UNIVERSITY OF CAPE TOWN (WITH WHICH IS INCORPORATED THE SOUTH AFRICAN COLLEGE)



Graduation Ceremony

27th JUNE 1986, at 10.30 a.m. in the JAMESON MEMORIAL HALL

Chancellor: H F OPPENHEIMER, MA DECON LLD DLITT

Vice-Chancellor

and Principal: S J SAUNDERS, MD FRCP FCP (SA)

Chairman of Council: LG ABRAHAMSE, BCOM

President of

Convocation: THE HON MR JUSTICE P H TEBBUTT, BA LL B AMP

Deputy Professor A D CARR, PR ENG B SC (AIC) PH D FSAI CHEME Vice-Chancellors: Professor J V O REID, MA BM B CH FRCP

Deans of Faculties: ARTS Professor R H PHEIFFER, MA LITT DRS PH D

SCIENCE Professor V C MORAN, MSC PHD FRES FLS

ENGINEERING PROFESSOR J B MARTIN, PR ENG B SC (ENG) PH D

D SC MASCE MASME FSAICE

LAW PROFESSOR E J WHITAKER, Q C BA LL B

MEDICINE Professor G DALL, MB CHB CHM

EDUCATION Professor I de V HEYNS, M SC M ED MA PH D

COMMERCE Professor J D SIMPSON, B SC MBA PH D

MUSIC PROFESSOR B PRIESTMAN, BMUS MA DFA DHI

FINE ART &

ARCHITECTURE . . PROFESSOR J W RABIE, DIP QS RQS MA QS

FRICS AA ARB

SOCIAL SCIENCE

& HUMANITIES . . . Professor Z R VAN STRAATEN, BA (HONS)

Registrar: H VAN HUYSSTEEN, BA LL B

ORDER OF PROCEDURE

- Academic procession
 (The audience is requested to stand as the procession enters the hall and is invited to participate in the singing of Gaudeamus.)
- 2. The Chancellor will constitute the congregation.
- 3. University Prayer.
- 4. University Choir will sing: two choral dances from GLORIANA by Benjamin Britten.
- 5. Welcome by the Vice-Chancellor.
- 6. Announcement of Book Award (Professor G M Branch).
- 7. The honorary graduands will be presented to the Chancellor, and will be invested with their academic hoods.
- 8. The Vice-Chancellor will introduce the guest speaker, Helen Suzman, MP.
- 9. Address by Mrs Helen Suzman, MP.
- The graduands will be presented to the Chancellor by the Deans of the Faculties, and will be invested with their academic hoods.
- 11. The Chancellor will dissolve the congregation.
- Procession will leave the platform (The audience is requested to stand while the procession leaves the hall.)

GAUDEAMUS (To be sung in Latin)

Gaudeamus igitur, juvenes dum sumus, Gaudeamus igitur, juvenes dum sumus, Post jucundam juventutem, post molestam senectutem.

Nos habebit humus, nos habebit humus.

Ubi sunt qui ante nos in mundo fuere? Ubi sunt qui ante nos in mundo fuere? Vadite ad superos, transite ad inferos, Quos si vis videre, quos si vis videre.

Vita nostra brevis est, brevi finietur, Vita nostra brevis est, brevi finietur, Venit mors velociter, rapit nos atrociter, Nemini parcetur, nemini parcetur.

Vivat Academia, vivant Professores, Vivat Academia, vivant Professores, Vivat membrum quodlibet, vivant membra quaelibet, Semper sint in flore, semper sint in flore.

LET US REJOICE (Translation by Robin Whiteford)

Let us therefore merry be while 'tis still life's springtime.

Let us therefore merry be while 'tis still life's springtime:

When the joys of youth have vanished, when the ills of age are over,

Then the grave will hold us, then the grave will hold us.

Where are those who passed this way in the world before us?

Where are those who passed this way in the world before us?

Turn your steps to those above, make your way to those below,

If you wish to see them, if you wish to see them.

Lasts not long this life of ours, soon will come its ending.

Lasts not long this life of ours, soon will come its ending:

On his winged way comes Death, pitilessly snatches

None will win his mercy, none will win his mercy.

To the halls of learning, health! – and to their Professors,

To the halls of learning, health! – and to their Professors;

Health to all who work in them, to each and every person:

May they ever flourish, may they ever flourish.

NAMES OF GRADUANDS

An asterisk * denotes that the degree will be awarded in absentia.

Dean: Professor J D Simpson

II. FACULTY OF COMMERCE

DEGREE OF BACHELOR OF COMMERCE

HONORARY DEGREES

Thomas Hamilton Bothwell (Doctor of Medicine)
Daniel Jakob Du Plessis (Doctor of Medicine)
Samuel Mokgethi Motsuenyane (Doctor of Economic Sciences)
Helen Suzman (Doctor of Laws)

I. FACULTY OF ARTS

Dean: Professor R H Pheiffer

DEGREE OF BACHELOR OF ARTS

Abdurahman Abderoef

*Lesley-Anne Boardman

*Safiya Chicktay

*Indran Coopoo

Stephen John Corna

*Geraldine Dorothy Corneilse

Ralph Trevor Damonse

*Zain Davis

*Margaret Elizabeth de Wet

*Shireen Effendi

Dorota Barbara Gorka

Glenville Victor Hartzenberg

Narriman Howa

*Darlene Jeftha

*Paulette Ruth Jordaan

*Brigitte Kuhlmann

*Riyani Mohomed

Patricia Leigh Marlow

*Puke Andrew Maserumule

*Mohammed Saleem Mowzer

*Francesca Terrili Nicolay

*Mohammed Noor Nieftagodien

*Justin Harry O'Sullivan

Belinda Haley Phillips

Catherina Aletta Popplestone (With distinction in Afrikaans en Nederlands and the degree with distinction)

Gideon Louis Rossouw

*Alistair Paul Ruiters

Rhudaiba Sadien

Natalia Ann Shunmugan

Mark John Smith

Beverley Martha Thaver

*Johan Traut

*Deon Ridgley Welz

Michel Albert Arend
*Gavin Peter Ashwell
John Harold Ashwell
Robert Craig Bartosch
Julee Bergström
Michael John Bradley
Peter Michael Chadwick

*Timothy Coulton Rico de Piaz Michelle Dean

*Penelope Patricia Donnelly Grant Michael Eckersley Rodger Allen Farao Michael Naftali Flax Rochelle Bernice Forbes Barbara Galloon

Nicholas Michael Gebers Liliane Sylvie Giot

Bryan Shawn Goldberg Howard Lyle Greenstein

John Edward Gwilt

Charles Norman Oliver Hockey

Ronnie Itzikovitz
*Bryn Kenneth Jevon

Timothy Paul Katzen

*Stephen Frank Kroon Epaminondas Ladas Stanley Levy

Leslie Charles Marais Christopher Andrew Martin

*Kenneth McKenzie Stephen Paul Mendel Mohamed Allie Parker

*Paul Gregory Pilossof Gordon Solomon Price Shelley Margaret Reinders Bryan Bruce Roberts Belinda Leigh Rodman Ashraf Roomaney

Eugene Jonathan Ruiters
Andrew Marley Russell

*Bruce Gregory Sahd

*Christoph Felix Schiess Margaret Searle

James Robert Sedgwick Tracey Jeanne Sibthorpe Steven Joel Stein

Arthur Frederick Sturrock

David John Swart
*Paul Mountford Timoney
Gary Douglas Tullis
Louis van der Merwe

Pierre van Greunen Walter Graeme Weeden *Nicholas Michael Williams Simon Robert Fergus Wood

DEGREE OF BACHELOR OF BUSINESS SCIENCE

Marlise Martins Ashley Mendelowitz Michael John Rachman *Andrew Carl Wolff

III. FACULTY OF ENGINEERING

Dean: Professor J B Martin

DEGREE OF BACHELOR OF SCIENCE IN ENGINEERING

In Chemical Engineering: Robert Tod Urquhart

In Civil Engineering: Kevin Balfour Graham Jeffrey Williamson

In Electrical and Electronic Engineering:

*Sohrab Bayasah Russell Boyes

*Michael Robert Oliver Cuddon David Barnett Ezer

Pierre Louis Hammond Errol Anthony Joubert

Khathutshelo Seth Netshisaulu

Simon Philip Rachman Gustav Robert Scholtz

*Francis Arthur White Smith

*Andrew Neil Spencer

*Brian Fritz Trautman

In Mechanical Engineering: Michael Alan Earl Richard Anthony John Everingham

*Duncan Andrew Groenewald David Johnson

*Bruce Antony Mennell Torsten Peters Michael Glen Petersen Jonathan Nigel Roche Gary van der Heyde

DEGREE OF BACHELOR OF SCIENCE IN SURVEYING

Johannes Erasmus Albertus Burger

IV. FACULTY OF FINE ART AND ARCHITECTURE

Dean: Professor J W Rabie

DEGREE OF BACHELOR OF ARCHITECTURAL STUDIES

Nicoline Bess Alma

Paraskeve Irene Callias Adele de Jager Wendy Lynn Grater *Vivienne Evadne Buchanan Gray

Stephen John Mayers Jennifer Jane Mills Anthony Alan Monk

*David Leon Peerutin Helene van der Merwe

> DEGREE OF BACHELOR OF SCIENCE IN QUANTITY SURVEYING

James Anthony Herbert Newton

DEGREE OF BACHELOR OF ARCHITECTURE

Stuart Andrew Calder, BAS Michael Jacques du Toit, BAS David John Galloway *Gita Goven Nigel Martin Haupt

