

## UJ HAS A TOTAL OF 176 NRF-RATED RESEARCHERS AS AT FEBRUARY 2017

The evaluation and rating of researchers [by the NRF] is based primarily on the quality of the research outputs in the recent past [2002 onwards] and is undertaken by national and international peers/reviewers who are requested to critically scrutinise the completed research.

### A-Rated (Leading International Researchers)

The NRF defines A-Rated researchers as “Researchers who are unequivocally recognised by their peers as leading international scholars in their field for the high quality and impact of their recent research outputs”.

Title	Initials	Surname	Faculty	Valid Rating	Specialization
Prof	NJ	Beukes	Science	A1	Economic geology, Sedimentology, Sedimentary geochemistry, Sequence stratigraphy
Prof	HC	Ferreira	Engineering	A2	Communication technologies, Information systems and technologies, Electronic engineering, Applied mathematics, Communication technologies, Information systems and technologies
Prof	WF	Harris	Health Science	A2	Physics, Biophysics, Vision metrology, Optics, Biostatistics, Biometrics
Prof	MA	Henning	Science	A2	Combinatorics, Graph theory
Prof	JN	Maina	Science	A2	Respiration
Prof	TH	Metz	Humanities	A2	Life, Meaning of, Ethics, Political and legal philosophy
<b>Total A-rated Researchers</b>				<b>6</b>	

### B-Rated (Internationally Acclaimed Researchers)

The NRF defines **B-Rated** researchers as “Researchers who enjoy considerable international recognition by their peers for the high quality and impact of their recent research outputs”.

Prof	SH	Connell	Science	B1	Solid state physics, Nuclear physics, Applied physics, Accelerator physics, High energy physics, Advanced materials
Prof	DJ	Geldenhuys	Humanities	B1	International relations, Foreign policy analysis
Prof	L	Gunner	Humanities	B1	Orality-Literacy Studies, African performance, African fiction (English), African languages, Oral literature, Blacks - Religion, Praise poetry, South African literature, Cultural studies
Prof	S	Karataglidis	Science	B1	Theoretical physics, Nuclear structure, Nuclear reactions, Nuclear astrophysics
Prof	K	Lammertsma	Science	B1	White
Prof	JC	Sonnekus	Law	B1	Private law, Property law, Law of Estoppel, Unjustified Enrichment, Matrimonial property law, Law of succession

Prof	KG	Tomaselli	Humanities	B1	Communication, Media Studies, Library and Information Sciences
Prof	BE	Van Wyk	Science	B1	Ethnobotany, Medicinal plant chemistry, Taxonomy, Biodiversity, Medicinal plants, Biosystematics
Prof	JL	Neels	Law	B2	Private international law
Prof	S	Tappe	Science	B2	Melting processes within the Earth's mantle, particularly the formation of alkaline and carbonate-rich magmas, and their roles within the geochemical cycle
Prof	L	Patel	Humanities	B2	Social work, Social work research, Social development, Social policy, Social security, Social welfare, Social policy
Prof	P	Alexander	Humanities	B2	Anthropology, Geography, Sociology and Social Work
Prof	C	Burnett-Louw	Health Science	B2	Sports sociology, Sports - Social aspects, Gender and Sports, Research methodology, Participatory research, Sports - Research, Community based research, Community development, Development sociology, Applied anthropology
Prof	PA	Dankelmann	Science	B2	Graph theory, Combinatorics
Prof	IA	Dubery	Science	B2	Plant biochemistry and molecular biology, Analytical biochemistry/ phytochemical analysis
Prof	BCEJB	Hendrickx	Humanities	B2	Byzantine studies, Byzantino-Africana
Prof	JD	Kramers	Science	B2	Isotope geochemistry
Prof	M	Lombard	Humanities	B2	Human evolution, Cognition and culture, Microscopy, Archaeology - Stone Age
Prof	CM	Rogerson	Management	B2	Urban tourism development, Local economic development, Small business development, Tourism - Development, Tourism - Impact, Tourism, Urbanisation and tourism
Prof	D	Scott-Macnab	Humanities	B2	Medieval Manuscripts, History of the Book, Textual Editing, Historical linguistics, English literature - Middle English, 1100-1500, Medieval studies, Literature, Medieval
Prof	WH	Steeb	Science	B2	Mathematical Tools in Computer Graphics, Mathematical Tools in Signal Processing, Lie Groups Lie Algebras and Computer Algebra, Mathematical physics
Prof	AM	Strydom	Science	B2	Strongly correlated electron systems, Magnetism, Electrical/magnetic measurements, Magnetic properties of matter, Electronic properties/solids, Low temperature physics
Prof	DD	Van Reenen	Science	B2	Metamorphic petrology, Structural geology, Tectonics
Prof	SH	Von Solms	Science	B2	Information security
Prof	DI	Bilchitz	Law	B3	Human rights law

