



RHODES UNIVERSITY

————— 2015 —————

GRADUATION CEREMONY

1820 SETTLERS NATIONAL MONUMENT

THURSDAY, 09 APRIL AT 10.00

CHANCELLOR
The Hon Justice L Mpati, BA, LLB, LLD (*Honoris causa*)

VICE-CHANCELLOR
SG Mabizela, MSc, PhD

ACTING DEPUTY VICE-CHANCELLOR (ACADEMIC & STUDENT AFFAIRS)
Professor CM Boughey, MA, MA, PGCE, DPhil

DEPUTY VICE-CHANCELLOR (RESEARCH & DEVELOPMENT)
PG Clayton, PhD, FICS, MCSSA, MACM

CHAIRPERSON OF COUNCIL
VD Kahla, BA, LLB

PRESIDENT OF CONVOCATION
The Rev TSN Gqubule, PhD, DD (*Honoris causa*)

DEANS

Professor TW Martin, BSc(Hons), BA(Hons), PhD
Professor AJ Booth, BSc(Hons), PhD
Dr R Krüger, BA(Hons), LLB, PhD
Professor PD Wilmot, BA, HDE, BEd, MEd, PhD
Professor DA Sewry, MSc, PhD, FICSIT, MCSSA, MAIS
Professor RB Walker, BPharm, PhD, MPS

Dean of the Faculty of Humanities
Acting Dean of the Faculty of Science
Dean of the Faculty of Law
Dean of the Faculty of Education
Dean of the Faculty of Commerce
Dean of the Faculty of Pharmacy

REGISTRAR
S Fourie, BTh, BD, DTh

VIS VIRTUS VERITAS

Quae paris cives animo vigentes
Africae praebens rationis artes
Alma te mater canimus libenter
Nos Rhodienses.

You who produce citizens of vigorous intellect, as
you offer to Africa the arts and skills which come
from reason - we who are Rhodians gladly hymn
you, our Alma Mater.

Veritas semper pretiosa nobis
Praesit et pellat procul omne furtum
Neu sinat quemquam male consulentem
Discere falsa.

May truth be always precious and preside over us
and may it drive far away all deceit, nor may it
allow anyone with evil intent to learn what is
false.

Quicquid est foedum cohibere, quicquid
Integrae vitae proprium tueri
Gaudeat virtus studiosa pacis
Visque benigna.

May virtue and courage, eager for peace, together
with well disposed strength, rejoice to restrain
whatever is disgusting and to uphold whatever
belongs to the fullness of life.

Purpura cincti et memores parentum
Cuique nitamur dare iustum honorem
Neminique umquam licet invidentes
Astra petamus.

Clad with purple and remembering our parents,
let us strive to render to everyone with honour
which is due and without envying anyone let us
aim for the stars.

ORDER OF PROCEEDINGS

The Congregation is requested to stand while the Choir sings Vis Virtus Veritas and the Procession enters the Auditorium.

The Chancellor will constitute the Congregation.

The Vice-Chancellor will welcome the Congregation.

The Acting Dean of the Faculty will present the candidates for the Degrees of Bachelor, Bachelor with Honours and Doctor of Philosophy.

The Acting Deputy Vice-Chancellor (Academic and Student Affairs) will present the Jongaphambili Sinethemba Group (Sheona Elizabeth Shackleton, Georgina Cundill, Nicholas Hamer, Monde Edwin Ntshudu and Heila Lotz-Sisitka) for the Vice-Chancellor's Distinguished Award for Community Engagement.

The Deputy Vice-Chancellor (Research and Development) will present Barry Vivian William Irwin for the Vice-Chancellor's Distinguished Research Medal.

The Deputy Vice-Chancellor (Research and Development) will present Charles Michael Shackleton for the Vice-Chancellor's Distinguished Senior Research Medal.

The congregation will stand and sing the National Anthem.

The Chancellor will dissolve the Congregation.

The Congregation is requested to stand while the Choir sings Gaudeamus Igitur and the Procession leaves the Auditorium.

With the exception of the commencement and conclusion of the Ceremony and the singing of the National Anthem, members of the Congregation are requested to remain seated throughout the proceedings.