Sally Anne Hugo-Hamman, BAS

*Mitchell Lewis Lichtman, BAS Anne Marie Longrigg, BAS

*Jacobus Adriaan Louw, BAS *Roger Stewart Martin, BAS Alfred Sindile Ngonyama, BAS Jacqueline Louise Perrin, BAS Colin Joseph Sakinofsky, BAS Michael Lawrence Shaw, BAS Stephen Kidger Thorne, BAS Louise Maude van Riet, BAS Gary Steven Venter, BAS

James Ormsby Wilkinson, BAS

V. FACULTY OF MEDICINE

Dean: Professor G Dall

DEGREE OF BACHELOR OF PHARMACY

Ann Christine Abrahams Nanette Basson Hendrik de Wet Iris Haberkorn Sheena Eleanore Hansen Hermanus Have, BSc (Rhodes) Gary Paul Morris Michele Teresa Nichollas Anka Schulz

DEGREE OF BACHELOR OF SCIENCE (PHYSIOTHERAPY)

Jean Elizabeth Carlyle

DEGREE OF BACHELOR OF SCIENCE (MEDICINE)

In Physiology:

*Stephen Burnham King

*Fazleh Ahmed Mahomed

VI. FACULTY OF MUSIC

Dean: Professor B Priestman

DEGREE OF BACHELOR OF MUSIC

General

Leon Hurter Henrico

Education

*Marilyn Elizabeth Patricia Braam

*Cara Luise Loening

Practical
Diane Breetzke
Stephen Henry Wrankmore
Richard John van Schoor

VII. FACULTY OF SCIENCE

Dean: Professor V C Moran

DEGREE OF BACHELOR OF SCIENCE

Manfred Ashley Abrahams Franciscus Jacobus Baars Lex Gilbert Barker Robert Stephen Bedford

*Bridget Mary Brooke

*Mahomed Farouk Tayob Carrim

*Mogamat Reederwan Craayenstein

Jithendra Chotoo Daya Sara Jane Flicker

Alan Bernard Goldschmidt

Teresia Jeanette Grimwood

Dimitrios Haralambous

Alexander Friedrich Hundt

Charles Rubin Isaacs

Mogamat Anwar Jardine

*David Russell Kitto

Michael Klaas

Monwabisi David Lali

*Jitesh Madhoo

Johnson Thandinkosi Madlala

*Gadija Patel

*Sardar Osman Patel Lucky Reuben Phiri

Theresa Pillay

Kurt John Pretorius

*Sharon Prince

Linda Lictor Qaba

Rasheed Sirkhotte

Nkgoele Conrad Teffo

*Graeme Trollip Michael Troost

*Peter Raymond Uys Graham Peter Voges

Catherine Ruth Wildgust

VIII. FACULTY OF SOCIAL SCIENCE AND HUMANITIES

Dean: Professor Z R Van Straaten

DEGREE OF BACHELOR OF ARTS

*Boyd Graham Carr

*Lisa Andrea Carr

*Abid Dawray

Shiehaam Edwards

*Glenn Delroy Hollands

*Sulaiman Jacobs

Tembelani Solomon Kolwane

Hagera Lagerdien

*Moosa Mahadick

Catherine Lynne Michelson

Maxine Zandile Ndaba

*Fatima Noordien

*Tracy Rushmere

*Salima Sayed

Carla Ann Sutherland

Mark Wolmarans

DEGREE OF BACHELOR OF SOCIAL SCIENCE

General Curriculum:

Fuad Allie

Najwah Allie

*Gabi Ann Bengis

Michelle Campbell

Azieza Daniels

Mohamed Shakoor Ebrahim

*Moosa Ebrahim

Jeremy Franklin Ganga

Joseph Godwin

*Saleema Jaffer

John Herold Joubert

*Cathy-Mae Karelse

Andre Thomas Kriel

*Xoliswa Thelma Krwaqa

*John Alexander Mair

Llewellyn Mthuthuzeli Mangesi

Ebenezer Nkosi Mehlomakulu

Anton Rory Mitchell

Wadia Naidoo

Heather Margaret Petersen

*Amin Rhoda

Joseph David Ribeiro de Souza

*Bruce Sherman

*Donald Harry Skinner, BBusSc Keith Ian Smith

Roderick Peter Solomons

Bernadette Stober Judith Cecilia Tippoo Chantel van Niekerk *Stephen Aloysius Wertheim

Social Work Curriculum:

*Natalie Estelle Fortuin

*Rosemary Dudu Hlatshwayo

*Nduna Livingstone Mavana

IX. FACULTY OF ARTS

Dean: Professor R H Pheiffer

DEGREE OF BACHELOR OF ARTS (HONOURS)

In African Studies: Grant Rory Saff, BA

In Cultural History of Western Europe: *Mariette Lötter, BA
Keith Richard Stanley, BA

In Economic History: (First class) Josette Grace Cole, BA

In English:

*Norman Charles Abrahams, BA, BCom Celia Joan Beckenstrater, BA (Witwatersrand)

*Rebecca Camp, BA

*Jeremy Richard Doveton-Helps, BA, LLB

*Patricia Anne Fotheringham, BA

*Silke Sabine Friedrich, BA

*Katherine Lalage Glenday, BA (Natal)
Lesley Moyra Hay-Whitton, BA
Rosalyn Daphne Hosking, BA (Natal)
Lindy-Lou Hughes, BA (RAU)
(First class) David Wayne Johnson, BA, LLB

*Gavin Andrew Jolliffe, BA

(First class) Susan Ruth Joubert, BA

*Rochelle Lynne Kapp, BA Karen Klein, BA

*Naomi Kim Lloyd, BA

*Pamela Mavis Lourens, BA

*(First class) Rosemary Dawn O'Leary, BA

*Sheelagh Catherine Stewart, BProc, LLB Anthony Stott, BA

*Calene Norma Weinberg, BA Joanne Zasman, BA

In English and French: Marcus Allan Brewster, BA Lesley Margaret Oliver, BA

In History:

Stephen Neil Hurworth, BA

*Murray Fraser Lamond, BA

*Sally Louise Marsden, BA Albinia Jennifer Jill Pearce, BA Patrick Don Solomon, BA Anne Truluck, BA (First class) Paul David Valentine, BA

*Lance van Sittert, BA *Tracy Vienings, BA

*Justin Anthony Dyke Wells, BA (Witwatersrand)

In Linguistics:

*Paula Mary Hathorn, BA

DEGREE OF MASTER OF ARTS

In English:

*Finuala Rachel Dowling, BA (Hons)

*Alexander Mark Hay-Whitton, BA (Cape Town), BA (Hons) (Witwatersrand)
Winifred Alice Thomson, BA (Hons) (SA)
Felicity Wood, BA (Hons) (Natal)

In Librarianship:

(With Distinction) Dorothy Lyle Ivey, BA (SA), BBibl (Hons) (SA)

X. FACULTY OF COMMERCE

Dean: Professor J D Simpson

DEGREE OF BACHELOR OF COMMERCE (HONOURS)

In Accounting:

Reuben Beelders, BCom

Gary Russell England, BCom

*Mandla Sizwe Vulindlela Gantsho, BCom (Unitra)

*Andreas Aloysius Petrus Cornelius Geboers, BCom Christopher Lister Lawrance, BCom Rajendra Makanjee, BCom Jeanette Margaret Pietersen, BCom Hieronymus van Alphen, BCom

In Economics:

*Pieter McClean Van Riet-Lowe, BCom

In Financial Management:
Paul Keith Slack

In Taxation:

Graham David Cochrane, BBusSc, CA (SA) Leon Freese, BCom (Hons) Edward Leslie Haynes-Smart, BProc (SA) Richard Dennis Jooste, BA, LLB Raoul Maurice Kaplan, BBusSc

DEGREE OF MASTER OF BUSINESS ADMINISTRATION

Gert Johannes Lindeque Alberts, BEng (Stell) Richard Benedict Murray Anderson, BA (Witwatersrand) Hugh Thomas Ashby, BA (Cantab) Yaseen Bhayat, BCom (West Cape)

Henricus Johannes Blomerus, BCom (Hons) (Pret) *Margaret Joan Brindle, BSc (Hons) (Rhodes)

*Ian Robertson Bryson, BSc (Hons) (Dundee)

William Jonathan Burridge, BSc (Eng) Gavin Howell Burt, BSc (OS) (Natal)

Gregory Morgan Candy, BPharm (Zimbabwe)

Gavin Knighton Chadwick, MAgric Mgt (Natal) Simon James Mathewson Cleasby, BSc (Eng)

*Brent Nicholas Cohen, BCom

Peter Basil Constan-tatos, BSc (Eng)

Peter Gavin Cook, MSc (Witwatersrand)

Brian Lawrence Davidson

*Adrian Mark Dawson, BSc (Eng) (Natal) James Allon Balfour Downie, BSc (Natal)

Juanita du Toit BSc (Stell)

Meindert Dykstra, BSc (Rhodes)

William Lowry Ewels, BSc (Hons) (Witwatersrand)

Simon Robert Favish, BCom

Lionel Mark Fig, BCom

Terrance Pieter Flach, MSc

Stephen Hugh Floyd, BSc (Eng)

Gavin Porteous Fraser, BSc (Eng)

Robert Foster Garmany

*Georges Francois Gombay-Gugyeras, BSc (Hons) Michael Kevin Grallert, BCom (Hons)

Donald Arthur Cardross Grant

Julian Solomon Gross

*Robert John Gunthorpe, PhD (New Eng) Steven Douglas Holger Hassel, BCom (SA)

*David Karl Hofmeyr, BSc (Eng) (London)

Susan Holland

John Francis Adrian Hook, BSc (SA)

Beatrice Rose Ingram, BA (Hons), MA (Reading)

Astrid Jackson, BA (Pret)

Michael Peter Rowland Jackson, BSc (Hons) (Leeds)