Dr	LM	Chisholm	Education	B3	Research in comparative education and development, curriculum and education policy
Prof	J	Darkwa	Science	B3	Organometallic Chemistry, Organometallic chemistry, Homogeneous catalysis, Polymers, Coordination chemistry
Prof	GR	Hearne	Science	B3	Experimental condensed matter physics, High pressure research, Materials science
Prof	E	Henning	Education	B3	Language and literacy, Conceptual change learning, Early childhood education
Prof	A	Hofmann	Science	B3	Archaean studies (Geology)
Prof	TCJ	Jen	Engineering	B3	Coloured
Prof	T	Marwala	Non-Faculty	B3	Evolutionary computation, Intelligent control and signal processing, Artificial intelligence, Neural networks, Artificial intelligence, Finite element methods, Neural networks
Prof	LG	Mpedi	Law	B3	Social Security and Labour Law
Prof	B	Schmahmann	FADA	B3	Art - History - South Africa, History of art, public art, Gender studies, community art projects - needlework, Pop Art
Prof	FM	Tregenna	Economic and Financial Science	B3	Economics, Management, Administration and Accounting
Prof	PCJ	Vale	Humanities	B3	International studies, Social theory, International relations
Prof	KS	Viljoen	Science	B3	Economic geology
<b>Total B-rated Researchers</b>				<b>37</b>	

### **C-Rated (Established Researchers)**

The NRF defines C-Rated researchers as “Established researchers with a sustained recent record of productivity in the field who are recognised by their peers as having:

- produced a body of quality work, the core of which has coherence and attests to on-going engagement with the field;
- demonstrated the ability to conceptualise problems and apply research methods to investigating them”.

Prof	H	Abrahamse	Health Science	C1	Photodynamic therapy, Wound healing, Laser therapy
Prof	HJ	Annegarn	Science	C1	Atmospheric environment, Renewable energy, Environmental management
Prof	A	Avenant-Oldewage	Science	C1	Fish Parasitology, Water Quality, Fish parasitic monogenea, Water metal pollution, Crustacean ecology, Crustacean morphology
Prof	CJ	Conradie	Humanities	C1	Afrikaans and Dutch grammar, Historical linguistics