FACULTY OF SCIENCE

DEGREE OF BACHELOR OF SCIENCE

ANDERSON, Ian William
ANDERSON, Maurice Bruce
ANDREW, Nicholas James
ARUN, Aditya
BAILEY, Jean-Clive David
BALL, Leslie Thomas Saddleton
BLOY, Lesley Elizabeth
BORNMAN, Eugin
BOTH, Kauri Hannah
BOTTON, Bruce Vivian
BRIGGS, Tiffany Elizabeth
BURSEY, James Rodney
BUTLER, Edward Claude
BUYS, Kylie
CARRUTHERS, Nicola Mary
CHABELI, Relebohile Puleng Pertunia
CHIKAMBURE, Kudzai Trevor Theo, **with distinction in Computer Science**
CHILOANE, Virae Daisy
COETZEE, Amy
CRANSWICK, Russell Vos
CRICHTON, Gregory David
CROSS, Andreas Oliver
CULL, Darryn Edwin
DA SILVA, Stephanie Anne
DAMJI, Amira Mahamood, **with distinctions in Biochemistry and Microbiology**
DANIEL, Jay Matthew
DE BEER, Ashley Clifford
DE FLEURIOT DE LA COLINIERE, Kayla Gabriella
DE LANGE, Anja, **with distinctions in Biochemistry and Human Kinetics & Ergonomics**
DE WET, Kirsten Andrea
DEDEKIND, Danielle

DONYELI, Mandilakhe
 DORBOR JR, Stephen Baysah, **with distinction in Chemistry**
 DREWETT, Jessica Coral, **with distinction in Geography**
 DUNCAN, Pamela
 DUNE, Tadiwanashe Chido, **with distinction in Environmental Science**
 DUNLOP, Robyn, **with distinction in Biochemistry**
 DUNYWA, Siphumelele Asamkele
 ELLERY, Steven Grant
 FALTEIN, Zintle
 FAUL, Charles Fredrick James
 FELLOWS, Tamika Daniella, **with distinctions in Biochemistry and Botany and Microbiology**
 FREER, James Edward Carless
 GIBBON, Ethan Miles
 GREEVES, Amy-Lee
 GRIFFITH, Tamzin Camilla
 HANNWEG, Bianca
 HEINS, Matthew Russell, **with distinctions in Geography and Geology**
 HEYDENRYCH, Shaan Melissa
 HIGGO, Tai Brereton, **with distinctions in Ichthyology and Zoology**
 HLATSHWAYO, Manqoba Qedindaba, **with distinction in Mathematics**
 HLATSHWAYO, Zweli Thabiso
 HOEPFNER, Bernard Johan
 HOUGHTING, Samantha Wendy
 HUNDLING, Jethro Daniel, **with distinction in Biochemistry**
 HUTTON, Joshua Matthew
 ISEMONGER, Eric William
 JALI, Vuyokazi Connie
 JOKAZI, Nombulelo Virginia
 KEKANA, Refiloe Mary
 KENNEDY, Amy Jane
 KENT, Cameron Vincent, **with distinction in Information Systems**
 KGWASI, Mpho Clementine
 KINGON, Matthew Shane

KNOX, Jenna Tracy
 KOORN, Craig Ian, **with distinctions in Applied Mathematics and
Computer Science and Information Systems**
 KRUGER, Michael Johan, **with distinctions in Computer Science
and Information Systems**
 LANCASTER, Tara
 LE FEBOUR, Brendon
 LE ROUX, Chase Alexander
 LEAVER, Craig Jacob
 LEBETA, Omphile
 LILFORD, Shannon Theresa
 LLOYD, Melissa, **with distinction in Microbiology**
 LOTTER, Lucas Ronald, **with distinction in Biochemistry**
 LOURENCO, Marcelo Daniel
 LOVEMORE, Richard Norman
 MABUTYANA, Awongiwe Nonkululeko
 MACCALLUM, Robert Peter, **with distinctions in Chemistry and
Physics**
 MADIKAZI, Siphesande
 MAGOPENI, Chumisa Kathleen
 MAHARAJ, Shantal
 MAHLANGU, Gugu Precious
 MAINGARD, Luke Patrick
 MAJONGWE, Tapuwa Alex
 MAJOZI, Duduzile
 MAKAWULA, Thokozani
 MAKHASI, Lwandile
 MARAKANE, Mathapelo Johanna
 MASEBE, Conslihah Tebogo
 MASEKO, Sfiso Doctor
 MATIAS, Kelly-Ann
 MAY, Ashley Lynn
 MAY, Aviwe Khanya, **with distinction in Chemistry**
 MHLONGO, Buhlebakhe Marinda
 MOLOBI, Lesego Pauline
 MOODLEY, Holisha
 MOORCROFT, Justin Fenner

