EIA process; tourism development and policy; sustainable livelihoods	Foggin, Timothy - Mr	foggint@ukzn.ac.za	033 260 5273 083 378 7009	School of Agricultural, Earth and Environmental Sciences
Environmental life cycle assessments for waste and water systems, Carbon footprints, Vulnerability of infrastructure to climate change and general environmental management.	Friedrich, Elena - Dr	Friedriche@ukzn.ac.za	031 2607709	School of Engineering, Civil Engineering Programme
Biochemistry, Protein isolation, Malaria, Malaria diagnosis, Immunology	Goldring, Dean - Professor	goldringd@ukzn.ac.za	033 260 5466	School of Life Sciences / Biochemistry
Yeast flocculation; yeast biotechnology; mammalian cell culture cytotoxic screening; antimicrobial screening	Govender, Patrick – Dr	govenderpt@ukzn.ac.za	031 260 7814 082 925 1423	School of Life Sciences / Microbiology
Marine geology and sedimentology; sea level fluctuation and continental shelf dynamics	Green, Andrew – Professor	green1@ukzn.a.za	031 260 7924 076 819 5632	School of Agricultural, Earth and Environmental Sciences / Geological Sciences

Renewable energy; local economic development; pro-poor tourism; agricultural development/food security	Green, J Maryann – Professor	green@ukzn.ac.za	033 260 5271 082 510 8585	School of Agricultural, Earth and Environmental Sciences
Plant virology – identification and control of plant virus diseases; plant transformation for transgenic virus resistance	Gubba, Augustine – Dr	gubbaA@ukzn.ac.za	033 260 5795 082 312 6755	School of Agricultural, Earth and Environmental Sciences
Yeast biotechnology; Biochemical Education	Guptar, Abin S. – Professor	gupthara@ukzn.ac.za	031 260 7189 082 929 2957	School of Life Sciences
General Relativity; Mathematics Education; Relativistic Astrophysics	Hansraj, Sudan – Dr	hansrajs@ukzn.ac.za	031 260 3000 083 232 4781	School of Mathematics, Statistics and Computer Science
Project Management, Quantity Surveying, Construction Management, Risk Management, Construction Education	Harinarain, Nishani – Dr	harinarain@ukzn.ac.za	031 260 1206	School of Engineering / Property Development
Construction health and safety, Construction education, construction industry development	Haupt, Theo C – Professor	haupt@ukzn.ac.za	031 260 2712	School of Engineering
Environmental science; GIS; physical geography/biogeography; palaeo environments	Hill, Trevor Raymond – Professor	hillt@ukzn.ac.za	033 260 5235	School of Agricultural, Earth and Environmental Sciences
Statistical Epidemiology, Applied Extreme Value Analysis and Generalized Linear Mixed Models	Hammujuddy, Jahvaid - Mr	hammujuddy@ukzn.ac.za	031 260 8153	School of Mathematics, Statistics and Computer Science
Applied and environmental microbiology; biocontrol of phytopathogens; fingerprinting and typing of environmental bacterial isolates	Hunter, Charles – Mr	hunter@ukzn.ac.za	033 260 5528	School of Life Sciences
Renewable and alternative energy; energy management; energy harvesting; energy efficiency; modelling of energy systems; internal combustion engines: design, modelling and processes	Inambao, Freddie – Dr	inambaof@ukzn.ac.za	031 260 8530 084 458 8892	School of Engineering / mechanical engineering
Biochemistry & nutritional biochemistry; diabetes, obesity, metabolic syndrome; nutrition & food science; functional &	Islam, Shahidul – Dr	islamd@ukzn.ac.za	031 260 8717	School of Life Sciences / Biochemistry, Genetics & Microbiology