Dr	MA	Elburg	Science	C1	Igneous petrology, Granite petrology, Isotope geochemistry, Trace element analysis, Mineralogy
Prof	F	Freschi	FADA	C1	Architecture - History, Art - History - South Africa, Post-apartheid South Africa, Political parties - South Africa
Prof	JH	Janse van Vuren	Science	C1	White Fish haematology, Ecophysiology, Ecotoxicology, Biomarkers, Ecophysiology, Ecotoxicology
Prof	B	JANSEN VAN VUUREN	Science	C1	Phylogeography, Spatial and temporal patterns and processes of biotic diversity across different hierarchical levels from the gene to the ecosystem, Biological invasions, Molecular ecology
Prof	S	Razzaque	Science	C1	Astroparticle physics, High energy astrophysics
Prof	M	Swart	Law	C1	Transitional justice, international criminal law, and comparative constitutional law.
Prof	PM	Tilney	Science	C1	Plant anatomy
Prof	S	Vally	Education	C1	social class, trans-formation, social justice, human rights and democracy; critical and liberatory pedagogies; participatory action research and transdisciplinary approaches to critically examining education policy and practice.
Prof	M	Van der Bank	Science	C1	Molecular systematics, Population genetics
Prof	KE	Van der Linde	Law	C1	Corporate finance law, corporate law, creditor protection, corporate insolvency law, tax law.
Dr	NJ	Wagner	Science	C1	Coal petrography, coal geology, and clean coal technology
Prof	SM	Beukes	Humanities	C2	Politics of language, Applied linguistics, Language policy and planning, Translation studies, Sociolinguistics
Prof	J	Duncan	Humanities	C2	media policy, journalism, human rights, freedom of expression
Prof	M	Dundu	Engineering	C2	Cold-formed steel structures, Composite concrete-steel structures
Prof	LN	Farber	FADA	C2	Visual Culture
Prof	A	Kabundi	Economic and Financial Science	C2	Applied econometrics, Monetary economics, International Macroeconomics, Factor analysis, Neural networks
Prof	C	Landsberg	Humanities	C2	Diplomacy, Foreign policy analysis
Dr	J	Lehmann	Science	C2	tectonics structural geology orogen exploration
Prof	MC	Long	Education	C2	Mathematics Education, Rasch measurement theory, Assessment, Teacher Agency
Prof	R	Mestry	Education	C2	Education Law, Human Resource Management, Education leadership and management, Financial management
Prof	DV	Nicolae	FEBE	C2	white

Mr	AW	Opper	FADA	C2	Art, Architecture, Urbanism, Politics of space, spatial practice
Dr	A	Oskolski	Science	C2	white
Prof	NF	Petersen	Education	C2	Childhood Education, Service Learning, Social Justice and Care
Prof	DJ	Petzer	Management	C2	White
Dr	MF	Ferentinou	Engineering	C2	Geotechnics, Engineering geology, Geo Hazards
Prof	JM	Rogerson	Science	C2	Urban Geography, Economic Geography, Tourism and Sustainability
Prof	AD	Van Breda	Humanities	C2	resilience, care-leaving, clinical social work, social work education
Prof	GJ	van der Westhuizen	Education	C2	Learning interactions, professional learning, school learning, conversation analysis
Prof	KS	Berman	FADA	C2	Visual Art, Community Engagement, Cultural studies
Dr	RM	Brits	Science	C2	Functional analysis, Banach algebras, Spectral theory, Operator algebras, Operator theory, Functional Analysis
Prof	B	Cairncross	Science	C2	Coal sedimentology, Sedimentology, Mineralogy, Science education
Prof	GS	Cloete	Non-Faculty	C2	Governance, Public policy analysis, Decision support systems, Conflict resolution, public administration, Transformation management, Public management
Dr	BP	Doyle	Science	C2	Surface physics, Electron spectroscopy, Synchrotron X-rays, Electronic structure
Dr	SOE	Ekolu	Engineering	C2	Materials: Cementitious systems and concrete materials viz pozzolans, aggregates, admixtures
Prof	N	Erlank	Humanities	C2	Urban history (Johannesburg), gender, Christianity - South Africa, Gender and history, Colonialism - Africa, Historiography, Historical memory, Christianity - History
Prof	GH	Grantham	Science	C2	Antarctic – Southern African Geological relationships.
Prof	WJ	Henderson	Humanities	C2	Greek and Latin Lyric Poetry
Prof	T	Hendrickx	Humanities	C2	Nationalism - Greek, Byzantine studies, Frankokratia - Byzantium, Greek literature, Modern Greek
Prof	NJ	Kotze	Science	C2	Urban Geography
Prof	CCA	Labuschagne	Economic and Financial Science	C2	Functional analysis
Prof	C	Landsberg	H	C2	Diplomacy, Foreign policy analysis
Prof	BL	Leibowitz	Education	C2	Higher education - Learning facilitation
Prof	CH	MacKenzie	Humanities	C2	South African literature
Prof	C	Mbohwa	Engineering	C2	Energy production, Climate change - Adaptation, Climate change mitigation, Energy efficiency, Energy systems, Renewable energy,