Alan Stanley Jacobson

Noelle Kieser, BSocSc

Nicholas John Lovell Greene, BA

Patricia Ann Lockwood, BSocSc

Rory McGrath, BCom

Arnold Wilhelm Möhr, BEng (Stell)

Keabecoe David Motlhoioa, BSc (Fort Hare)

*Graham Cleave Muir, BA (Hons)

Michael Guy Nixon, BSc (Eng) (Witwatersrand)

Bernard Marc Joseph Noel, BSc (Eng) (Louisiana)

Ellen Hinda Oboler, BSc

Martin Peddie, BSc (Hons) (Strath)

Sidney Philip Peimer

*Richard Leonard Procter, BSc (Eng) (Witwatersrand) Neil Patrick Rafter, BSc (Eng) (Witwatersrand)

Robert Peter Rand, BSc (Eng), MSc (Eng) (London) Duncan Peter Raven, BSc (Eng)

Mark Vincent Richter, BSc (Hons) (Witwatersrand)

*Malcolm Johnston Roberts, BSc (Sheff)

*Daniel Harry Fram Rosenzweig, BCom, LLB (Witwatersrand)

(Rhodes)

Gavin Hugh Russel, BSc

*Mark Franz Rowles, BCom (SA), BSc (Hons)

*Edmund Siusun Shung, BCom (Witwatersrand) Richard Michael Berrangé Smuts, BJourn (Rhodes) Maurice Daniel Souchon, BAgric Man (Hons) (Natal)

*Christopher Stanley Spreckley, BA, BSc David Allan Stadler, BAcc (Natal) Alan John Tew, PhD (Witwatersrand)

Errol Earl Thomas, BSc, BSc (Hons) (Stell)

Douglas Edwin Brent Trollope Pieter van Dam, BSc (Eng)

Robert Paul van Doorn, MSc (Delft)

*Andries Beyers Veglio, BSc (Eng)

*Remco Verheul, MA (Econ) (Groningen)

Peter Owen Von Zahn, BBA (Vanc)

Anthony Michael Watermeyer, BSc (Eng)

Laurie Maitland Watermeyer, BSc (Eng) (Natal) Michael John Watters, BSc (Eng) (Witwatersrand)

Laura Jeanne Wegscheid, BSc (Illinois)

*Marc Marie Wilson, BSWE (Ohio)

Edmund Rolf Wittig, BCom (Natal)

DEGREE OF MASTER OF COMMERCE

*(With Distinction) Nicholas Rawson Sealy, BCom (Hons)

Alan James Harris Stewart, BCom (Hons)

*Enrico Orlando Uliana, BCom (Hons)

XI. FACULTY OF EDUCATION

Dean: Professor I de V Heyns

DEGREE OF BACHELOR OF EDUCATION

*Raymond Malcolm Breetzke, BA (SA)

*Eleanor Nomsa Chaphole, BA

*Herbert Ndango Diaz, BA (Hons) (Zululand), MA (Saarbruchen)

*Andrew James Foster, BA (Stell)

*Neil John Hayward, BA

*Paulus Joemat, BSc (West Cape)

Silumko Nelson Mama, BA (SA)

Stephen David Price, BSc

*Alfred Bonisile Stuurman, BA (SA), BA (Hons) (Fort Hare), MA (Stell)

Ross Paul Torr, BA (Rhodes)

*Jennifer Gail van Breda, BA (UPE)

DEGREE OF BACHELOR OF LIBRARY AND INFORMATION SCIENCE (HONOURS)

Gudrun Alston Alexander, BA (Stell) Robin Josephine Perold, BMus (Librarianship) Sharon Charmaine Schreuder, BBibl (West Cape)

*Noel Francis Christopher Stott, BA

DEGREE OF MASTER OF EDUCATION

(With Distinction) Michael James Cameron, BA, BSc, BEd

(With Distinction) Martin Richard Fisher, BEd, BA (Hons) (SA)

*Angela Joan Schaffer, BA (Natal), BEd

*Alexander Stevenson, BA (Rhodes), BEd (Special Honours) (Zimbabwe)

DEGREE OF MASTER OF LIBRARY AND INFORMATION SCIENCE

Andrew Summers Kerkham, BTheol (SA), BBibl (Hons) (SA)

DEGREE OF MASTER OF PHILOSOPHY

In Education:

*(With Distinction) Merilyn Dewar, BSc (Witwatersrand), BSc (Hons)

XII. FACULTY OF ENGINEERING

Dean: Professor J B Martin

DEGREE OF MASTER OF SCIENCE IN APPLIED SCIENCE

In Materials Engineering: Arthur Edwin Capendale, BSc Andrew Ian Gifford Lloyd, BSc

In Surveying:

*Alison Moira Howman, BA (Hons) (Rhodes)

DEGREE OF MASTER OF SCIENCE IN ENGINEERING

In Chemical Engineering:

*Louise Madeleine Barker, BSc (Eng)

*Anna Dimou, Degree in Mining and Metallurgical Engineering (Athens)

*Ronald Sidney Fickling, BSc (Eng)

In Civil Engineering:

*Wayne Kendall Bagg, BSc (Eng) Henry Frank Herring, BSc (Eng)

Gavin Roger Wardle, BSc (Eng) (Natal)

*Derek Leslie Skeeles Wilson, BSc (Eng)

In Electrical and Electronic Engineering:

*Johathan Anthony Eva, BSc (Eng)

*Desmond Hirson, BSc (Eng) (Witwatersrand)

*Arthur James Pennington, BSc (Eng) (Washington) David Malcolm Rachman, BSc (Eng) Robert George Watson Thomson, BSc (Eng) (Pret) Thijs Waardenburg, BSc (Eng)

In Mechanical Engineering:

Anthony Court Huggett, BSc (Eng)

*Dietrich Ludwig Wilfried Krueger, BIng (Pret)

*Anthony Trevor Williams, BSc (Eng)

XIII. FACULTY OF FINE ART AND ARCHITECTURE

Dean: Professor J W Rabie

DEGREE OF MASTER OF SCIENCE (BUILDING MANAGEMENT)

*Philip Waizenegger, BSc (Blg)

DEGREE OF MASTER OF ARCHITECTURE

*Helen Anne Vokaty, BArch (Montreal)

DEGREE OF MASTER OF CITY AND REGIONAL PLANNING

Penelope Ann Cummins, BA *Alastair Douglas Sempill, BSocSc

XIV. FACULTY OF LAW

Dean: Professor E H Whitaker

DEGREE OF BACHELOR OF LAWS

Christine Veronique Burger, BA

*Andrew William Corbett, BA (Stell)

*Verity Frampton, BA

Clifford Albert January, BA (SA)

*Andrew Paul Lane-Mitchell, BA Alice Bahumi Zita-Mary Mogwe, BA Christopher Roy Moore, BA

*Roseline Mary Nyman, BALaw (West Cape)

*Daryll Wellesley Roelf, BA Gary Dean Searle, BA Geoffrey Basil Smith, BA

*Gerhardus Paulus Swart, BA (Stell)

*Martina Rolene van Rooyen, BProc (SA)

DEGREE OF MASTER OF LAWS

Hilton Basil Fine, BUris (SA), LLB (SA)

XV. FACULTY OF MEDICINE

Dean: Professor G Dall

Degree of Bachelor of Science (Medicine) (Honours)

In Immunology:

*Stephen John Duncan Bell, BSc (Rhodes)

DEGREE OF MASTER OF SCIENCE (MEDICINE)

In Biomedical Science:

Leon Lourens du Toit, BSc (Pret), BSc (Med) (Hons)

In Biomedical Engineering: Gisela Hefftner, BSc (Eng) (Witwatersrand)

In Sport Science:

*Mark Laurence Nathan, BSc (Physio) Witwatersrand), BSc (Med) (Hons)

DEGREE OF MASTER OF SCIENCE (OCCUPATIONAL THERAPY)

Aletta Helena Rousseau, BSc (OT) (Witwatersrand), BA (SA)

DEGREE OF MASTER OF MEDICINE

In Dermatology:

Mohamed Ebrahim Docrat, MB ChB (Natal)

*Nico Mousdicas, MB ChB

In Pathology (Forensic):

Duncan Louwrens Lamont, MB ChB (Rhodesia)

XVI. FACULTY OF MUSIC

Dean: Professor B Priestman

DEGREE OF MASTER OF MUSIC

By Dissertation

*Jaco Hentie Kruger, BMus (Ed)

(With Distinction) Janet Jean Naude, BMus (Gen)

By Practical Work and Dissertation

*Robert William van Sice, BMus (Cleveland)

XVII. FACULTY OF SCIENCE

Dean: Professor V C Moran

DEGREE OF BACHELOR OF SCIENCE (HONOURS)

In Analytical Science: David Paul Bligh

In Mathematics:

*Washiela Davids, BSc

*Stephen Clive Sydney McBride, BSc

*Brent Craig Walters, BSc

DEGREE OF MASTER OF SCIENCE

In Analytical Science:

Karin Helene Soldenhoff, BSc (Hons)

(Witwatersrand)

In Applied Mathematics:

(With Distinction) Michael Johannes Jaklitsch, BSc (Hons)

Patricia Ann Symington, BSc, BA

In Botany:

*Michael Graham O'Callaghan, BSc (Hons)

*Adriaan Jacobus van Schalkwyk, BSc (Hons) (UOVS)

In Chemistry:

*Marc Edgar Botha, BSc (Hons)

Vinolia Vuyelwa Kuku Qubeka, BSc (Fort Hare), BSc (Hons)

In Clinical Psychology:

*Fiona Winifred Gibson, BSc (Hons) (Natal)

In Geochemistry:

*Hermina Alberdina van der Heyde, BSc (Hons)

In Geology:

(With Distinction) Robbrecht Herman de Decker, BSc (Hons)

*(With Distinction) Gert Claus-Jurgen Schlegel, BSc (Hons) (Stell)