MOTILAODI, Donald
 MOYO, Chido
 MPEKA, Tlokotsi Lefu Paul
 MPONWANA, William
 MPOPETSI, Pule Peter
 MPUPA, Anele
 MUNRO, Catherine Elizabeth
 MUZENDA, Trish, **with distinctions in Biochemistry and**
 Microbiology
 NDOBO, Irene
 NGXIKI, Masibulele
 NICHOLSON, Chase Hurst
 NKANGALA, Kuhle
 NKATA, Zimkita Zenande
 NKOANA, Mmabatho Bridget
 NKOSI, Lwandile Innocentia
 NTSHANGASE, Nondumiso Thembani
 NTSONGE, Sinazo
 NTWALI, Blaise
 NUKA, William Jedi Junior
 NUNN, Matthew James
 NUTTALL-SMITH, Gareth David
 NYAMELA, Namso
 NYAMUJARA, Tinashe
 NYIKADZINO, Natalie Amy Tendai
 NYUSELA, Siphokazi
 OREE, Glynis
 PACA, Athandwe Monica
 PAINTER, Kathleen
 PEARTON, Tracy Ann, **with distinction in Environmental Science**
 PETERSEN, Elaine Maree
 PHUTIEAGAE, Kgalalelo Valerie
 PILLAY, Maxime Lynn
 PITCHER, Courtney Richard
 PLAATJIE, Sphosethu
 POYOYO, Masixole

PROCTOR, Shannon Nicolle, **with distinctions in** Human Kinetics
 & Ergonomics **and** Psychology
 RAMOSHABA, Malefo Rebotile
 REID, Nichola
 RIORDAN, Tristam Sikokhele, **with distinction in** Information
 Systems
 ROBERTS, Sky
 ROBERTSHAW, Matthew James William
 ROBINSON, Bradley Charles
 ROBINSON, Craig Grant, **with distinction in** Information Systems
 RUTTER, Dana Monique
 SAMSON, William John, **with distinction in** Biochemistry
 SANTHIA, Shalon, **with distinctions in** Applied Mathematics **and**
 Mathematics
 SCHEEPERS, Martinus Johannes
 SHIBE, Thobeka Ethel, **with distinction in** Mathematical Statistics
 SHWEMPE, Noluvuyo
 SINDELO, Azole
 SITHOLE, Nombuso Slindile
 SMART, Catherine Ann, **with distinction in** Environmental Science
 SMETHERHAM, Kyle Norman
 SNELL, Holly, **with distinctions in** Chemistry **and** Physics
 SOUTAR, Erin Jessica
 SOUTHEY, Richard Robert, **with distinctions in** Information
 Systems **and** Mathematical Statistics
 STARKEY, Roxanne, **with distinction in** Environmental Science
 STEPHENS, Kirstin, **with distinction in** Environmental Science
 SUTTON, Guy Frederick, **with distinctions in** Entomology **and**
 Microbiology
 TALMA, Sheena Claudia Aisa Lydie
 TEFFO, Francina
 THACKRAY, Jonathan Lawrence
 THERON, Jedrick Dane
 THOSAGO, Magadima Mary
 VALENTINE, Kyle, **with distinction in** Mathematical Statistics
 VAN DER MERWE, Marcel
 VAN STADEN, Jefferson Luke

VAN TONDER, Roger Douglas
 VAN WYK, Nicholas Kelly
 VENTER, Brian Edwin Nixon, **with distinction in Information Systems**
 VERCUEIL, Jessica Jean
 VISAGIE, Kevin Johan
 VOWLES, Kathleen Frances
 WALAZA, Zintle
 WAMBUA, Lynn Mutio, **with distinctions in Biochemistry and Microbiology**
 WESTCOTT, Wayne John
 WESTON, Mark Jonathan
 WHELAN, Jaclyn Tara
 WHITE, Bridget Anne
 WILLIAMS, Roxanne May
 WRIGHT, Oliver Thomas
 YOUNG, Aeren De Chelaine

DEGREE OF BACHELOR OF SCIENCE (INFORMATION SYSTEMS)

DAMANA, Sonwabiso Buyiselo, **with distinction in Information Systems**
 FAUL, Graeme John
 MOJAPELO, Tshireletjo Mosebo
 PEBANE, Rethabile Florence
 TEMBANE, Noxolo

DEGREE OF BACHELOR OF SCIENCE WITH HONOURS

ABBOTT, Chyanne, in Chemistry, **with distinction**
 ABBOTT, Michael John, in Computer Science/Information Systems
 ASTIER, Adrian Maxime Alexandre, in Ichthyology & Fisheries Science
 AYRES, Gabrielle Alexzena, in Geography
 BADENHORST, Rozane, in Microbiology

