



UNIVERSITY COLLEGE
AUSTRALIAN DEFENCE FORCE ACADEMY

CONFERRING OF DEGREES
SCIENCE AND ENGINEERING

Wednesday, 9 December, 1992, 4.00 p.m.



THE UNIVERSITY OF
NEW SOUTH WALES



THE UNIVERSITY MACE

The Mace is a symbol of the dignity and authority of the University.

Originally it was a weapon capable of breaking through the strongest armour and, according to the Encyclopedia Britannica, was carried in battle by mediaeval bishops so as to conform to the canonical rule that forbade priests to shed blood. Later, maces began to have a ceremonial function, though they were still intended to provide protection, usually to the king's person, and were carried by sergeants-at-arms.

The University's Mace is of simple form, constructed of stainless steel and embellished with silver. The head, of sixteen satin-finished stainless steel ribs, is surmounted with a silver waratah, the floral emblem of the State of New South Wales, and on its horizontal bar are mounted four silver shields, two engraved with the arms of the University and two with the arms of the State. The inner core has a scarlet velvet lining.

The shaft is of eumung, a New South Wales timber, dark in colour, and terminates in a stainless steel tail.

The Mace was presented to the University on 6 December 1962 by the Broken Hill Proprietary Company Ltd.

ORDER OF PROCEEDINGS

The Academic Procession proceeds to the dais, the Assembly standing. The Assembly is requested to remain standing until the Chancellor is seated, after the playing of *Advance Australia Fair*.

The Chancellor, the Hon Mr Justice Samuels, AC, MA *Oxf*, extends a welcome to those present.

Mrs S-A Phillips, BA *Monash*, Deputy College Secretary (Academic).

Professor P J Dennis, BA *Adel.*, MA PhD *Duke*, DipT(Sec) *Adel.T.C.*, FRHistS, Chairman of the Academic Board, presents to the Chancellor candidates from the University College.

Professor J R Niland, MCom *UNSW*, PhD *Ill.*, FASSA, Vice-Chancellor and Principal, presents the recipient of a Vice-Chancellor's Award for Teaching Excellence.

Professor A E Clarke, AO, BSc PhD *Melb.*, FTS, FAA, Chairman, CSIRO, delivers the Occasional Address.

Professor H P Heseltine, AO, BA *W.Aust.*, MA PhD *Louisiana State*, Rector of the University College.

The Mace Bearer: Emeritus Professor E C Daniels, MArch, ASTC, LFRAIA, Hon MIES

The Academic Procession retires, the Assembly standing.

THE HISTORY AND SIGNIFICANCE OF ACADEMIC DRESS

The history of academic dress reaches far back into the early days of the oldest universities. A statute of 1321 required that all 'Doctors, Licentiates, and Bachelors' of the University of Coimbra wear gowns. It is still a vexed question whether academic dress finds its sources chiefly in ecclesiastical or in civilian dress. Gowns may have been counted necessary for warmth in the unheated buildings frequented by mediaeval scholars, and the hood currently in use is the remnant of a garment, also a device against the cold, which could be pulled up over the head and kept in position with the tail wound around the throat. The type of academic headgear most commonly worn by graduates today is the mortar-board cap, also called the trencher cap, which dates back to the seventeenth century. It is also the custom of many universities for Doctors to be allowed to wear a distinctive type of headgear, either a round velvet bonnet or a black velvet mortar-board, with the full dress gown.

As universities developed throughout the Commonwealth countries they mostly prescribed academic costume based on that established for the members of Oxford and Cambridge Universities, where the Chancellors and often other senior members wear a distinctive official gown and hat. Graduates are identified by the wearing of a gown and hood specially prescribed for each degree, and undergraduate students wear a distinctive gown and hat.

Notwithstanding the importance of the Oxford and Cambridge tradition of the gown and cap, it is the wearing of a hood by the graduate to indicate his or her degree which is the principal feature of the academic costume code.

The tradition of wearing academic dress continues in universities around the world and it is customary that on ceremonial occasions such as the Conferring of Degrees Ceremony today that the distinctive official costume of each person concerned be worn.

THE BAND OF THE CORPS OF OFFICER CADETS

BANDMASTER: Warrant Officer Class 2 G. W. Palfrey

BAND CADET CAPTAIN: Midshipman R. L. Phillips

DRUM MAJOR: Officer Cadet C. J. Cornell

The Band of the Corps of Officer Cadets was established to provide music for ceremonial parades, functions and other activities held at the Australian Defence Force Academy. The COOC Band consists of officer cadets from the three services and is run on a volunteer basis.

The origin of the COOC Band dates back to early 1986, starting as a Drum Corps, consisting of four side drummers and a bass drummer. In June of that year a full time Bandmaster provided by the Australian Army Band Corps was appointed. With the recruitment of both brass and woodwind players, a Military Band was soon raised.

The first engagement saw the COOC Band provide the musical support to the Defence Academy's weekly parade. A memorable day for the Corps of Officer Cadets. The Band now performs regularly at various functions held at the Defence Academy.

The Band rehearses four mornings a week for 30 minutes and maintains a strength of approximately 50 members, all of whom enjoy the opportunity of being able to continue their interest in music.