(With Distinction) Lesley Yvonne Shackleton, BSc

In Microbiology:

*Elizabeth Anne Knox, BSc (Natal), BSc (Hons)

*(With Distinction) Phillippa Fernandes Norman, BSc (Hons) (Witwatersrand)

In Physical Oceanography:

Clive John Holden, BSc (Hons) (Liverpool)

In Theoretical Physics:

*(With Distinction) Gwendolen Catherine Littlewort, BSc (Hons)

In Zoology:

*John David Atmore, BSc (Hons)

Anna Aletta Crowe, BSc (Hons)

*Pierre Marc Jean de Boucherville Baissac, BSc (Hons)

(With Distinction) Hendrik Paul de Decker, BSc (Hons)

*Richardt Murray Prosch, BSc, BSc (Hons) (UPE) MBA (Stell)

*Stephen Charles Webb, BSc (Hons) (Hull)

XVIII. FACULTY OF SOCIAL SCIENCE AND HUMANITIES

Dean: Professor Z R van Straaten

DEGREE OF BACHELOR OF ARTS (HONOURS)

In African Studies:

Maxwell Sakhela Buhlungu, BA (Unitra)

*Katrina Hazel Good, BA

In Industrial and Organizational Psychology: (First class) Jennifer Lynn Yeo, BSocSc

In Industrial Sociology:

- *David Radcliffe Mayson, BA
- *Catharine Mary Philip, BA
- *Shirley Daniela Rhaese, BA (Witwatersrand)

In Political Studies:

- *Iris Irmhild Himmel, BA
- *Peter Josef Karel Skalnik, PhD (Prague)

In Religious Studies:

*Elin Dorothy Edith Botha, BSc (First class) Janneke Wilma Engelbrecht, BA Michelle Yvette Guttler, BA (First class) Cecilia Winifred Mary Walter, BA

In Social Anthropology: *Robin Mark Chambers, BA

In Sociology:

*Nicola Jane Atmore, BA

DEGREE OF BACHELOR OF SOCIAL SCIENCE (HONOURS)

In Economics:

Vivien McMenamin, BSocSc

In Industrial Sociology:

Lynnette Peta Terrie Pallitt, BSocSc

In Political Studies:

Hazel Ann Bowen, BA (SA)

*Suzanna Karen Johnson, BA

Ian Jeffrey Koeningsfest, BSocSc

In Psychology:

*Peter Jarl Jurgens, BSc (Natal)

In Public Administration:

Spurgeon Cameron Lange, BSocSc

In Religious Studies:

Malusi Mthanjiswa Mpumlwana

Richard Graham Wortley, BSocSc

In Social Planning and Administration:

*Wesley Engela Lambert, BSocSc (SW) (Hons)

Benjamin Phule Motswenyane

Mpule Ivy Sikwane, BSocSc (Hons) (Unibo)

*Viviene Elizabeth Devapushpum Taylor, BA (SW) (UDW)

*Debbie van Heerden, BSocSc (Hons)

In Sociology:

- *Shaun Patrick Field, BSocSc
- *(First class) Anthony Walter Harding, BSocSc

*Mary-Jane Morifi, BSocSc

*Fhulufhuwani Hastings Nekhwevha, BSocSc

DEGREE OF MASTER OF ARTS

In Philosophy:

Frances Mary Howard, BA (Hons)

In Psychology:

*(With Distinction) Carolina Johanna Vosters, BA (Hons) (UPE)

In Religious Studies:

*Jonathan Thornhill Cook, BA (Witwatersrand), BA (Hons) (SA)

DEGREE OF MASTER OF SOCIAL SCIENCE

In Industrial and Organizational Psychology:
Peter Edwin Arthur Whitehead, BA (Hons) (Stell)

XIX. FACULTY OF ARTS

Dean: Professor R H Pheiffer

DEGREE OF DOCTOR OF PHILOSOPHY

In Archaeology:

William Ferguson Buchanan, BA (Cape Town)

(Thesis Title: Sea shells ashore: a study of the role of shellfish in prehistoric diet and lifestyle at Elands Bay, southwestern Cape, S.A.)

Bill Buchanan was born in Glasgow, Scotland in 1912 and served with distinction in the Western Desert and Italy in World War II. His professional life was spent in the insurance business from where he retired in 1972 as MD of a large company, in order to pursue a second career in Archaeology. Between 1974 and 1978 Bill Buchanan completed a BA at the University of Cape Town with five first class passes and a major in prehistoric archaeology.

Bill Buchanan's thesis is designed to answer a deceptively simple sounding question – how important were shellfish to the prehistoric hunter gatherers of the south-western Cape coast? The answer is hard to come by partly because of uncertainties over the subsistence patterns of prehistoric people and partly because of poor preservation of the evidence. The thesis uses ethnographic, historic, archaeological and nutritional information to argue that prehistoric coastal diets were rich in protein and relatively poor in carbohydrates. The research estimated the volumes of shell middens, analysed the balance of plant, marine animal and terrestrial animal components and evaluated the nutritional contributions of each. The study illustrates the value of the regional approach to reconstructing prehistoric diets and sets a standard for other coastal archaeological research.

Supervisors: Professor J Parkington and Dr M Hall (Archaeology)

XX. FACULTY OF ENGINEERING

Dean: Professor J B Martin

DEGREE OF DOCTOR OF PHILOSOPHY

In Electrical and Electronic Engineering:

Robin Michael Braun, MSc

(Thesis Title: Phase locked and phase modulated microwave solid state sources using Gunn Oscillators)

Robin Braun was born in the Transvaal in 1951. He completed his schooling in 1969 and subsequently spent six years in industry in South Africa with further study at the Witwatersrand Technikon. After this he went to England and graduated at Brighton Polytechnic with an honours degree in Electrical Engineering. In 1981 he joined Plessey South Africa and enrolled for an MSc at the University of Cape Town which he obtained in 1982.

In his PhD he investigates new techniques to phase lock and phase modulate Gunn Oscillators.

Gunn Oscillators are now the most common solid state devices used for producing power at microwave frequencies. They can be readily frequency modulated by introducing a voltage variable capacitor (varactor) into the microwave cavity. The frequency stability (with temperature) of Gunn Oscillators is, however, not acceptable for most communications purposes.

Techniques have been devised and published in the literature for improving the frequency stability of Gunn Oscillators. However, many of these techniques involve the use of expensive and elaborate external devices and circuits. Further, in improving the frequency stability, the frequency modulation range is often degraded.

Robin Braun has devised two separate techniques for improving the frequency stability of Gunn Oscillators without the need for expensive external devices and without degrading the frequency modulation performance.

Supervisor: Professor B J Downing (Electrical & Electronic Engineering)

XXI. FACULTY OF LAW

Dean: Professor E H Whittaker

DEGREE OF DOCTOR OF LAWS

In Roman and Private Law:

*Jacobus Johannes Albertus Nel, MA, LLB (South Africa)

(Thesis Title: Die wese van staatskontrole oor boedeladministrasie in Suid-Afrika)

JJA Nel was born in Rouxville in 1904, from where he matriculated in 1923. He obtained the BA (1931), MA (1934), and LLB (1935) degrees from the University of South Africa. His distinguished career in the Public Service culminated in his appointment as Secretary of Mines in 1958, a post he held until his retirement in 1969.

His early career included more than thirty years in the Master's Office, giving him a good background for the work of his thesis. In it he discusses the development of state control over the administration of estates in South Africa. A historical study of the development of executorship is followed by a comparative study of the position in selected Western countries. In the second half of his thesis he distinguishes clearly between primary and secondary control and shows that the conditions necessitating the introduction of secondary control no longer exist. He consequently pleads for a large scale withdrawal of state control over the administration of estates.

Supervisors: the late Professor B Beinart, and

Professor N J Wiechers (Unisa), and Professor D Visser (Roman Dutch and Private Law)

XXII. FACULTY OF MEDICINE

Dean: Professor G Dall

DEGREE OF DOCTOR OF PHILOSOPHY

In Medical Biochemistry:

David Austin Sanan, BSc (Hons) (Cape Town), BSc (Med) (Hons) (Stell)

(Thesis Title: Receptor-mediated endocytosis of low density lipoproteins in aortic endothelial cells)

David Sanan was born in East London in 1945 and matriculated from St Aidan's College, Grahamstown. After obtaining the BSc (1967) and BSc (Hons) (1968) degrees at UCT he moved to Stellenbosch to take the BSc (Med) (Hons) degree in Medical Biochemistry. He has until recently been a senior research officer at the Institute for Electron Microscopy of the Medical Research Council and is now a member of the UCT/MRC Muscle Research Unit.

His thesis deals in large part with the interaction of low density lipoproteins (particles bearing most of the cholesterol present in the blood of humans) with the specialised cells (endothelial cells) which line arteries. Different culture models were extensively studied by light and electron microscopy in conjunction with accurate biochemical measurements. His findings have overturned the most widely known theory for the handling of LDL by endothelial cells and have also provided very fine pictorial data relating to the way in which receptors for lipoprotein particles move around within living cells.

Supervisor: Dr G A Coetzee (Medical Biochemistry)

In Paediatrics and Child Health:

Christopher David Molteno, BA (Hons) (South Africa), MBChB, MD, MMed (Paed), (Cape Town), FCP (South Africa), DCH (London)

(Thesis Title: The relationship between growth, development and social milieu – a longitudinal study involving preschool Coloured children in Cape Town)

Christopher Molteno was born in Springs, Transvaal, in 1940. After matriculating at St John's College, he entered this University and graduated MBChB in 1964. Several years of clinical experience followed and in 1967 he obtained the Diploma in Child Health of the Royal College of Physicians (London) and the Royal College of Surgeons, England. He returned to Cape Town in 1971 as a Research Fellow in the Department of Paediatrics and Child Health on Asphyxia

Neonatorum, and he was awarded the MD degree for this work in 1977. Specialist Paediatric training led to the MMed (Paediatrics) in 1972 and the Fellowship of the College of Physicians (South Africa) in 1973. In 1978 he obtained the BA degree (Unisa) majoring in Sociology and Psychology and in 1981 the BA (Hons) in Sociology with distinction.