BANNATYNE, Laura Joan, in Environmental Water Management, **with distinction**
 BARCLAY, Amy Suzanne, in Environmental Water Management
 BARCLAY, Donald Charles, in Environmental Science
 BARNES, Lauren Lee, in Biochemistry
 BLANCKENBERG, Michelle Claire, in African Vertebrate Biodiversity, **with distinction**
 BRITS, Devon, in Entomology
 BUDAZA, Edward, in Mathematical Statistics
 BURKE, Ashley Morgan, in Entomology, **with distinction**
 CHIKOMO, Kevin, in Financial Management
 CHIPFAKACHA, Melody, in Environmental Science
 CLARKE, Matthew David, in Biochemistry, **with distinction**
 CORMACK, Bradley Alexander, in Chemistry
 CRAIG, Christie Anne, in African Vertebrate Biodiversity
 CRANSWICK, Russell Vos, in Geology, **with distinction**
 DAMES, Michael Henri, in Ichthyology & Fisheries Science
 DAWETI, Sakhile Vincent, in Information Systems
 DE BEER, Frankie Emma, in African Vertebrate Biodiversity
 DE BRUYN, Mart-Mari, in Microbiology, **with distinction**
 DERRY, Leigh-Anne Tracy Kim, in Biochemistry, **with distinction**
 DINGLE, Ashton Vicky, in Physics & Electronics, **with distinction**
 DINGLE, Laura Margaret Kirkpatrick, in Biochemistry, **with distinction**
 DOCHERTY, Keigan Stuart, in African Vertebrate Biodiversity
 DUNSER, Stephen John, in Ichthyology & Fisheries Science
 ERASMUS, Bernard, in Ichthyology & Fisheries Science
 FINDLAY, Megan Jean, in Human Kinetics & Ergonomics
 FREESE, Kelvin Roderic, in Computer Science/Information Systems
 FRITSCH, Thomas Roland, in Microbiology
 GAISFORD, Elizabeth Louise, in Botany
 GOODENOUGH, Luke Brian, in Human Kinetics & Ergonomics
 HAMUNIME, Naufiku Paulina, in Geography, **with distinction**
 HARRIS, Jessica Anne, in Chemistry, **with distinction**
 HIGGINS, Olivia Elizabeth, in Environmental Science, **with distinction**
 HILLIAR, Storm Hannah, in Microbiology, **with distinction**

HODGSON, Danuta Lorina, in Geography
 HÖFT, Maxine Allison, in Microbiology
 HONIBALL, John Robert, in Biotechnology, **with distinction**
 HOUSEMAN, Pascalene Shannon, in Biotechnology
 HOWE, Megan Joanne, in Environmental Science
 HOYI, Zandile, in Human Kinetics & Ergonomics
 HUCHZERMEYER, Nicholas Heinrich, in Geography
 HUNT, Kieran Richard, in Computer Science
 HUNTER, Cayley Ann, in African Vertebrate Biodiversity
 HUNTER, Jeannine, in Botany
 IMMELMAN, Caroline, in Biotechnology
 INGLIS, Judge Cameron, in Ichthyology & Fisheries Science, **with distinction**
 JACKSON, Hayley Claire, in Biochemistry
 JAY, Lonwabo, in Mathematical Statistics
 JOHNSON, Kyle Mills, in Computer Science
 JOUBERT, Francois Dehan, in Entomology
 JUBY, Roxanne, in Ichthyology & Fisheries Science, **with distinction**
 KABI, Seitebatso Khasiane, in Mathematics, **with distinction**
 KABUDI, Tumaini John, in Information Systems, **with distinction**
 KAYES, Sean Michael, in Mathematical Statistics/Mathematics
 KAYTON, Michelle Louise, in Environmental Water Management
 KEIGHLEY, Tia-Kristi, in Environmental Science
 KELLY, Kelvin Leigh, in Chemistry
 KENT, Jessica Lynn, in Computer Science, **with distinction**
 KING, Philippa Jane, in Economics
 KOTA, Ntsika Monde Mbulelo, in Chemistry
 LAGESSE, Juliette Valerie, in Environmental Science, **with distinction**
 LARGATZIS, Savvas Anthony, in Geology, **with distinction**
 LLOYD, Kyle John, in African Vertebrate Biodiversity/Botany, **with distinction**
 MACHELL-COX, Matthew Ferguson, in Ichthyology & Fisheries Science
 MADIKANE, Zipporah Kayakazi, in Chemistry
 MAFU, Masakheke, in Mathematical Statistics, **with distinction**