medicinal foods; gastroenterology and animal models				
Kinetics & mechanistic investigation; environmental analysis	Jaganyi, Deogratius – Professor	jaganyi@ukzn.ac.za	033 260 5183	School of Chemistry and Physics
Microbiology; Endophytes; Arbuscular Mycorrhizal fungi; Microbial ecology; Bioremediation; Biofouling, Biocorrosion; Bio-hydrocarbons	Jamal-Ally, Sumaiya – Dr	jamal@ukzn.ac.za	033 260 6209	School of Life Sciences / Microbiology
Superconductivity; material science (electrical/electronic); Graphene and Nanotechnology	Jarvis, Leigh – Dr	Jarvis@ukzn.ac.za	031 260 2742 083 671 6435	School of Engineering / Electrical, Electronic & Computer Engineering
Water resources management; Water security; Hydrology; Land-Water; Water footprinting; Water and ecosystem services	Jewitt, Graham - Professor	Jewittg@ukzn.ac.za	033260 5678	School of Engineering / Centre for Water Resources Research
Oxidation chemistry; heterogeneous catalysis, use of hypochlorite, chlorine dioxide & ozone; kinetic simulations & nonlinear dynamics; environmental analytical chemistry- soil/vegetation	Jonnalagadda, Sreekantha Babu – Professor	jonnalagaddas@ukzn.ac.za	031 260 7325 083 785 4344	School of Chemistry and Physics
Dietetics: obesity; diabetes; heart disease & other lifestyle and public health issues	Kassier, Suna – Dr	kassiers@ukzn.ac.za	033 260 5431 083 658 8349	School of Agricultural, Earth and Environmental Sciences / Dietetics
Pulping & papermaking technology: non-wood pulping, high-yield pulping; life cycle assessment; resource efficiency; cleaner production & waste minimisation; EIA; water reduction and recycling in the pulp and paper industry	Kerr, Iain – Mr	kerr@ukzn.ac.za	031 260 2186 082 879 4748	School of Engineering / Chemical Engineering
Grassland ecology; pasture science; grassland restoration; plant/animal interactions	Kirkman, Kevin – Professor	Kirkmank@ukzn.ac.za	033 260 5102 083 631 4815	School of Life Sciences
Measurement & control of quantum systems; quantum information processing and communication; quantum optics; foundations of quantum physics	Konrad, Thomas – Professor	konradt@ukzn.ac.za	031 260 7911 082 389 3981	School of Chemistry and Physics

Organic Chemistry, NMR Spectroscopy, Heterocyclic Organic synthesis, Natural Products chemistry	Koorbanally, Neil – Professor	koorbanally@ukzn.ac.za	031 260 3189	School of Chemistry and Physics
Water use of potential biofuels crops; mapping of areas optimally suited to the growth of biofuel crops; climate change impacts on agriculture and water resources	Kunz, Richard – Mr	kunzr@ukzn.ac.za	033 260 6499	School of Agricultural, Earth and Environmental Sciences / Hydrology
Plant Pathology: biological control, epidemiology, disease management. Plant Breeding: training; African crops, cabbages, ornamentals. Postgraduate studies: managing throughput, enabling skills, research management	Laing, Mark – Professor	laing@ukzn.ac.za	033 260 5524 082 372 4945	School of Agricultural, Earth and Environmental Sciences / African Centre for Crop Improvement
Molecular systematics and evolution; Science education	Lamb, Jennifer M – Professor	lambj@ukzn.ac.za	031 260 3038	School of Life Sciences
Ecological Modelling; Mechanisation; Precision Agriculture; Sustainable Agriculture and Development; Brewing	Largerwall, Gareth - Dr	largerwall@ukzn.ac.za	033 260 5177	School of Engineering / Bioresources (Agricultural) Engineering
Chemical reaction engineering, process design and optimization	Lokhat, David - Dr	lokhat@ukzn.ac.za	(031)260 1897/ 074 436 5335	School of Engineering / Chemical Engineering
Green buildings and Green Infrastructure. Energy efficiency, green building design/retrofit. Low-income/informal settlements upgrading programmes. Smart cities & integration of renewable energy sources	Loggia, Claudia – Dr	Loggia@ukzn.ac.za	031 260 1771	School of Engineering, for the Property Development Programme
Mineral Processing – grinding & flotation. Hydrometallurgy – pressure leaching	Loveday, Brian – Professor	loveday@ukzn.ac.za	031 260 3121	School of Engineering / Chemical Engineering
Crop water use, drought and heat stress tolerance, crop modelling and climate change adaptation as well as neglected and underutilised crops	Mabhaudhi, Tafadzwanashe - Dr	mabhaudhi@ukzn.ac.za	033 260 5442 074 130 9845	School of Agricultural, Earth and Environmental Sciences / Crop Science
Horticultural and Crop Science (Postharvest Technology, Fruit Biology, Vis/NIRS, X-Ray computed tomography, Non-destructive	Magwaza, Lembe - Dr	magwazal@ukzn.ac.za	(033) 260 5516	School of Agricultural, Earth and Environmental Sciences