His thesis examines the relationship between growth, development and social milieu. In recent years there has been much interest in the effects of early malnutrition on subsequent development particularly intellectual development. Malnourished children tend to come from families where social stability, education and environmental stimulation are particularly poor and it has been difficult to differentiate the effect of these from that of nutrition. He shows that early development in infancy correlates well with growth (nutrition) but that later in the pre-school period there is a fall-off in development with a greater association with social circumstances and family stability. This has important implications for intervention suggesting that simple feeding programmes are unlikely to be effective. Intervention will need to be more broadly based and aimed at the improvement of incomes, housing and family cohesion, child centredness and at eliminating social pathology.

Supervisor: Associate Professor M D Bowie (Paediatrics and Child Health)

DEGREE OF DOCTOR OF MEDICINE

In Community Health: Neil Walton White, MBChB

(Thesis Title: An investigation of byssinosis among South African textile workers)

Neil White was born in Edinburgh in 1954. He graduated in Medicine at UCT in 1978, and served an internship at Groote Schuur Hospital in 1979. His interest in byssinosis arose during his time with the Health Care Trust and, subsequently, the National Union of Textile Workers.

His thesis explores an occupational disease in the South African textile industry about which there has been no detailed knowledge until now. He deals with the identification of a disease of the lung which may be developed by workers with heavy exposure to dust generated during the manufacturing process. The study is of major importance to the industry in South Africa in that it has defined the problem and now makes it possible for management to plan corrective action. Workers suffering from the disease may now be more readily identified and compensated accordingly.

In Medicine:

*Allan Ivan Binder, BSc (Med), MBChB, MRCP

(Thesis Title: Painful still shoulder (frozen shoulder) and soft tissue rheumatism in the upper limb)

Allan Binder was born in Johannesburg in 1950. he graduated in Medicine at UCT in 1975 and after an internship at Groote Schuur Hospital he trained in General Medicine and Rheumatology at Addenbrooke's Hospital, Cambridge. He is a senior registrar at the University College and Middlesex Hospitals in London.

In his thesis he reports on a careful study of several forms of soft tissue rheumatism causing pain in the shoulder and elbow. He has analysed much precisely measured clinical detail and large volumes of blood samples. He has succeeded in pin-pointing numerous areas of doubt in the current understanding of these conditions, and undertook a survey of the use of pulsed electro-magnetic field therapy in painful soft tissue lesions. He also explored the use of thermographic assessments as part of the investigation of the painful tennis elbow condition: all patients were shown to exhibit increased heat over the painful area.

XXIII. FACULTY OF SCIENCE.

Dean: Professor V C Moran

DEGREE OF DOCTOR OF PHILOSOPHY

In Applied Mathematics:

Michael Olaf Bergh, BSc (Eng)

(Thesis Title: The value of catch statistics and records of guano harvests for managing certain South African fisheries)

Michael Bergh was born in Paarl in 1957. After matriculating at Kimberley Boys High School he graduated BSc

(Chemical Engineering) with first class honours in 1979. After working for a period with the CSIR in Pretoria in the field of high pressure physics, an interest in modelling biological processes led him to join the newly formed Benguela Ecology Research Programme in 1982. His contribution to this programme has centred on the mathematical and statistical aspects of marine stock assessment and harvesting theory.

His thesis first considers an overview of material flows in southern Benguela pelagic ecosystem. Qualitative conclusions that emerge are the need to take cannibalism into account in models used to manage the hake fishery, and that lightfish, lanternfish and squid may have potential for increased exploitation. However, the complexity of the ecosystem mitigates against the development of species-interaction models to provide quantitative predictions of future systems behaviour.

The major part of the work is an examination of the Virtual Population Analysis (VPA) technique used to assess trends in fish population sizes from data on the age-structure of the industry's annual catches, with specific reference to the South African anchovy, pilchard and hake resources. This age-structure data alone is shown to produce equivocal results, and the need to incorporate further relative abundance information in such analyses is demonstrated, with guano harvest records being used in this context to evaluate historic population trends for pilchard. The conclusion is drawn that the apparent accuracy offered by earlier deterministic analyses of these fisheries using the VPA technique was misleading, and that management based on catch-statistics alone is at best open to reservation (in the case of hake) and at worst probably impossible (in the cases of pilchard and anchovy). The work endorses the necessity for direct survey assessment of marine resources, and calls for imaginative management initiatives to produce the data contrast necessary to estimate fishery management variables with reasonable precision.

Supervisors: Dr D Butterworth (Applied Mathematics)
Professor J C Field (Zoology)

*Waldir Leite Roque, BSc (Londrina), MSc (CBPF) (Thesis Title: Studies in cosmological dynamics)

Waldir Roque did his undergraduate studies in Mathematics and Physics at the University of Londrina, Brazil, and in 1982 completed a Masters degree at the Brazilian Physics Research Centre (CBPF – Rio de Janeiro) on the Einstein-Cartan-Sciama-Kibble theory of gravitation. He then came to Cape Town to study Cosmology at the Applied Mathematics Department.

His thesis is a study of the dynamics of universe models within the general theory of relativity. The major part is a study of the dynamics of anisotropic but spatially homogeneous universe models. These models allow much more general behaviour than the standard models, and their geometry is complex. He has developed a method of simplifying the field equations by use of the automorphism group of the symmetry group of the space-time, describing in a clear manner the geometry underlying the method and confirming its utility. In addition he examines the way the initial singularity in the standard universe models would look to a fast-moving observer, showing that the properties are substantially different than on the usual view; and he examines the effect of small-scale clumping of matter on the effective field equations at a large scale, showing that significant effects may be expected that cannot be ignored.

Supervisor: Professor G F R Ellis (Applied Mathematics)

In Biochemistry:

Kevin Ian Grant, BSc (Zimbabwe), BSc (Hons) (Cape Town) (Thesis Title: *The preparation and properties of ³H-phe^{B1} insulin*)

Kevin Grant was born in Zimbabwe in 1954. He graduated in 1975 with a BSc in Biochemistry from the then University of Rhodesia. He received his Honours degree in Biochemistry in 1979 from the University of Cape Town. During his graduate studies he has worked as a part-time technical officer and later as a teaching assistant in the Department of Biochemistry of the University of Cape Town.

Kevin Grant's thesis describes a semisynthetic procedure for preparing radioactive insulin labelled in the B chain of the molecule with tritiated phenylalanine. He shown that this insulin, in contrast to most radioactive insulin preparations preparations presently used for research and diagnostics which are labelled with iodine, has retained its full biological activity. With the aid of the titriated insulin it will now be possible to investigate in detail the post receptor metabolism of the hormone.

Supervisor: Professor C von Holt (Biochemistry)

Jacques Daniel Retief, BSc (Stell), BSc (Hons)

(Thesis Title: Poly(glutamic acid) promoted assembly of nucleosome cores on the histone gene quintet of Psammechinus miliaris)

Jacques Retief was born in the Cape Province in 1954. He matriculated from the D F Malan High School, Bellville, in 1972. He received his BSc in Biochemistry from the University of Stellenbosch in 1978 and his Biochemistry Honours degree in the first class from the University of Cape Town in 1979.

Jacques Retief's thesis makes a distinct contribution to the advancement of knowledge in the field of nucleic acidprotein interactions. The thesis demonstrates that certain nucleotide sequences in genes contain the information to direct the assembly of nucleosomal core particles in specific loci on the DNA. These findings lead to a better understanding of the packing process of genes which results in highly ordered structures of chromosomes in the cell nucleus.

Supervisor: Professor C von Holt (Biochemistry)

In Botany:

*Colin John Straker, BSc (Hons)

(Thesis Title: Aspects of the phosphorus nutrition in endomycorrhizal fungi of the Ericaceae)

Colin John Straker was born in Cape Town in 1950 and matriculated from Rondebosch Boys' High School in 1968. After completing his military service, he obtained a BA in Psychology in 1974 and a BSc in Botany and Zoology in 1976 from the University of Cape Town. After two years of school teaching he returned to the University of Cape Town to pursue a BSc (Hons) degree in Botany in 1979. He was appointed a junior research fellow in the Department of Botany during 1980-1984. He has now been awarded a post-doctoral fellowship by the Foundation for Research and Development (CSIR) and is presently doing research at the Institut National de Recherche Agronomique in Dijon, France.

His doctoral work investigates the phosphorus nutrition of mycorrhizal fungi which are nutritionally associated with the root systems of heather plants belonging to the Ericaceae, a family characteristic of the fynbos vegetation of the Western Cape as well as European heathlands. He shows that these fungi possess efficient enzymatic and physiological systems for the utilization, absorption and storage of phosphorus. He offers an insight of the ability of ericaceous plants to grow in soil of a low phosphorus status. The thesis represents an original contribution to the understanding of the nutrient cycling of the fynbos vegetation and provides information which will be useful in the growth, management and conservation of heather plants.

Supervisor: Associate Professor D T Mitchell (Botany)

In Computer Science:

Simon Mark Kaplan, BSc (Hons)

(Thesis Title: Specification and verification of context conditions for programming languages)

Simon Kaplan was born in Cape Town in 1958. After matriculating from Herzlia in 1976, he graduated with a BSc in Computer Science (1981) and a BSc (Hons) in the first class and was awarded the Southern Life prize.