MAGWAZA, Rachael Ntombikayise, in Chemistry
MAJERO, Tinotenda Agnes Tiffany, in Biotechnology, **with distinction**
MAKALIMA, Gwiba Hlonela, in Chemistry
MAKELENI, Nelisa, in Biochemistry
MAKGOE, Annah Motshwenyane, in Mathematical Statistics
MAKHENE, Lebohang, in Biotechnology
MAMHENDE, Precious Gamuchirai, in Biochemistry
MATIWANE, Lwazi Mandilive, in Microbiology
MATONG, Joseph Mojalefa, in Chemistry
MAXAMBA, Qaqamba, in Mathematical Statistics/Mathematics
MBABA, Mziyanda, in Chemistry, **with distinction**
MDUNGE, Sanele Maud Nondumiso, in Biochemistry
MGABA, Ntombekhaya, in Environmental Water Management
MILES, Adrian Ross, in Computer Science/Information Systems
MJOLI, Nwabisa, in Environmental Science
MKHIZE, Bongimpilo Kevin, in Biotechnology
MLANDU, Cumisa Manzikazi, in Biotechnology
MORAKE, Selokwane Thabang, in Biotechnology, **with distinction**
MOSTERT, Emma Charlotte, in Botany, **with distinction**
MOTALA, Robert Ramapulana, in Applied Mathematics
MOTSUMI, Tebagano Valerie, in Computer Science/Information Systems
MOXHAM, Emily Jeanne, in Ichthyology & Fisheries Science
MPOFU, Trisha Lerato, in Biotechnology, **with distinction**
MSENGANA, Siphokazi Valencia, in Chemistry
MTHETHWA, Siphokazi Bongiwe Kho, in Environmental Science
MTHOMBOTHI, Zinhle Emily, in Mathematics
MTSHEMLA, Buhlebendalo, in Microbiology
MTUTU, Paidamoyo Pearl Tinashe, in Environmental Science
MTWEBANA, Sinethemba Siphokazi, in Biotechnology
MULLINS, Rachel Brenna, in Ichthyology & Fisheries Science, **with distinction**
MUSHEGA, Munanura Kasya, in Biochemistry
MUSKETT, Phillippa Claire, in Entomology
MVANGO, Sindisiwe, in Chemistry
NAUDE, Simon Mark Berg, in Computer Science

NCUME, Mawande, in Geology
 NDORO, Tariro, in Microbiology
 NDOU, Esther, in Environmental Science
 NICHOLSON, Thomas Joseph, in Biotechnology
 NJOKO, Nqobile Antonia, in Chemistry
 NONDLAZI, Sinoyolo, in Biotechnology
 NORMAN, Alexandra Louise, in African Vertebrate Biodiversity
 NTINGANA, Nokuthula, in Environmental Science
 O'DONOGHUE, Charles St John Nqwabuko, in Chemistry, **with distinction**
 OPENSHAW, Roxanne, in Chemistry
 POLAK, James Samuel, in Economics, **with distinction**
 RALL, Adrienne, in Environmental Water Management
 RAMOKGABA, Lesego, in Geology
 RAUDZINGANA, Maanda, in Computer Science/Information Systems
 RAWLINS, Jonathan Mark, in Environmental Water Management, **with distinction**
 ROODT, Murray Steven, in Zoology
 ROSENFELS, Jessica Ann, in Geography
 RUDMAN, Lauren Lynne, in Computer Science
 SABA, Asanda Julius, in Chemistry
 SANTHIA, Darika, in Environmental Science, **with distinction**
 SCHMIDT, Nicholas Conrad, in Ichthyology & Fisheries Science
 SICWEBU, Kanyisa, in Geology
 SILBERNAGL, Ryan, in Environmental Water Management
 SITHOLE, Yonela, in Ichthyology & Fisheries Science
 SIXABA, Vuyile Lucky, in Applied Mathematics/Physics
 SMITH, Timothy Graham, in Ichthyology & Fisheries Science
 SOUTER, Steven Albert, in Human Kinetics & Ergonomics
 TAYLOR, Robert David, in Geology
 TAYLOR, Rozanne Maria, in Chemistry, **with distinction**
 THACKERAY, Sean Robin, in Entomology, **with distinction**
 THOMAS, Msimelelo Athenkosi, in Information Systems
 TILBURY, Chelsea Miranda, in Chemistry, **with distinction**
 TOZER, Sven-Gareth, in Entomology
 TRIACA, Alessandro Robert, in Computer Science

UKAMA, Angela, in Biochemistry
 UNDERHILL, Laura Gillian, in Environmental Science
 UPFOLD, Nicole Sarah, in Microbiology, **with distinction**
 VAN ZYL, Ignus, in Computer Science/Information Systems
 WEIR, Ian J.D, in Geology
 WHEELER, Alexander Thomas, in Geology
 WOOLF, Gregory Jay, in Biochemistry
 YATES, David Mcwilliam, in Computer Science
 ZEFFERTT, Mikha Elizabeth, in Computer Science, **with distinction**
 ZEISBERGER, Dusty Stuart, in Human Kinetics & Ergonomics

DEGREE OF DOCTOR OF PHILOSOPHY

ADAMS, Ross Montague, BScHons (Wits), MSc (Rhodes), in Mathematics, in the Department of Mathematics (Pure and Applied). Degree by thesis. Thesis: Contributions to the study of a class of optimal control problems on the orthogonal groups $SO(3)$ and $SO(4)$. Supervisor: Dr CC Remsing. Co-supervisor: Dr W Holderbaum (Reading).

BERGAMINO ROMAN, Leandro, MSc (Uruguay), in Marine Biology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Spatial and temporal variations in trophic connectivity within an estuarine environment: Benthic-pelagic and terrestrial-aquatic linkages via invertebrates and fishes. Supervisor: Dr NB Richoux.