technologies for quality measurements and Rural development)				
Teaching & learning of advanced mathematical topics; advanced mathematical thinking; APOS (action-process-object-schema) theory; Mathematics e-learning; Online diagnostic testing for undergraduate mathematics	Maharaj, Aneshkumar – Dr	Maharaja32@ukzn.ac.za	031 260 1021 083 446 1937	School of Mathematics, Statistics and Computer Science
Urban development, planning, migration, philanthropy	Maharaj, Brij – Professor	maharajb@ukzn.ac.za	031 260 1027 083 776 7274	School of Agricultural, Earth and Environmental Sciences
Theories of gravity; Einstein’s equations; cosmology & astrophysics	Maharaj, Sunil – Professor	maharaj@ukzn.ac.za	031 260 1365 084 500 4546	School of Mathematics, Statistics and Computer Science / Astrophysics and Cosmology Research Unit
Chemical kinetics of coordination compounds; Environmental chemical analysis	Mambanda, Allen - Dr	mambanda@ukzn.ac.za	033 260 5272 073 538 2924	School of Chemistry and Physics
Photochemistry; Solution Thermodynamics; Environmental Analysis	Martincigh, Bice - Professor	martinci@ukzn.ac.za	031 260 1394	School of Chemistry and Physics
Waste management – Zero wast, recycling, waste minimisation	Matete, Ntlibi – Dr	matete@ukzn.ac.za	031 260 3056 076 105 7728	School of Engineering / Civil Engineering
Structural geology and tectonics, Precambrian geology of South Africa, geological mapping, economic geology Earth science education and training	McCourt, Stephen – Professor	mccourts@ukzn.ac.za	031 260 2803 082 940 4730	School of Agricultural, Earth and Environmental Sciences / Geological Sciences
Civil engineering – structures; reinforced concrete & structural steel; reliability & safety of structures	McLeod, Christina – Mrs	mcleodc@ukzn.ac.za	031 260 1059 084 510 1588	School of Engineering / Civil Engineering, Surveying & Construction
General statistics, applied statistics, biostatistics, linear models, statistical inference; mixed models for longitudinal data, structural equation modelling	Melesse, Sileshi Fanta - Dr	melesse@ukzn.ac.za	033 260 5610 078 016 0575	School of Mathematics, Statistics and Computer Science
Igneous Petrology and Geochemistry, radiometric dating, asteroid impact craters, Optical mineralogy, Archaean crustal	Misra, Saumitra Kumar - Dr	Misras@ukzn.ac.za	031 260 2800 07461640571	School of Agricultural, Earth and Environmental Sciences / Geological Sciences

growth, planetary geochemistry				
Agronomy; Crop Science; Seed Science and Technology; Rural Development	Modi, Albert Thembinkosi - Professor	modiat@ukzn.ac.za	033 260 5854 072 207 4325	School of Agricultural, Earth and Environmental Sciences
Experimental condensed matter physics; Semiconductor devices; Characterization of organic photovoltaic cell; Nuclear hyperfine interaction; Nonlinear optical properties of materials	Mola, Genene Tessema - Professor	mola@ukzn.ac.za	033 260 5350	School of Chemistry and Physics
Mass spectrometry, analytical chemistry, environmental chemistry, industrial chemistry, chromatography	Moodley, Brenda – Dr	moodleyb3@ukzn.ac.za	031 260 2796 082 871 9955	School of Chemistry and Physics
Artificial Intelligence; Data mining; Semantic Web technologies; Adaptive and autonomous computer systems	Moodley, Deshen – Dr	Moodleyd37@ukzn.ac.za	031 260 1287 078 246 1345	School of Mathematics, Statistics and Computer Science
Cosmology; extragalactic astronomy; theoretical astrophysics	Moodley, Kavilan – Professor	moodleyk41@ukzn.ac.za	031 260 2543 072 447 5499	School of Mathematics, Statistics and Computer Science / Astrophysics & Cosmology Research Unit
Quantum Monte Carol methods for condensed matter systems; Stochastic wave-function methods for open quantum systems & quantum optics; quantum information; computational physics, lattice gauge theory	Moodley, Mervlyn – Dr	moodleym2@ukzn.ac.za	031 260 1355	School of Chemistry and Physics
Analytical chemistry	Moodley, Roshila - Dr	moodleyrosh@ukzn.ac.za	031 260 8127 084 606 7710	School of Chemistry and Physics
Applied and Computational Mathematics; Differential equations; Numerical methods and analysis; Fluid dynamics	Motsa, Sandile - Professor	motsas1@ukzn.ac.za	033 260 5627 076 780 1871	School of Mathematics, Statistics and Computer Science
Condensed matter physics; magnetic properties of materials; Mossbauer spectroscopy, synthesis of materials by various techniques; characterisation of materials by x-ray diffraction	Moyo, Thomas - Dr	moyo@ukzn.ac.za	031 260 2173 072 937 3481	School of Chemistry and Physics