					Sustainable life cycle management, Life Cycle Assessment, Life cycle engineering
Prof	R	Meijboom	Science	C2	Coordination chemistry, Organometallic chemistry, Crystallography (X-ray), Homogeneous catalysis, Heterogeneous catalysis, Operando spectroscopy
Prof	S	Motala	Non-Faculty	C2	Schools - Finance, Quality of education
Prof	CPH	Myburgh	Education	C2	Mental health promotion, Psycho-educational programme development, Psychology of education
Prof	JC	Ngila	Science	C2	Environmental/analytical chemist, Electroanalytical chemistry, Analytical polymer science, Environmental analysis, Electroanalytical, Analytical chemistry, Environmental analysis, Adsorption Chemistry, Wood science, Soil and water sciences
Prof	JC	Perumal	Education	C2	Curriculum, Curriculum management, Education management
Prof	J	Pillay	Education	C2	Educational psychology, Community psychology, Life Orientation
Prof	M	Poggenpoel	Health Science	C2	Psychiatric nursing, Mental health promotion, Psycho-educational programme development, Mental health, Substance abuse, Research at Postgraduate level in the field of education, Psychology and Psychiatric Nursing
Prof	ARE	Prinsloo	Science	C2	Magnetism, Solid state physics, Thin films
Prof	H	Raubenheimer	Science	C2	Functional analysis, Spectral theory of Banach algebras, Banach algebras
Prof	G	Roodt	Management	C2	Organisational behaviour, Research methodology, Psychological assessment, Organisational development
Prof	A	Rubin	Health Science	C2	Computer software development, Vision science
Prof	HA	Strydom	Law	C2	International environmental law, United Nations, International humanitarian law, International human rights law, International peace and security
Prof	PR	Teske	Science	C2	Uses genetic tools to study aquatic animals, with a specific focus on the marine biogeography of southern Africa.
Prof	A	Thomas	Management	C2	Governance, Business ethics, Corporate social investment
Prof	JM	Uys	Humanities	C2	Higher education - Identity, Social psychology - Intergroup relations and prejudices, Whistleblowing
Prof	G	Verhoef	Economic and Financial Science	C2	Accounting History, Economic history, Business History
Prof	KE	Von Veh	FADA	C2	Transgressive Christian Imagery in Post-apartheid South African Art
Prof	GM	Wagenaar (Pieterse)	Science	C2	Fish histology, Ecotoxicology, Physiology, Spermatology, Aquatic health
Prof	MM	Watney	Law	C2	Criminal Law, Law of Evidence, Cyber Law, Law of Criminal Procedure

Prof	R	Winkler	Humanities	C2	19th and 20th century European thought with a particular focus on the phenomenological tradition and German idealism. Rafael also has a research and teaching interest in contemporary epistemology and in early modern philosophy
Dr	CT	Chasi	Humanities	C3	health communication, political communication, and participatory communication
Prof	M	Coetzee	Science	C3	Wireless communication, World-Wide Web services, Information security, Network security
Prof	KJ	Collins	Humanities	C3	Participatory research, Action research, Social services
Prof	MF	Dutton	Health Science	C3	White Mycotoxins, Mycology, Environmental health, Food technology
Prof	EM	Ehlers	Science	C3	Artificial intelligence, Intelligent systems, Software engineering, Automata, Formal languages, Image processing
Prof	RN	Frenkel	Humanities	C3	Gender studies, post-colonial studies, Indian diaspora, South African literary and cultural studies
Prof	WDH	Gillan	Health Science	C3	Contact lenses
Prof	H	Kinfe	Science	C3	Medicinal chemistry, development of synthetic methodologies and biocatalysis
Prof	ZGK	Knight	Humanities	C3	Psychoanalysis, Object relations, Psychotherapy
Prof	A	Lo Giudice	Engineering	C3	Life Cycle Assessment
Dr	K	Mallick	Science	C3	Polymer composites, Nanomaterials, Nanobiotechnology, Organic chemistry (Synthesis), Catalysis, Conductive polymer nanocomposites, Material science,, Nanoscience,, Condensed matter physics
Prof	C	Marnewick	Management	C3	IT Project Management with specific focus on how project, programme and portfolio management can be used to implement organisational strategies.
Prof	NA	Moteetee	Science	C3	Plant Taxonomy and Systematics (specifically of the family Fabaceae), Ethnobotany, Medicinal Plants
Prof	H	Mouri	Science	C3	Metamorphic petrology, Mineralogy, Medical geology
Prof	AF	Mulaba-Bafubiandi	Engineering	C3	Materials science, Energy, Material science and technology, Physics, Minerals processing, Microwave energy, Minerals, Minerals beneficiation
Prof	AJ	Muller	Science	C3	Coordination chemistry, Single crystal X-ray, crystallography, Computational chemistry, Kinetics/reaction mechanisms
Dr	MAT	Nyenti	Law	C3	Social security law, labour law
Prof	AOS	Osman	FADA	C3	Architecture, Housing, Open building principles