BIGGS, Rory, MSc (Rhodes), in Mathematics, in the Department of Mathematics (Pure and Applied). Degree by thesis. Thesis: Invariant control systems and sub-Riemannian structures on Lie groups: Equivalence and isometries. Supervisor: Dr CC Remsing. Co-supervisor: Professor NT Nagy (Budapest).

BIZABANI, Christine, BScHons (Midlands State), MSc (Rhodes), in Microbiology, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: The diversity of root fungi associated with

Erica species occurring in the Albany centre of endemism. Supervisor: Professor JF Dames.

BRYJA, Malgorzata Anna, BA (Toronto), MSc (York, Canada), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: An evaluation of the potential for implementing adaptive co-management in the Waodani social-ecological system in the Ecuadorian Amazon. Supervisor: Professor SE Shackleton.

CECH, Alexandra Louise, BSc (Wits), in Biotechnology, in the Biotechnology Innovation Centre. Degree by thesis. Thesis: Towards a mobile bioethanol unit for point of source conversion of sugar sources to bioethanol: Design and feasibility study for South Africa. Supervisor: Professor JL Limson. Co-supervisors: Dr R Fogel and Dr G Cambray.

CHAMBERS, Craig Brian, MSc (UKZN), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Production of *Cydia pomonella* granulovirus (CpGv) in a heterologous host, *Thaumatotibia leucotreta* (Meyrick) (False codling moth). Supervisor: Professor MP Hill. Co-supervisors: Dr C Knox and Dr SD Moore (CRI).

CLIFFORD-HOLMES, Jai Kumar, BAHons (Rhodes), in Water Resource Science, in the Institute for Water Research. Degree by thesis. Thesis: Fire and water: A transdisciplinary investigation of water governance in the lower Sundays River Valley, South Africa. Supervisor: Professor CG Palmer. Co-supervisors: Professor CJ de Wet and Prof J Slinger (DELFT).

DALU, Tatenda, MSc (Zimbabwe), in Marine Biology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Spatio-temporal variation in the phytobenthos and phytoplankton community structure and composition of particulate matter along a river-estuary continuum assessed using microscopic and stable

isotope analyses. Supervisor: Dr NB Richoux. Co-supervisor: Professor PW Froneman.

DALY, Ryan, MSc (Rhodes), in Marine Biology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Feeding ecology, residency patterns and migration dynamics of bull sharks (*Carcharhinus leucas*) in the southwest Indian Ocean. Supervisor: Professor PW Froneman. Co-supervisor: Dr M Smale (Bayworld).

DE ALMEIDA, Louise Kashiavala Sophia, MSc (Rhodes), in Biochemistry, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: The detection of glyphosate and glyphosate-based herbicides in water, using nanotechnology. Supervisor: Professor BI Pletschke. Co-supervisor: Professor C Frost (NMMU).

DHANANI, Karim Colin Hassan, MSc (Rhodes), in Biochemistry, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Human *FNI* is regulated by the heat-shock response. Supervisor: Dr AL Edkins.

EDEKI, Oghenekume Gerald, MSc (Ilorin), in Environmental Biotechnology, in the Institute for Environmental Biotechnology. Degree by thesis. Thesis: Bacterial degradation of fossil fuel waste in aqueous and solid media. Supervisor: Professor AK Cowan (EBRU).

FASHINA, Adedayo Alabi, MSc (Ibadan), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Photophysical studies of Zinc phthalocyanine-silica nanoparticle conjugates. Supervisor: Distinguished Professor T Nyokong.

FILMALTER, John David, MSc (Rhodes), in Fisheries Science, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: The associative behavior of silky sharks, *Carcharhinus falciformis*, with floating objects in the open ocean. Supervisor: Dr P Cowley (SAIAB). Co-supervisor: Dr L Dagorn (IRD).

FOX, Helen Elizabeth, MSc (Rhodes), in Water Resource Science, in the Institute for Water Research. Degree by thesis. Thesis: Social-ecological resilience for well-being: A critical realist case study of Boksburg Lake, South Africa. Supervisor: Professor CG Palmer. Co-supervisor: Professor R O'Donoghue.

GENNARI, Enrico, MSc (Degli Studi (La Sapienza)), in Fisheries Science, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: Thermal physiology and behavioural ecology of the white shark, *Carcharodon carcharias*. Supervisor: Dr P Cowley (SAIAB). Co-supervisor: Mr R Johnson (Oceans Research).

GOLA, Nontutuzelo Pearl, BScHons (UPE), MSc (Stell), in Water Resource Science, in the Institute for Water Research. Degree by thesis. Thesis: The value of locally isolated freshwater micro-algae in toxicity testing for water resource management in South Africa. Supervisor: Professor CG Palmer. Co-supervisor: Dr NJ Muller (Amatola Water Board).