Soil Science: soil fertility and plant nutrition; soil chemistry; soil pollution and waste management; conservation agriculture	Muchaonyerwa, Pardon - Professor	muchaonyerwa@ukzn.ac.za	033 260 5764 083 691 9856	School of Agricultural, Earth and Environmental Sciences / Soil Science
Agricultural economics, smallholder production systems, agricultural development, agricultural marketing	Mudhara, Maxwell - Dr	mudhara@ukzn.ac.za	033 260 5673 084 804 3729	School of Agricultural, Earth and Environmental Sciences
Veterinary & medical parasitology; parasitic zoonosis, veterinary & medical malacology; GIS & remote sensing	Mukaratirwa, Samson – Professor	mukaratirwa@ukzn.ac.za	031 260 1338 078 869 5542	School of Life Sciences
Optimisation and Control of Processing Plants	Mulholland, Michael - Professor	mulholland@ukzn.ac.za	031 260 3123 082 806 7926	School of Engineering / Chemical Engineering
Engineering surveying; GIS; remote sensing; cadastral surveying; general mapping expert	Musonda, Evaristo - Mr	musonda@ukzn.ac.za	031 260 3290 082 567 2992	School of Engineering / Surveying & Construction
Hyperspectral remote sensing; GIS for environmental application; spatial modelling, geostatistics; vegetation & wildlife modelling & monitoring	Mutanga, Onesimo – Professor	mutangao@ukzn.ac.za	033 260 5779 072 385 9069	School of Agricultural, Earth and Environmental Sciences
Taxonomy/phylogeny of terrestrial arthropods, particularly millipedes	Mwabvu, Tarombera - Dr	mwabvut@ukzn.ac.za	031 260 3186 084 604 9896	School of Life Sciences
Infectious disease modelling. Statistics and Biostatistics methods in health and applied research including analysis of correlated cross-sectional and longitudinal data, missing data models, modelling time to event data in survival analysis; spatial statistics, generalised linear and mixed models, Experimental and clinical trial design and analysis. Statistical Methodology Research.	Mwambi, Henry - Dr	mwambih@ukzn.ac.za	033 260 5614 082 684 7185	School of Mathematics, Statistics and Computer Science
Image processing & computer vision; signal processing; artificial intelligence	Naidoo, Bashan - Mr	bnaido@ukzn.ac.za	031 260 2758 083 258 8638	School of Engineering / Electrical, Electronic & Computer Engineering
Plant ecophysiology; estuarine ecology; plant stress physiology; environmental pollution, wetland plant ecology	Naidoo, Gonasageran – Professor Emeritus	naidoogn2@ukzn.ac.za	031 260 7367 082 901 3728	School of Life Sciences

Chemical thermodynamics – phase equilibria; separation studies, distillation, mass transfer	Naidoo, Paramespri (Prathieka) - Dr	naidoop18@ukzn.ac.za	031 260 3177 082 478 2440	School of Engineering / chemical engineering
Secretory structures, essential oils, phytochemistry, histochemistry & cytochemistry of selected southern African medicinal plants; microscopy of salt-secreting structures in halophytes; microscopy of foliar structures of resurrection plants	Naidoo, Yougasphree - Dr	naidooy1@ukzn.ac.za	031 260 7360	School of Life Sciences
Thermodynamics; Separations Technology	Narasigadu, Caleb - Dr	narasigaduc@ukzn.ac.za	031 260 3734	School of Engineering/ Chemical Engineering
Hyperbolic systems of conservation laws; Finite volume methods for partial differential equations; Numerical analysis of differential equations; Computational fluid dynamics	Ngnotchouye, Jean Medard Tchoukouengno - Dr	ngnotchouye@ukzn.ac.za	033 260 5629 079 336 0489	School of Mathematics, Statistics and Computer Science
Stem cells; differentiation & migration; muscle; wound repair; tissue engineering	Niesler, Carola U - Dr	niesler@ukzn.ac.za	033 260 5465 083 773 5898	School of Life Sciences
Electrochemistry; electrocatalysis, sensors development; nanofiber fabrication, nanotechnology	Nombona, Nolwazi - Dr	Nombonan@ukzn.ac.za	031 260 3199 078 523 1928	School of Chemistry and Physics
Statistics education; curriculum developmt, training & material development for statistics teaching at school level; development of support schemes for introductory statistics modules at tertiary level; Statistics capacity building – initiatives though links with government. Institutional research	North, Delia – Professor	northd@ukzn.ac.za	031 260 3011 083 661 3650	School of Mathematics, Statistics and Computer Science
Ruminant nutrition; livestock production	Nsahlai, Ignatius – Professor	nsahlail@ukzn.ac.za	033 260 5473 083 619 4925	School of Agricultural, Earth and Environmental Sciences
Separation; Fluidisation; Biofuels; Electrochemical engineering	Ntunka, Mbuyu Germain - Mr	ntunka@ukzn.ac.za	031 260 3215 086 695 3030	School of Engineering / Chemical Engineering
Nanotechnology; Green Chemistry and Catalysis; Sustainable Energy; Ferrocenes Metallocenes and Organometallic Chemistry	Nyamori, Vincent Onserio - Professor	nyamori@ukzn.ac.za	031 260 8256 082 816 7587	School of Chemistry and Physics