His thesis is in the area of language specification for the production of compilers. Although there are techniques for specifying the text conditions, most of these techniques are orientated more towards the implementation of the context condition rather than providing an easy method for the language-specifier to specify the context conditions. In addition, the formal verification that the program will correspond to these conditions is often not done, or is extremely difficult.

He provides a notation for the specification of context conditions which would easily enable the language-specifier to provide a correct, formal specification for semantic analysis. He has shown the usefulness of his notation by specifying the context conditions for most of the common, imperative programming languages. His analysis has led to a greater understanding of this area, and he has published results in international journals.

Supervisor: Professor K J MacGregor (Computer Science)

In Geology and Mineralogy:
Stephen William Goodlad, BSc (Hons) (Aberdeen)
(Thesis Title: Tectonic and sedimentary history of the mid-Natal Valley (S.W. Indian ocean))

Stephen Goodlad was born in Lerwick in the Shetland Isles in 1953 and completed his schooling at Peterhead Academy. He obtained his BSc (Hons) degree from Aberdeen University in 1975. In the same year he joined the Joint Geological Survey/University of Cape Town Marine Geoscience Unit. Since 1981 he has been employed by SOEKOR where he is now an Exploration Team Leader involved in the search for oil on the Agulhas Bank.

His thesis deals with the tectonic and sedimentary history of part of the Natal Valley in the vicinity of Durban. This is a sediment-filled basin lying between the continental margin and the Mozambique Ridge. Particular attention is paid to the Tugela Cone, a large sedimentary feature that extends from the continental shelf off the Tugela River into deep water in the centre of the Valley. Goodlad uses a small amount of published, and a large amount of unpublished data to interpret the plate-tectonic and sedimentary history of the region. During the course of this he proposes a new model for the plate-tectonic origin of the Valley, which at this point straddles possible "oceanic" and "continental" areas, as well as the Mozambique Ridge. Using an acoustic stratigraphic scheme he also interprets the palaeo-oceanographic history of the area.

Goodlad's contributions are in the documentation he provides that are examples of geological processes and the further understanding of the structural and sedimentary history of this region as well as the tectonic history of the southwest Indian Ocean in general.

Supervisor: Professor R V Dingle (Geology and Mineralogy)

In Geochemistry:

*Simon Raphael Shee, MSc

(Thesis Title: The petrogenesis of the Wesselton Mine kimberlites, Kimberley, Cape Province, R.S.A.)

Simon Shee was born in Bulawayo. He obtained his BSc degree majoring in Geology in 1973 and the BSc (Hons) in Geochemistry in 1974. He was awarded an Elsie Ballot Scholarship for an MSc on the xenoliths in the Orapa kimberlite which he obtained in 1978.

In correlating, for the first time, the recent advances in knowledge about the emplacement mechanisms of kimberlite with a mineralogical study of the igneous intrusive phases in the root zones of a specific diatreme, Simon Shee has written a thesis which yields valuable new information on the origins of, and processes of magma differentiation in these economically important but rare rocks. The Wesselton kimberlites are probably derived from metasomatised peridotite in the earth's convecting aesthenosphere by a process of volatile induced relatively low temperature partial melting. Redox conditions in this melt changed from relatively low oxygen fugacities to more oxidising conditions as degassing of the magma occurred during emplacement. Many of the abundant macrocrysts which give the kimberlite its characteristic inequigranular texture are deduced to be of xenolithic (accidental) origin. These and other conclusions that have emerged from this currently uniquely detailed study will contribute to the formulation of future models which deal with the composition of the mantle and magma genesis at depth beneath old continental crust (cratons).

Supervisor: Associate Professor J J Gurney (Geochemistry)

In Mathematical Statistics:

Gillian Ziona Rubinstein, BSc (Hons) (Cape Town), MSc (South Africa) (Thesis Title: Models for count data using the Sichel distribution)

Gillian Rubinstein (née Stein) was born in Cape Town in 1956. After matriculating at Rustenburg Girls High School, she obtained BSc (1976) and BSc (Hons) (1977) degrees at UCT. She then took up a junior lectureship in Statistics at UNISA and while there obtained the MSc degree in Operations Research. She returned to UCT as a lecturer in 1980.

Her thesis develops techniques for modelling data in which a few genuine large counts occur among many small ones. This phenomenon, known technically as overdispersion, occurs in many biological applications when counts of insect species are made and in linguistics where word frequency distributions are studied. She has developed theoretical results which lead to ways of modelling correlated frequencies and methods for relating counts to explanatory variables. All new techniques proposed can be implemented on a micro computer using programs developed as part of the thesis. This makes the new results readily available for the practitioner.

Supervisor: Associate Professor June Juritz (Mathematical Statistics)

In Organic Chemistry:

*Elizabeth Eldred Sutton, MSc (Natal)

(Thesis Title: A synthetic and structural investigation into homo- and hetero-, di- and tri- nuclear complexes containing Osmium)

Elizabeth Sutton was born in Pietermaritzburg in 1955. She received her BSc (1975) and BSc (Hons) (1976) in Chemistry from the University of Natal at Pietermaritzburg. In 1978 she took up a lectureship in the Pharmacy Department at the Natal Technikon, transferring in 1979 to the Department of Applied Science and being promoted to Senior Lecturer in Inorganic and Analytical Chemistry in 1980. In 1980 she was awarded the MSc degree from the University of Natal at Pietermaritzburg and in the following year registered as a PhD student at the University of Cape Town.

In her thesis she describes a high yield synthesis of dinuclear osmium carbonyl halide complexes. This is significant as it provides a convenient entry for further studies on dinuclear osmium complexes. Thus, using X-ray crystallographic techniques, she has determined the molecular structures of several dinuclear osmium complexes, notably $Os_2(CO)_6I_2$ and $Os_2(CO)_8X_2$ (where X=C1 or I). As a possible route to chain cluster complexes containing osmium, she investigated the reactions of $[O_s(CO)_4]^{2^-}$ with $M(CO)_5Br$ (M=Mn or Re). These reactions lead to the chain cluster complexes $M_2Os(CO)_{14}$ and the new anionic complex $[OsRe(CO)_9]^-$ was obtained. The reactions of $[HOs(CO)_4]^-$ with $M(CO)_5Br$ led to the neutral binuclear hydride complexes $HOsM(CO)_9$ (M=Mn or Re) and in the case of M=Re, the novel anionic complex $[HOsRe(CO)_8Br]^-$. She studied the chemical reactivity of some of these complexes. An investigation of the 1H nmr spectra of the homologous series of complexes $H_2[OS(CO)_4]_n(n=1-3)$ led to the assignments of $^{187}Os^{-1}H$ coupling constants. This thesis makes an important contribution to the chemistry of di- and tri-nuclear metal complexes. Studies on complexes of this type are significant as they can further our understanding of catalytic reactions occuring on metal surfaces.

Supervisor: Associate Professor J R Moss (Inorganic Chemistry)

In Physical Chemistry: Dianne Ruth Bond, MSc

(Thesis Title: A structure-reactivity study of selected phosphate esters)

Dianne Bond (née Hunt) was born in Pinelands in 1958. After matriculating with a first class pass from Thornton High she entered this University in 1977 and in 1979 graduated BSc with distinction in Chemistry. The following year she obtained a first class Honours degree in Chemistry and in 1982 she was awarded an MSc degree, with distinction, in the field of clathrate chemistry.

Dianne Bond's thesis makes a substantial contribution to the field of structural phosphorus chemistry.

Her X-ray crystallographic and mass spectrometry studies in conjunction with kinetic investigations of model phosphate ester systems have revealed evidence for an intramolecular catalytic mechanism operative in nucleophilic displacement reactions, the significance of such a catalytic process is its possible pertinence to the enzyme mediated phosphoryl transfer reactions in biochemical systems.

Supervisor: Professor L R Nassimbeni (Physical Chemistry)

In Physical Chemistry:

Michael Alexander Erich Wandt, Dipl-Phys (Tubingen)

(Thesis Title: Scientific aspects of urolithiasis: quantitative stone analyses and crystallization experiments)

Michael Wandt was born in Stuttgart, West Germany, in 1955. After matriculation in 1974 he studied towards the degree Diplom-Physiker (MSc), first at the Albert-Ludwigs-University Freiburg and later at the Eberhard-Karls-University Tubingen, where he graduated in 1981 with a thesis on magnetic properties of spin glasses. In the same year he emigrated to South Africa. In July 1984 he was appointed researcher at the Ion-solid Interaction Division of the National Accelerator Centre's Van de Graaff Group, where he is working on the use of silicides for elimination of contact degradation in shallow junction silicon devices.

Michael Wandt's doctoral thesis describes two approaches to the study of urolithiasis – that of urinary stone analysis and that of crystallization experiments. The search for more efficient therapeutic regimens has led to a demand for more accurate analyses. In an attempt to parallel the success of x-ray diffraction in the qualitative identification of stone constituents, quantitative x-ray diffraction analytical procedures were reviewed, adapted, developed and tested to

establish routine guidelines. In defining the latter, he recognised that a detailed picture of stone composition and structure is more likely to be attained by application of an element-specific analytical procedure in conjunction with quantitative x-ray diffraction analysis. Inductively coupled plasma atomic emission spectroscopic methods were therefore investigated for their suitability in the field of stone research and successfully developed and applied for the simultaneous determination of major, minor and trace elements.

To gain insight into the physico-chemical factors which govern calcium oxalate crystallization processes in particular, a series of crystallization experiments were conducted in a rotary evaporator involving a standard reference artificial urine. Examination of the influence of pH and urine composition as well as the role of various natural and synthetic inhibitors were undertaken. Crystals formed in these experiments were subjected to the same analytical procedures as developed for stones, including scanning electron microscopy. The significance of these experiments lies in the fact that similar deposits to those observed in calculi were obtained with the fast evaporator. The results derived, some of which were presented at the Vth International Symposium on Urolithiasis and Related Clinical Research, suggest that this system provides a simple, yet very useful means for studying the crystallization characteristics of urine solutions.