JONES, Roy William, NDip (Technikon SA), MSc (Rhodes), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Aquatic invasions of the Nseleni river system: causes, consequences and control. Supervisor: Professor MP Hill. Co-supervisors: Dr O Weyl and Dr JM Hill.

KHOZA, Phindile Brenda, BSc (UKZN), BScHons (Zululand), MSc (UJ), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Phthalocyanine-nanoparticle conjugates for photodynamic therapy of cancer and phototransformation of organic pollutants. Supervisor: Distinguished Professor T Nyokong.

MAAKE, Pholoshi Abram, MSc (Limpopo), in Ichthyology, in the Department of Ichthyology and Fisheries Science. Degree by thesis. Thesis: Systematics and phylogeography of mormyrid fishes in South Africa. Supervisor: Dr G Gouws (SAIAB). Co-supervisors: Dr E Swartz (SAIAB) and Mr O Gon (SAIAB).

MAGWA, Nomampondo Penelope, BSc (NMMU), BScHons, MSc (Rhodes), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: The development of amine-based extractants for separation of base metals in a sulfate medium. Supervisor: Professor Z Tshentu (NMMU). Co-supervisor: Professor GW Watkins.

MARINGA, Audacity, BScHons (Zimbabwe), MSc (Wits), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Electrode surface modification using metallophthalocyanines and metal nanoparticles: Electrocatalytic activity. Supervisor: Distinguished Professor T Nyokong.

MAY, Bronwen, BScHons (Rhodes), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Investigations into insect-induced plant responses of Water Hyacinth, (*Eichhornia crassipes*) (Pontederiaceae.) Supervisor: Dr JA Coetzee.

MOHOBANE, Thabiso, BScHons (Lesotho), MSc (Waikato), in Hydrology, in the Institute for Water Research. Degree by thesis. Thesis: Water resources availability in the Caledon River basin: Past, present and future. Supervisor: Professor DA Hughes. Co-supervisor: Dr SK Mantel.

MOKOENA, Fortunate, BScHons (Limpopo), MSc (Rhodes), in Biotechnology, in the Biotechnology Innovation Centre. Degree by thesis. Thesis: Characterization of the co-chaperones of Hsp70 and Hsp90 in *Trypanosoma brucei* and their potential partnerships. Supervisor: Dr A Boshoff. Co-supervisor: Dr AL Edkins.

MTHETHWA, Thandekile Phakamisiwe, BScHons (Zululand), MSc (UJ), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Metallophthalocyanine-gold nanoparticle conjugates for photodynamic antimicrobial chemotherapy. Supervisor: Distinguished Professor T Nyokong.

OGBODU, Racheal Odiri, MSc (Ibadan), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis:

Photophysicochemical properties and *in vitro* photodynamic therapy activities of zinc phthalocyanine conjugates with biomolecular and single-walled carbon nanotubes. Supervisor: Distinguished Professor T Nyokong.

OTTEN, Frederick John, BSc (UKZN), MSc (Rhodes), in Computer Science, in the Department of Computer Science. Degree by thesis. Thesis: Network simulation for professional audio networks. Supervisor: Professor RJ Foss.

PUCCINELLI, Eleonora, MSc (Pisa), in Marine Biology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Diet of coastal filter feeders: impact of factors operating at different scales. Supervisor: Distinguished Professor CD McQuaid. Co-supervisor: Dr M Noyon (UCT).

SANUSI, Sikiru Olukayode, MSc (Obafemi Awolowo), in Chemistry, in the Department of Chemistry. Degree by thesis. Thesis: Nonlinear optical studies of phthalocyanines and their conjugates with nanomaterials. Supervisor: Distinguished Professor T Nyokong.

SLATER, Cindy, BScHons (Rhodes), in Biochemistry, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Analysis of the role of Hsp90 in colon cancer and cancer stem-like cell biology *in vitro* using a genetically paired cell line model. Supervisor: Dr AL Edkins.

SPIRES, Meggan Hazel, BScHons (UKZN), in Environmental Science, in the Department of Environmental Science. Degree by thesis. Thesis: Barriers to and enablers of climate change adaptation in four South African municipalities, and implications for community based adaptation. Supervisor: Professor SE Shackleton.

STERRENBURG, Jason Neville, MSc (Rhodes), in Biochemistry, in the Department of Biochemistry and Microbiology. Degree by thesis. Thesis: Establishment of human OCT4 as a putative Hsp90 client

protein: A case for Hsp90 chaperoning pluripotency. Supervisor: Dr AL Edkins.

SWART, Ignatius Petrus, MTech (Tshwane), in Computer Science, in the Department of Computer Science. Degree by thesis. Thesis: Pro-active visualization of cyber security on a national level: A South African case study. Supervisor: Professor BVW Irwin. Co-supervisor: Professor M Grobler (CSIR/DPSS).