Environmental Engineering; Environmental Impact Assessment, Contaminant Transport Modelling; Management of Information Systems; Biofuels	Obwaka, Elly - Mr	obwakae@ukzn.ac.za	031 260 3382 083 431 6206	School of Engineering / Chemical Engineering
Crop Science; Agronomy; Seed Science & Technology	Odindo Alfred Oduor - Dr	odindoa@ukzn.ac.za	033 260 5425	School of Agricultural, Earth & Environmental Sciences / Crop Science
General entomology; alien invasive plants; biological control of pests	Olckers, Terence - Dr	olckerst@ukzn.ac.za	033 260 5139 082 933 7383	School of Life Sciences
Agricultural production economics; agricultural policy; farm & financial management	Ortmann, Gerald Friedel - Professor	ortmann@ukzn.ac.za	033 260 5492	School of Agricultural, Earth and Environmental Sciences
Separations technology; Gas Solubility; Carbon Dioxide Capture; Thermodynamics	Osman, Khalid - Dr	osman@ukzn.ac.za	031 260 1674 083 645 8705	School of Engineering/ Chemical Engineering
Mechanical design and failure analysis; Design of CNC machines and automated manufacturing equipment; Manufacturing system facility design and layout optimization; Optimization techniques including metaheuristic applied to manufacturing operations management problems	Padayachee, Jared – Mr	padayacheej@ukzn.ac.za	031 260 3216 083 690 8219	School of Engineering / mechanical engineering
Chemistry Education, Student Academic Support – Supplemental Instruction training and materials development.	Paideya, Vinodhani - Dr	paideya@ukzn.ac.za	031 260 8311	School of Chemistry & Physics
Conservation biology, biology of parrots, ecology of rodents, scientific editing , postgraduate supervision	Perrin, Michael Richard - Professor	perrin@ukzn.ac.za or perrin@sai.co.za	033 260 5118	School of Life Sciences
Quantum information processing & communication; quantum cryptography; open quantum systems; quantum optics.	Petruccione, Francesco - Professor	petruccione@ukzn.ac.za	031 260 2770 072 664 3476	School of Chemistry and Physics / Quantum Research Group
Industrial & environmental biotechnology; wastewater treatment & bioremediation of recalcitrant pollutants; bioenergy production from non-edible feedstocks; development of	Pillay, Balakrishna – Professor	pillayb1@ukzn.ac.za	031 260 7404 083 378 8587	School of Life Sciences

new technologies for evaluation of water quality; microbiological quality of water resources				
Redox biology, systems biology, computational modelling of biological systems, yeast molecular biology and biochemistry	Pillay, Ché - Dr	pillayc3@ukzn.ac.za	033 260 6231	School of Life Sciences
Amyloid diseases (in particular type II diabetes); tissue culture	Pillay (nee Muthusamy), Karen - Dr	muthusamy@ukzn.ac.za	031 260 7942	School of Life Sciences / biochemistry
Human nutrition; clinical dietetics; biofortification	Pillay, Kirthee – Dr	pillayk@ukzn.ac.za	033 260 5674 083 785 3072	School of Agricultural, Earth and Environmental Sciences / Dietetics
Analytical Chemistry; Environmental Analysis; Metal Speciation	Pillay, Letitia - Dr	Pillayl18@ukzn.ac.za	031 260 2978	School of Chemistry and Physics
Artificial Intelligence; biologically inspired methods; hyper-heuristics; combinational optimization	Pillay, Nelishia – Dr	pillayn32@ukzn.ac.za	033 260 5644	School of Mathematics, Statistics and Computer Science / Computer Science
Estuarine studies; water quality / contaminant studies in aquatic systems; coastal geomorphology; physical geography	Pillay, Srinivasan - Dr	pillays2@ukzn.ac.za	031 260 7654	School of Agricultural, Earth and Environmental Sciences
Power system dynamics; Flexible AC Transmission Systems; Subsynchronous Resonance	Pillay Carpanen, Rudiren - Dr	pillayr21@ukzn.ac.za	031 260 1217	School of Engineering
Coal processing; mineral processing; extractive metallurgy, educational research	Pocock, Jonathan – Dr	pocockj@ukzn.ac.za	031 260 3377	School of Engineering / Chemical Engineering
Biodiversity measurement; Global biogeography; Endemism in southern Africa; Weevils (Coleoptera: Curculionidea)	Proches, Serban - Professor	prochess@ukzn.ac.za	031 260 7317	School of Life Sciences / Environmental Science
Materials Science, Nanoscience, Electron Microscopy, High-Temperature Materials, Materials for Energy Applications	Pruessner, Karin - Dr	pruessner@ukzn.ac.za	031 260 7660	School of Chemistry & Physics
Phase equilibrium; thermodynamics, measurement & computation; gas chromatograph calibration for gases and	Raal, J David, - Professor	raal@ukzn.ac.za	031 260 3124 082 806 7242	School of Engineering / Chemical Engineering / Thermodynamics Research