Supervisor: Dr A L Rodgers (Physical Chemistry)

In Zoology:

*Alfredo Guillet, Dottorato (Turin)

(Thesis Title: Biogeography and Ecology of African Waterbirds)

Alfredo Guillet was born in Rome in 1948. After matriculating at the Nunziatella Military School, Naples, he entered the University of Turin where he obtained a doctoral degree in Political Sciences. He then completed a specialization certificate in Diplomatic History, International Law and Economics at Bologna. He thereafter joined the Faculty of Natural Sciences, University of Rome, and has since been involved in both university courses and field work with a focus on community ecology in the African and Asian tropics.

His thesis is aimed at explaining distribution and diversity of African waterbirds at four levels: the continent, subcontinent, ecosystem and species. The major contribution of his biogeographical research is the identification of a longitudinal gradient in waterbird species diversity. Birds with non-aquatic habitats, and indeed most other groups of animals and plants, exhibit a latitudinal species diversity gradient. Dr Guillet uses uni- and multi-variate statistics to discover the complex patterns of habitat availability and quality which are the underlining processes behind this atypical species diversity gradient. At the species level, his thesis provides an integrative bioenergetics model to estimate fish consumption by the southwestern Cape Province population of the Great White Pelican (*Pelecanus onocrotalus*). The Great White Pelican is one of South Africa's 'Red Data' bird species, and this model will be an important component in any conservation-orientated management scheme for this species.

Supervisor: Dr Timothy M Crowe (Zoology)

*Rory Paul Wilson, BA (Hons) (Oxon)

(Thesis Title: Breeding Jackass Penguins Spheniscus Demersus as pelagic predators)

Rory Wilson was born in Northamptonshire, England in 1957. After A-levels at Oundle School, he completed a degree in Zoology at Oxford University in 1979. He was awarded a J W Jagger Scholarship at the University of Cape Town to support his doctoral studies on the marine ecology of the Jackass penguin.

Rory Wilson overcame many technical and logistical problems normally involved in studying penguins at sea by designing, constructing and deploying remote-sensing devices which work either auto-radiographically or electronically. These devices record data on the behaviour of penguins that were previously unquantifiable. He has elucidated basic foraging parameters of penguins, such as normal dive depth, dive time, travelling speed and foraging range. He has combined these results with a comprehensive study of penguin diet, to infer the distribution and availability of important pelagic prey fish species such as anchovy *Engraulis japonicus capensis*. These results have facilitated the development of an index of recruitment for the commercially-exploited anchovy stock.

Supervisors: Professor W R Siegfried and Dr D C Duffy (Ornithology)

In Religious Studies:

Georgina Cicely Vauriol Buijs, MA (Natal)

(Thesis Title: A study of Indian Pentecostal Church membership with reference to a model of religious change)

Gina Buijs was born in Accra in 1950. She graduated BA, BA (Hons) in the University of Natal majoring in History and Social Anthropology. Her study of Extra-Familial Kin Relationship in the Indian Community resulted in her being awarded her MA and also in a number of publications on the role of religion in that Community. She has been a lecturer in the University of Durban-Westville and latterly in the University of Natal. She now lives in Malawi and teaches part-time at the University of Venda.

Many major Christian denominations attempted missionary outreach to the descendents of those indentured Indian labourers who were brought to Natal during the 19th century. They enjoyed varying degrees of success but none of them very much. In 1931 J F Rowlands, son of a Pietermaritzburg businessman, began his own mission, briefly in his home town, later in Durban. The result was the Bethesda Church, described as pentecostal but in fact owing much of its character to Rowlands himself. By the time of his death 50 years later Bethesda was a major force in the life of the Indian Community and its largest Christian denomination. The thesis reconstructs this development. Interesting as a piece of modern South African history which offers insights into the situation of the Indian Community in a period of upheaval, this thesis also sets out to advance understanding of the way in which religion functions in such circumstances and is itself modified by them.

Using a model of religion and religious change developed in this University during a number of similar studies, Gina Buijs sought both to explain the successes and reversals of the Bethesda Church and to further test the explanatory power of the model and in her turn contribute to its development. In all of these aims she has been remarkably successful.

Supervisor: Professor J S Cumpsty (Religious Studies)

In Sociology:

Mervyn David Lincoln, BA, BA (Hons) (Natal), MA (Wilfrid Laurier)

(Thesis Title: The culture of the South African sugarmill: the impress of the sugarocracy)

David Lincoln was born in Durban in 1951 and spent his youth in Zululand. He obtained his BA degree from the University of Natal in 1973 and an honours degree in Geography the next year. he was awarded the MA degree in Geography in 1977 by Wilfrid Laurier University in Canada. While there, he specialised in Third World and Urban Studies. He was appointed to the department of Sociology at the University of Cape Town in 1978.

His thesis is the result of detailed historical research which required gaining access to information not hitherto published. The search for relevant information led to archives and also required the interviewing of people who had worked in the sugar industry. The value of the thesis lies in the data that it makes available regarding the culture of the sugarmill and in the original form in which these data have been compiled, presented and interpreted. The culture of the sugarmill emerges as the ever changing product of the dynamic interplay between various social forces. Of these, the economic interests of the "sugarocracy" and the demands, accommodations and protests of the workers emerge as the most significant.

Supervisor: Associate Professor K Jubber (Sociology)

XXIV. FACULTY OF SOCIAL SCIENCE AND HUMANITIES

Dean: Professor Z R van Straaten

DEGREE OF DOCTOR OF PHILOSOPHY

In Sociology:

Johannes Gerhardus Bester Maree, BSc (Hons) (Rhodes), MA (Oxon), MA (Sussex) (Thesis Title: An analysis of the independent trade unions in South Africa in the 1970s)

Johan Maree was born in 1943 and matriculated in 1959 from Dealesville High School in the OFS. After an honours degree in Mathematics from Rhodes he read Philosophy, Politics and Economics at Oxford and followed this by taking

a master's degree in Development Economics at Sussex. He has had appointments at the University of the Orange Free State and UCT, where he has lectured in Economics and Sociology. He is a senior lecturer in Industrial Sociology at present.

His thesis is an historical and sociological study of the independent trade unions in South Africa in the 1970s. He finds that these unions went through two stages. First, they struggled for survival against employers and the state, both of which opposed their existence. At the end of 1976 their future hung in the balance, but they survived to gain formal recognition at a limited number of companies. Mareés thesis has two sociological themes: the efforts of these unions to be democratic organisations and the strategies they use to acquire power. He shows how the efforts to be democratic moved from the creation of structures, to the development of workers capacities to take control of these towards the emergence of representative and accountable worker leadership. His thesis concludes by pointing to the political singificance of the democratic organisation of these unions.

Supervisor: Professor F A H Wilson (Economics)

THE UNIVERSITY BOOK AWARD GEORGE MEREDITH BRANCH

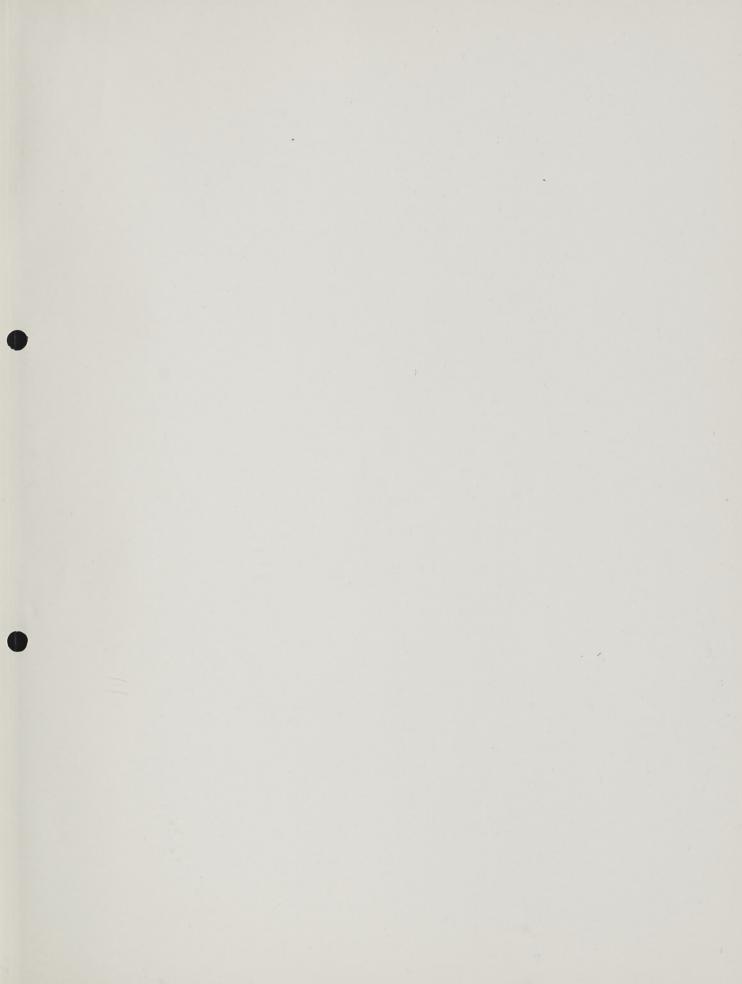
THE LIVING SHORES OF SOUTHERN AFRICA

The Living Shores of Southern Africa by George and Margo Branch was first published in 1981 and was immediately acclaimed by layman and scientist alike. Three major elements contribute to its warm reception. First, George Branch writes in a lucid readable style with an enthusiasm that infectiously shares the excitement and fun he has had as a marine biologist. Secondly, the text is graced with over 380 line drawings and by 150 delicately elegant colour paintings by Margo Branch, who coauthored the book. Finally, the book benefits greatly from magnificent photographs, mostly the work of Antony Bannister, one of the world's best wild-life photographers.