Prof	K	Ouahada	Engineering	C3	Error correction coding, Forward error correction, Information theory, Power line communication, Graph theory, Modulation and coding, Spectral analysis, Channel coding, Digital signal processing
Dr	LA	Piater	Science	C3	Biochemistry, Plant:microbe interactions, Innate immunity, Proteomics
Prof	JHC	Pretorius	Engineering	C3	Electrical Engineering, Engineering Management, Energy Efficiency
Prof	HG	Pretorius	Humanities	C3	Gender-based violence, Intimate partner violence, Ethics, Family violence
Prof	UD	Ramnarain	Education	C3	Inquiry-based learning with a particular focus on the interaction between learner autonomy and teacher scaffolding.
Prof	Y	Rodney-Gumede	Humanities	C3	Political communication; Media law and ethics; Journalistic autonomy and issues of freedom of expression; Media and elections; The role of the media in conflict monitoring and resolution.
Prof	CA	Smit	Science	C3	Tectonics
Prof	TG	Swart	FEBE	C3	Information theory, Power line communication, Error correction coding
Prof	WD	Thwala	FEBE	C3	Sustainable construction, Construction site - Management, Construction industry
Prof	B	Twala	Engineering	C3	Applied and Theoretical Machine Learning, Classification Methods, Signal/Image Processing
Prof	FH	Van der Bank	Science	C3	Population genetics
Prof	X	Yangkou Mbianda	Science	C3	The synthesis of bioactive organophosphorus molecules, mainly potential cancer drugs (bisphosphonates...) and ligands for radiopharmaceuticals. This program is done in collaboration with industrial and government partners.
<b>Total C-rated Researchers</b>				<b>99</b>	
<b><u>P-Rated (NRF Prestigious Awardees)</u></b>					
The NRF defines P-Rated researchers as “Young researchers (normally younger than 35 years of age), who have held the doctorate or equivalent qualification for less than five years at the time of application and who, on the basis of exceptional potential demonstrated in their published doctoral work and/or their research outputs in their early post-doctoral careers are considered likely to become future leaders in their field”.					
Dr	AB	Broadbent	Humanities	P	Philosophy of science, Metaphysics, Jurisprudence
<b>Total P</b>				<b>1</b>	



### Y-Rated (Promising Young Researchers)

The NRF defines **Y-Rated** researchers as “Young researchers (normally younger than 35 years of age), who have held the doctorate or equivalent qualification for less than five years at the time of application, and who are recognised as having the potential to establish themselves as researchers within a five-year period after evaluation, based on their performance and productivity as researchers during their doctoral studies and/or early post-doctoral careers”.