gas-liquid mixtures; flow calorimetry for measuring heat capacity or heats-of-mixing				Group
Chemical thermodynamics – separation studies, phase equilibria; distillation studies, process synthesis and design	Ramjugernath, Deresh - Professor	ramjuger@ukzn.ac.za	031 260 3128 082 336 3925	School of Engineering / chemical engineering
Kinetic and Mechanistic Investigations of Transition Metal Systems; Physical Inorganic Chemistry; General Chemistry	Reddy, Desigan - Dr	reddyd2@ukan.ac.za	033 260 5324	School of Chemistry and Physics
Finite group theory and applications to Algebraic coding theory & Combinatorial Design theory; computational group theory & modular representation theory of finite simple groups	Rodrigues, Bernardo - Professor	rodrigues@ukzn.ac.za	031 260 2630	School of Mathematics, Statistics and Computer Science
Agrometeorology; environmental physics; micrometeorology; soil physics/soil water relations; soil-plant-atmosphere system	Savage, Michael John - Professor	savage@ukzn.ac.za	033 260 5514	School of Agricultural, Earth and Environmental Sciences
Ecological network analysis; mutualism & competition in ecological networks; ecosystem models of coastal & oceanic environments; estuarine ecology; mangrove ecology	Scharler, Ursula Michaela - Dr	scharler@ukzn.ac.za	031 260 1605	School of Life Sciences / Biological & Conservation Sciences
Bacterial ecophysiology; microbiological quality of water and produce; industrial & environmental biotechnology; microbial catabolism of environmental pollutants; microbiology of anaerobic digestion processes (i.e. biogas)	Schmidt, Stefan – Professor	schmidts@ukzn.ac.za	033 260 5523	School of Life Sciences / Biochemistry, Genetics & Microbiology
Community ecology; evolutionary ecology, macroecology; small mammals	Schoeman, Corrie - Dr	schoeman@ukzn.ac.za	031 260 1161 073 173 5080	School of Life Sciences
Agroclimatic mapping; climate change impacts on water and agricultural resources; hydrological modelling; land use impacts on water resources	Schulze, Roland – Professor Emeritus	schulzer@ukzn.ac.za	033 260 5489 082 572 7937	School of Agricultural, Earth and Environmental Sciences
Irrigation engineering; irrigation water management; agricultural water	Senzanje, Aiden - Dr	senzanjea@ukzn.ac.za	033 260 6064 082 505 5061	School of Engineering / Bioresources Engineering

management				
Medicinal plant biotechnology; plant micro-propagation; extraction and analysis of secondary metabolites; in vitro seed germination	Shaik, Shakira - Dr	shaiksh@ukzn.ac.za	031 260 7773 079 106 0704	School of Life Sciences
Plant breeding; plant genetics; biometrical methods	Shimelis, Hussein - Professor	shimelish@ukzn.ac.za	033 260 6474 072 226 4729	School of Agricultural, Earth and Environmental Sciences
Homogeneous catalysis, Heterogeneous catalysis, Organometallic chemistry	Shozi, Mzamo - Dr	shozim2@ukzn.ac.za	031 260 3105 072 665 2430	School of Chemistry and Physics
Ecology of large mammals; foraging ecology of large herbivores (wild & domestic); white rhinos; behavioural ecology; ecology of fear: predator-prey dynamics	Shrader, Adrian, M - Dr	shrader@ukzn.ac.za	033 260 5143 084 568 6640	School of Life Sciences
Experimental Design and biostatistics. Analysis of Health, Environmental and demography statistics. Multilevel multivariate modeling, Bayesian approach and survival analysis.	Siaka, Lougue - Dr	siaka@ukzn.ac.za	033 260 8194 083 311 5380	School of Mathematics, Statistics and Computer Science
Applied Mathematics; Mathematical Modelling; Fluid dynamics	Sibanda, Precious - Professor	sibandap@ukzn.ac.za	033 260 5626 072 220 7293	School of Mathematics, Statistics and Computer Science
Plant breeding; biometrical genetics; genotype x environment analysis, plant pathology, scientific communication	Sibiya, Julia – Dr	sibiyaj@ukzn.ac.za	033 260 6246 083 710 2317	School of Agricultural, Earth and Environmental Sciences
Open quantum systems; Quantum information processing; Quantum optics; Group theory and quantum mechanics	Sinayskiy, Ilya - Dr	sinayskiy@ukzn.ac.za	031 260 8133 071 174 4373	School of Chemistry and Physics
Nanotherapeutics, non-viral gene delivery and expression (liposomes & nanoparticles, nanotubes); RNA interference and gene silencing; general biochemistry; mammalian tissue culture	Singh, Moganavelli - Dr	singhm1@ukzn.ac.za	031 260 7170 083 775 8672	School of Life Sciences