The Zoology Department of the University of Cape Town is internationally renowned for its research in marine biology, and <u>Living Shores</u> does much to communicate this work to a wider audience. When it first appeared the book was reviewed in glowing terms as "the most important definitive natural history book" of the decade, "to be understood and enjoyed by the uninitiated yet stand up to the critical appraisal of a marine scientist". It was soon among the top ten best-selling works of non-fiction and is now in its third impression.

<u>Living Shores</u> is really two books in one. The first part deals with the ecology of different communities, including rocky and sandy shores, estuaries, kelp beds, the open sea, and man's use and abuse of the sea. The second part covers the biology of the main groups of marine invertebrates and plants and allows identification of all the common species.

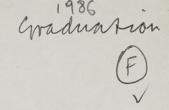
The book is now the unquestioned standard reference on marine life in southern Africa. But it is also more than that – it is a celebration and communication of the authors' love for the sea.







University of Natal Memorandum



6th October, 1986.

To:

The Assistant Registrar (Personnel), From: Mr. B.M. Emmerich, University of Natal, Assistant Registra University of Nata

Mr. B.M. Emmerich, Assistant Registrar (Academic), University of Natal, PIETERMARITZBURG.

SUBJECT: GRADUATION CEREMONIES: 1987: PMB. CAMPUS.

- 1. The Academic Ceremonial's Committee meeting held on 20.5.1986 Agreed :
 - (a) that Professor Bredenkamp, Messrs Emmerich and Binnendyk inspect the halls at the Royal Show Grounds to ascertain whether it would be a suitable venue for graduation.
 - (b) that should the Royal Show Grounds be unsuitable, a recommendation be made to Senate that consideration be given to the provision of four ceremonies in Pmb. (and possibly Durban) in 1987 dependant on the number of graduands.
- 2. In view of the non-availability of the halls at the Royal Show Grounds for graduation purposes in 1987 and future years, it would appear that part (b) of the above resolution needs to be implemented insofar as Pmb. is concerned. The next Senate Executive Committee meeting is scheduled for Tuesday 28.10.1986 and the next Senate meeting is set down for Wednesday 19th November, 1986. It seems therefore that unless we have an alternative proposal to make, that the "Four Ceremonies" idea needs to be put forward to Senate for consideration.
- Although the above information and facts are obvious to us it is important that we be reminded of the limited time available for report back.

Kind regards,

Yours sincerely,

B.M. EMMERICH.

ASSISTANT REGISTRAR (ACADEMIC)

D



University of Natal Memorandum

22 October 1986

To:

From: Mr C J Binnendyk

Mr C J Binnendyk Assistant Registrar (Personnel) University of Natal PIETERMARITZBURG

Venue for Graduation

As you know the accommodation problem at our three Graduation ceremonies has become critical.

Parents who arrive in good time find themselves having to sit on the steps or stand against the walls.

When the problem was discussed at the last Academic Ceremonials Committee it was agreed to look for an alternative venue. In the absence of Professor Bredenkamp, Professors Barrett and Benyon, Mr Emmerich and I went to see the largest Halls in Pietermaritzburg. The only usuable hall at the Royal Show Grounds is not available to us due to its use for pre Royal Show events. The General Manager, Mr Mark Shute saw no chance of assisting us there.

The YMCA Sports Hall was visited and this has been booked provisionally for next year's graduation. It is a stark, typical sports hall and we all felt some apprehension about recommending it as a venue. It seats up to three thousand plus people and ample parking is available. I still have to be told what it will cost us.

The other solution is to go to four ceremonies but the Registrar is opposed to that notion.

I would suggest therefore that you visit the YMCA Sports Hall as soon as this is possible as a decision must be taken before the end of the year. Graduating students are advised of the venue when they get their results.

Finally, a more expensive solution, at a total cost of R5 300, would be the temporary erection of an Amphihall on the grounds in front of the Library. This is a neat structure of aluminium and canvas and seats in excess of two thousand people. In view of our present financial situation I did not see this as a proposition.

Lave

C J Binnendyk

CJB/mz

Report on the logistics of arranging Graduation Ceremonies at the YMCA Sports Complex

As a result of the need to find an alternative larger, venue for our Graduation Ceremonies we have booked the YMCA Sports Complex and adjacent Sports Field for the week of graduation in 1987.

The following aspects have been investigated and present no problem if the Sports Complex is used :

Seating of up to 1268 persons per ceremony.

Robing room (large room at end of hall)

Parking for up to 700 cars on the YMCA precinct per occasion. (Ample parking available also for VIP's next to hall).

Pulic address system and recording of ceremonies.

Venue for refreshments at conclusion of ceremony.

Signposting.

Toilets.

Venue for Photographer (Akkersdyk).

Venue for stage platform and choir.

Ventilation and electric fans.

Plants and shrubs to block toilets and decorate the hall.

Ample lighting available in hall.

Flow of persons to and from the hall easily controllable.

Mr Hawksworth has advised that the cost of transport and of setting up the ceremonies, assuming three, will be $\mp R1~000$ in total.

Matters still to be investigated or confirmed are :-

Cost of curtaining or covering up of certain fixed signs in the hall.

Cost of additional carpeting in hall.

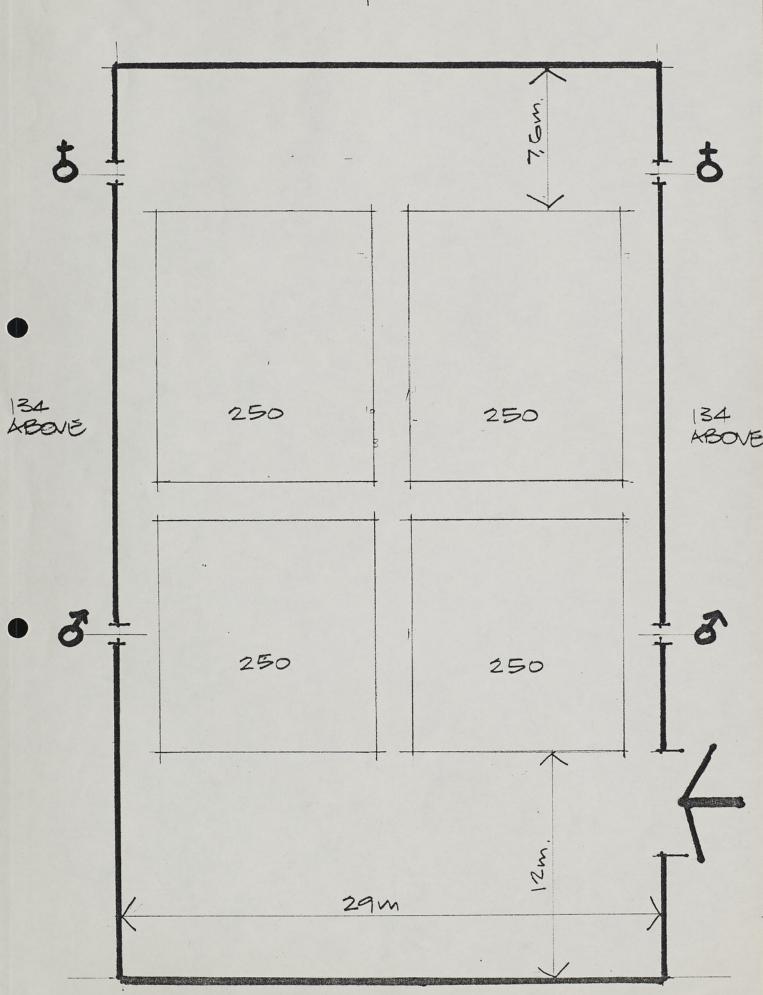
1 000 additional chairs were budgeted for but can be purchased only in 1987.

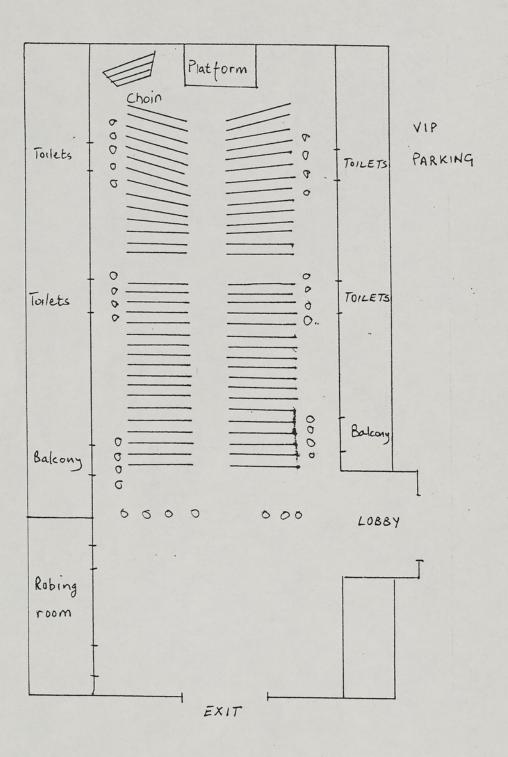
The rental to be charged by YMCA was given to me verbally. The charge is R300 per day (no charge for Sunday). Total cost R1 800 as it has been booked for the whole week.

If the University purchases the YMCA property, all is well - if someone else does before our graduation ceremonies are held we may have problems, because YMCA understandably are not prepared to commit themselves to these dates if they will be disposing the property before then.

A suggested seating plan of the hall is attached.

This seating layour is based on each scaring division being toox 1100 which allows for an aisle





YMCA Sports Complex Dec 1986