TALWANGA, Matiki, BScHons (Fort Hare), MSc (Rhodes), in Mathematics, in the Department of Mathematics (Pure and Applied). Degree by thesis. Thesis: Counting of finite fuzzy subsets with applications to fuzzy recognition and selection strategies. Supervisor: Professor V Murali.

TUMBO, Madaka Harold, MSc (Dar-es-Salaam), in Hydrology, in the Institute for Water Research. Degree by thesis. Thesis: Uncertainties in modelling hydrological responses in gauged and ungauged sub-basins. Supervisor: Professor DA Hughes. Co-supervisor: Dr DM Mulungu (Dar-es-Salaam).

UYI, Osariyekemwen, MPhil (Ghana), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Aspects of the biology, thermal physiology and nutritional ecology of *Pareuchaetes insulate* (Walker) (Lepidoptera: Erebidae: Arctiinae), a specialist herbivore introduced into South Africa for the biological control of *Chromolaena odorata* (L.) King and Robinson (Asteraceae). Supervisor: Professor MP Hill. Co-supervisor: Dr C Zachariades (Cedara).

VAN DER WAAL, Benjamin Wentsel, BSc (North-West), BScHons, MSc (Rhodes), in Geography, in the Department of Geography. Degree by thesis. Thesis: Sediment connectivity in the upper Thina catchment, Eastern Cape, South Africa. Supervisor: Professor KM Rowntree.

VILANCULOS, Agostinho Chuquelane Fadulo, MSc (Zimbabwe), in Hydrology, in the Institute for Water Research. Degree by thesis. Thesis: The use of hydrological information to improve flood management-integrated hydrological modelling of the Zambezi River basin. Supervisor: Professor DA Hughes.

WEYL, Philip Sebastian Richard, MSc (Rhodes), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Friend or foe? Resolving the status of the submerged macrophyte *Myriophyllum spicatum* L. (Haloragaceae) in southern Africa. Supervisor: Dr JA Coetzee.

WILLIAMS, Kirstin Alexa, MSc (Rhodes), in Entomology, in the Department of Zoology and Entomology. Degree by thesis. Thesis: Molecular systematics and biology of two closely related blowflies: *Lucilia sericata* and *Lucilia cuprina*. Supervisor: Professor MH Villet.

What is *graduation*?

Our practice of graduation is derived from a tradition which reaches back to at least the medieval universities of Europe.

Graduates are those who have been admitted to a degree. There is a strict hierarchy of degrees from “bachelor” through to “doctor”. In admitting a person to a degree the degree is *conferred* on that person in a somewhat archaic ceremony which is reminiscent of the equally archaic ceremony in which a knighthood is conferred.

What actually happens in a graduation ceremony is along the following lines. The Dean, who is the person responsible for the academic project in that particular Faculty and who can thus attest to the achievement of the particular student in reaching the required level, requests the Chancellor to confer the degree. The student then moves to the Chancellor and kneels before him. The Chancellor, who is the titular head of the University and who acts in the name of the University, then *confers* the degree by holding a ceremonial bonnet to the student’s head while saying “I confer the degree”. The student proceeds to the Registrar. The Registrar, who is the keeper of the records of the student’s endeavours, confirms the admission of that student to a particular degree by placing the appropriate hood over the student’s head. There is a hood for each degree. Hoods differ from each other in colour and shape.

The three basic degrees are Bachelor, Master and Doctor. Bachelor has nothing to do with the usual meaning “a man who has never married” but with the garland of leaves and berries (from the Latin *bacca lauri*, laurel berry) worn by graduands long ago. A Master’s degree is conferred on a person who has achieved the mastery of a specific field of study. “Doctor” is from the Latin verb “to teach” and is an ancient academic title which dates back to the very first universities where it implied that the holder had a licence to teach in a university.

Academic gowns are based on the clerical gowns (most scholars in Europe were monks or priests) worn in the Middle Ages in universities which would have been housed in poorly heated buildings. The hood is also derived from ancient times when it was attached to the gown and worn to keep the head warm. When not on the head it was pushed back to look more or less as it does when worn today.

NATIONAL ANTHEM OF SOUTH AFRICA

Nkosi sikelel' iAfrika
Maluphakanyisw' uphondo lwayo,
Yizwa imithandazo yethu,
Nkosi sikelela, thina lusapho lwayo.

Morena boloka setjhaba sa heso,
O fedise dintwa la matshwenyeho,
O se boloke, O se boloke setjhaba sa heso,
Setjhaba sa South Afrika - South Afrika.

Uit die blou van onse hemel,
Uit die diepte van ons see,
Oor ons ewige gebergtes,
Waar die kranse antwoord gee,

Sounds the call to come together,
And united we shall stand,
Let us live and strive for freedom,
In South Africa our land.