Design and synthesis of new organic scaffolds, Molecular modelling, Drug design and drug discovery, Pharmacophore modelling, Docking, peptide/protein folding study, Density functional theory.	Singh, Parvesh - Dr	singhp4@ukzn.ac.za	031 260 2181, 074 514 7754	School of Chemistry and Physics
Heterogenous Catalysis: Catalytic oxidation and oxidative dehydrogenation, hydrogenolysis, preferential oxidation and hydrogenation reactions.	Singh, Sooboo - Dr	singhso@ukzn.ac.za	031 260 7017 083 782 4497	School of Chemistry and Physics
Analogue Electronics, VLSI Design, RF Systems, Microelectronics Engineering, Communication Engineering	Srivastava, Viranjay M - Professor	srivastava@ukzn.ac.za Viranjay@ieee.org	031 260 2759 084 657 5266	School of Engineering / Electronic Engineering
Food Science: cereal science & technology; food microbiology & industrial microbiology; food quality assurance	Siwela, Muthulisi - Dr	siwelam@ukzn.ac.za	033 260 5459 072 415 9652	School of Agricultural, Earth and Environmental Sciences
Biodiversity and conservation management; Large mammal conservation; invertebrate conservation	Slotow, Rob - Professor	slotow@ukzn.ac.za	083 681 7136	School of Life Sciences
Agricultural engineering; engineering hydrology, floods and water resources	Smithers, Jeffrey, - Professor	smithers@ukzn.ac.za	033 260 5490	School of Engineering / Bioresources Engineering
Developmental biology; cancer biology; cell biology; molecular biology	Sommer, Paula – Dr	sommerp@ukzn.ac.za	031 260 3336	School of Life Sciences
Sugarcane biorefinery – biomass conversion and separation, catalysis, process and solvent design.	Stark, Annegret – Professor	starka@ukzn.ac.za	031 260 3383 073 252 5906	School of Engineering / chemical engineering
Space Physics	Stephenson, Judy Ann Elizabeth - Dr	stephens@ukzn.ac.za	083 396 7938	School of Chemistry and Physics
Mechatronics; robotics; electronics; communication; network security	Stopforth, Riaan - Professor	stopforth@ukzn.ac.za	031 260 1063 072 255 3330	School of Engineering / Mechanical Engineering
Integrated and adaptive water management; water governance; adaption to climate change in water management; South African water law and policies; participatory Processes	Stuart-Hill, Sabine - Dr	Stuart-Hills@ukzn.ac.za	033 260 5460	School of Agricultural, Earth and Environmental Sciences / hydrology

High Voltage Engineering	Swanson, Andrew - Dr	swanson@ukzn.ac.za	031 260 2713	School of Engineering / Electrical Engineering
Image processing & computer vision; pattern recognition; machine learning; algorithms	Tapamo, Jules-Raymond - Professor	tapamoj@ukzn.ac.za	031 260 2751 079 337 3772	School of Engineering / Computer Engineering
Plant physiology, fruit trees orchard management, postharvest technology, plant antioxidants	Tesfay, Samson - Dr	Tesfay@ukzn.ac.za	(033) 2606180	School of Agricultural, Earth and Environmental Sciences
Taxonomy, systematics and zoogeography of sea cucumbers (Echinodermata: Holothuroidea)	Thandar, Ahmed S – Emeritus Professor	thandara@ukzn.ac.za	031 260 7972 083 616 4565	School of Life Sciences
Power System Stability and control On-line Dynamic Security Assessment	Tiako, Remy – Dr	Taiko@ukzn.ac.za	031-2601244 071 495 5482	School of Engineering / Electrical Engineering
Green building design and retrofit; green infrastructure; sustainable construction technologies; energy efficiency in buildings; green building rating systems.	Tramontin, Vittorio - Dr	Tramontin@ukzn.ac.za	0312601183	School of Engineering / Property Development
Poultry science; reproduction & fertility	Tyler, Nicola - Dr	tyler@ukzn.ac.za	033 260 5475	School of Agricultural, Earth and Environmental Sciences
Organic chemistry; natural product chemistry, synthetic chemistry, chemistry of plants used in traditional medicine; drug discovery	Van Heerden, Fanie – Professor	vanheerdenf@ukzn.ac.za	033 260 5886 082 823 8642	School of Chemistry and Physics
Community nutrition and geophagia	Van Onselen, Annette - Dr	Vanonselen@ukzn.ac.za	(033) 2606154 083 468 2862	School of Agricultural, Earth and Environmental Sciences
Plant growth & development; plant hormones; seed germination; traditional medicinal plants	Van Staden, Johannes - Professor	rcpgd@ukzn.ac.za vanstadenj@ukzn.ac.za	033 260 5130/1	School of Life Sciences
Inorganic chemistry; nanomaterials chemistry; sustainable energy chemistry and green chemistry; gold chemistry; supramolecular chemistry	Van Zyl, Werner Ewald - Professor	vanzylw@ukzn.ac.za	031 260 3188 072 476 5750	School of Chemistry and Physics
Plant tissue culture; plant germplasm conservation; cryopreservation of plant tissues; horticulture	Varghese, Dalia - Dr	vaghese@ukzn.ac.za	031 260 1404 078 725 6177	School of Life Sciences