Dr	MO	De Kock	Science	Y1	Precambrian geology, Paleomagnetism, Stratigraphy
Prof	GJ	Groenewald	Humanities	Y1	Entrepreneurship, Business History, History - Dutch East India Company, Indian Ocean - History, Books - History, Urban history - South Africa, History - Cape of Good Hope - 18th Century, Slavery - South Africa, Gender and Family History, Social stratification
Dr	PL	Masiteng	Science	Y1	The physical properties of atomic nuclei.
Dr	K	Moothi	FEBE	Y1	Nanotechnology, Water Treatment, Carbon Nanotubes, Membranes
Dr	K	Yessoufou	Science	Y1	Ecology, extinction biology, invasion ecology, climate change, Environmental Management
Prof	CO	Aigbavboa	Engineering	Y2	Housing studies, Sustainable construction, Sustainable development, Construction management, Construction development
Prof	GJ	Hoogendoorn	Science	Y2	Tourism Geography
Dr	L	Leonard	Management	Y2	environmental justice; sustainability; environment (industrial risks, climate change); democracy and governance; civil society-state-industry relations; social movements; transnational environmental accountability; global justice movements; and political ecology/economy.
Prof	B	Xing	Engineering	Y2	e-maintenance, computational intelligence, remanufacturing, reconfigurable manufacturing system, artificial intelligence
Dr	NM	Mboti	Humanities	Y2	Communication and media studies
Prof	NF	Nelwamondo	Engineering	Y2	Design and control of a novel hybrid manufacturing system
Ass Prof	SO	Oluwafemi	Science	Y2	Green synthesis of electrosynthesized silver nanoparticles.
Dr	S	Von Solms	Engineering	Y2	cyber security, impact of engineering technology & engineering education
Prof	Y	SUN	Engineering	Y2	Optimisation, Automation, Artificial Intelligence, Nonlinear Dynamics
Prof	ET	Akinlabi	Engineering	Y2	Material science and technology, Laser materials processing, Friction stir welding
Prof	OA	Arotiba	Science	Y2	Electrochemistry, Physical Chemistry
Prof	B	Barnes	Humanities	Y2	Behaviour modification, Critical psychology, Public health psychology

Dr	E	Carleschi	Science	Y2	Electronic structure, Electron spectroscopy, Surface science, Strongly correlated electron systems, Synchrotron X-rays, Transition metal oxides
Prof	WE	Conradie	Science	Y2	Modal logic, Logic, Symbolic and mathematical, Logic and Computation
Prof	CF	De Meyer	Management	Y2	She specialises in Customer Relationship Marketing and Services Marketing
Dr	C	Hill	Management	Y2	Personality, Personality assessment, Cross-cultural assessment, Cross-cultural psychology, Psychometrics, Work wellness - South Africa
Dr	NN	Houeld	Health Science	Y2	Laser in biology, Laser therapy, Laser tissue interaction
Prof	K	Jalama	Engineering	Y2	Heterogeneous catalysis, Fischer-Tropsch synthesis, Biofuels, Nanomaterials, Process simulation
Dr	EJJ	Joubert	Science	Y2	Graph theory
Prof	N	Locke	Law	Y2	Corporate debt
Prof	D	Millard	Law	Y2	Law of delictual damages, Social security (Law), Insurance law
Dr	KN	Njenga	Management	Y2	Information systems - Audit and control, Information security, Information security governance
Prof	F	Ntuli	Engineering	Y2	Hydrometallurgy, Crystallisation, Precipitation, Wastewater treatment, Particulate systems, Leaching
Prof	BS	Shaw	Health Science	Y2	Green synthesis of elextrose reduced silver nanoparticles.
Dr	S	Sitha	Science	Y2	Computational chemistry, Computational biology, Computational modelling, Quantum chemistry, Quantum electronics, Theoretical chemistry, Theoretical biochemistry, Physical organic chemistry, Physical chemistry
Prof	WI	Ukperere	Management	Y2	Management - Employee participation, Small business - Management, Management science
Dr	JC	Van Dyk	Science	Y2	Aquatic health, Fish histology
Dr	E	Venter	Science	Y2	Molecular plant pathology, Plant molecular biology, Plant-insect interactions, Host-plant resistance
<b>Total Y- rated Researchers</b>				<b>33</b>	