Mechanical design and failure analysis; Material testing; Industrial efficiency techniques; Renewable energy\high efficiency electric vehicle design.	Veale, Kirsty, Miss	veale@ukzn.ac.za	031 260 1211 084 475 4321	School of Engineering / Mechanical Engineering
Atmospheric Remote Sensing, Atmospheric Physics, Atmospheric Structure and wave dynamics, Middle Atmosphere and Thermosphere and Ionosphere Interactions, Air Pollution, Aerosols and Clouds, Solar and UV Radiation	Venkataraman, Sivakumar – Professor	venkataramans@ukzn.ac.za	031 260 7661	School of Chemistry and Physics
Image processing and computer vision; pattern recognition and machine learning; biometrics; medical imaging and pathology detection; software reverse engineering and design patterns identification.	Viriri Serestina - Dr	viriris@ukzn.ac.za	031 260 3230	School of Mathematics, Statistics and Computer Science
Artificial creativity - evolutionary computing and machine learning techniques applied to music & acoustics; Operating systems - data communications and networking; high-performance computing; Software development - programming languages and development methods.	Vorster, Luke – Mr	vorsterl@ukzn.ac.za	031 260 1037 078 939 2841	School of Mathematics, Statistics and Computer Science
Stress physiology of invertebrates; animal adaption to changing environments; ecotoxicology & biomarker environments; animal performance in aquaculture & mariculture environments; metal pollution induced effects on animals.	Vosloo, Andre - Dr	vosloo@ukzn.ac.za	031 260 1337 082 455 5321	School of Life Sciences
Animal physiology and biochemistry; molecular mechanisms of functional adaptation; environmental toxicology; oxidative stress; thermal biology	Vosloo, Dalene - Dr	voslood@ukzn.ac.za	031 260 3237	School of Life Sciences
Climate change impacts on hydrology; climate change detection; climate change, land use & water dynamics	Warburton, Michele – Dr	warburtonm@ukzn.ac.za	033 260 6087	School of Agricultural, Earth and Environmental Sciences

Structural geology & tectonics, regional & field geology; petrology & geochemistry; economic geology	Watkeys, Michael - Professor	watkeys@ukzn.ac.za	031 260 2519 082 744 9748	School of Agricultural, Earth and Environmental Sciences / Geological Sciences
Plant propagation; plant biotechnology; plant physiology & biochemistry	Watt, Paula – Professor	wattm@ukzn.ac.za	031 260 1199	School of Life Sciences
Nonlinear analysis. Theory, methods, and applications; Elliptic partial differential equations (linear, semilinear, and nonlinear); Evolutionary equations and dynamical systems; Controllability theory for partial differential equations; Finite dimensional differential equations, dynamical systems, bifurcation theory and applications; Bifurcation and degree theories for partial differential equations and applications	Willie, Robert - Dr	wilier@ukzn.ac.za	031 260 7150	School of Mathematics, Statistics and Computer Science
Conservation genetics; phylogenetics & bioinformatics; landscape genetics & phylogeography	Willows-Munro, Sandi - Dr	Willows-munro@ukzn.ac.za	033 260 5436 072 931 6957	School of Life Sciences
Agricultural and food engineering	Workneh, Tilahun Seyoum – Professor	seyoum@ukzn.ac.za	033 260 5819 073 590 2339	School of Engineering/ Bioresources Engineering
Wireless communications	Xu, Hongjun – Professor	xuh@ukzn.ac.za	031 260 2107 072 463 9156	School of Engineering
Plant Pathology: Biological Control, biofertilization, disease management	Yobo, Kwasi Sackey - Dr	yobok@ukzn.ac.za	(033) 260 5822 082 979 1057	School of Agricultural, Earth and Environmental Sciences
Equine nutrition; African Horse Sickness, equine/animal science	Young, Marion - Dr	youngm@ukzn.ac.za	033 260 5478 082 419 3380	School of Agricultural, Earth and Environmental Sciences
Ecology of plant-insect interactions; Entomology; Biological control of invasive alien plants	Zachariades, Costas - Dr	zachariadesc@arc.agric.za	033 355 9418 083 315 2100	School of Life Sciences
Agricultural development economics; agro-biodiversity economics/natural resource economics; agricultural technology adoption; cost benefit analysis/impact assessment; economics of water use in agriculture, rural household survey design &	Zegeye, Edilegnaw Wale - Professor	walee@ukzn.ac.za	033 260 5410 079 942 1786	School of Agricultural, Earth and Environmental Sciences / Agricultural Economics

implementation				
Applied statistics; model diagnostics; generalised linear mixed models; generalised linear & nonlinear models; longitudinal studies	Zewotir, Temesgen - Professor	zewotir@ukzn.ac.za	033 260 5611 083 521 5476	School of Mathematics, Statistics and Computer Science