CONFERRING OF DEGREES

UNIVERSITY COLLEGE

PRESENTED BY PROFESSOR P. J. DENNIS

CHAIRMAN OF ACADEMIC BOARD

BACHELOR OF SCIENCE BSc

Steven John Adamson
Paul Stuart Arnold
Robert Banyari
Frederick Mark David Bloomfield
Lindsay Maurice Bowen
Leigh Virginia Bryant
Anthony Michael Campbell
Guy Carlisle
Cameron John Cornell
Scott Andrew Corrigan
Glenn Carlton Croft
Adam Waring Crook
Jason Scott Day
Stephen Dickfos
Andrew John Dobson
Brett David Donohoe
Shane Thomas Doolin
Matthew Geert Doornbos
Donna Maree Douglass
Andrew John Drummond
Michael James Egan
Carol Ann Evans
Boyd Travis Falconer
Glen Alan Ferguson
Karen Janelle Fisher
Terrence Ian Furness
Benjamin Alan Richard George
Alistair James Harold Green
Todd Douglas Green
Roger Thomas Grose
Donna Michelle Hajek
Richard Michael Halloway
Grant Andrew Halstead
Justin David Hardiman
Richard Harrison
Matthew Garry Harvey
Danielle Maree Hethorn
Andrew John Hocking
Julian Henley Holder
Jamie Roger Humphreys
Rebecca Elizabeth Jeffcoat
Ryan Alexander Jose
Edmund Knowles
Kaarin Nina Kooij
Scott Eden Latham
Robert John Laurence
Liang Tian Soon

Andrew David Lowe
Simone Patricia Lyons
Cameron James Mann
Frank Marchetti
Mark Steven McConnell
Paul Gregory McGauley
Heather Rosemary Milne
Simon Craddock Nickson
Jacqueline Kaye Otten
Barbra Kate Parker
Tina Lee Parkinson
Nicholas John Pausina
Arran Neville Bryan Pearson
Richard Cameron Penman
Robyn Louise Phillips
David James Plant
Daryn Paul Radford
Andrew Duncan Reid
Mark Laurence Rewi
Tony Leigh Richardson
Serin Elizabeth Robertson
David Brian Roger
Steven John Rowland
Elizabeth Anne Ryan
Craig Harris Simpson
David Hugh Skinner
Benjamin John Sleeman
Brian Laurence Smith
Christopher John Smith
David Campbell Smith
Brett Raymond Sonter
Jay Davidson Spence
Matthew Joseph Stilwell
Michael Richard Summers
Khanchai Suwansaila
Teo Cheng Hai
Frank Ronald Teunissen
Kelly Anne Tranter
Scott Andrew Tully
Katrina Joy Tunley
Sally Jane Wagland
Gene Victor Walker
Jason Michael West
Neil Robert Williams
Chin Han Wong
Larissa Renee Zimmerman

Honours Class 3

GEOGRAPHY

Andrew Donald Caudle

OCEANOGRAPHY

Arnnathea Collie

Honours Class 2 Division 2

INFORMATION SYSTEMS

Wayne William Hoban
Bernard Aidan Richards

OCEANOGRAPHY

Mitchell Craig Kent
Adrian Bruce McCallum
Fiona Louise Thorburn

Honours Class 2 Division 1

GEOGRAPHY

Benjamin Gene Butson
Trevor Warren Thatcher
Robert Jason Worswick

INFORMATION SYSTEMS

Peter David Komorowski

Honours Class 1

CHEMISTRY

Trevor Alan Watt

BACHELOR OF ENGINEERING BE

CIVIL ENGINEERING

Andrew Paul Bare
Bradley Stephen Wells
Brett Arthur Yallop
Matthew Scott Yourell

Honours Class 2 Division 2

Kelly Ross Banks
Noel Frederick Beutel
Sheldon Lee Krahe

Honours Class 2 Division 1

Mark Steven Blake
Glen Frazer Heyward
Alistair Robert McClusky
Gregory Philip Whalen

Honours Class 1

Jason Yves Markham

ELECTRICAL ENGINEERING

Andrew John Cardwell
Jeffrey Ian Goodall
Bradley John Hards
Martin John Huet
Darren John Hughes
Gregory Allen Laxton
Timothy Robert Long
Paul David Soper
Michael Joseph Turner

Honours Class 2 Division 2

Craig Richard Benson
Amy Hetherington
Pierre Semaan

Honours Class 2 Division 1

Gary Robert Stewart

Honours Class 1

John Paul Davies
Darren Rene Spee

MECHANICAL ENGINEERING

Honours Class 1

Katherine Anne Reid Bayliss

MARITIME ENGINEERING

Honours Class 2 Division 2

Rupert John Cardew Hoskin

Honours Class 2 Division 1

Stephen John Gliddon
Stuart Gabell Lymn

GRADUATE DIPLOMA GradDip

ELECTRICAL ENGINEERING

Mark Andrew Gontar

TECHNOLOGY MANAGEMENT

Rodney Wayne Gooding, BA *C.I.A.E.*

Kai Shun Li, BSc (Eng) *H.K.*, PhD

MASTER OF ENGINEERING SCIENCE MEngSc

CIVIL ENGINEERING

Allan Glenn Darnley-Stuart, BE

Johnathon Ronald Delaney, BSc *Macq.*

Lindsay Stewart Evans, BE

Richard James Fechner, BE

Stephen John Fester, BE *N.S.W.I.T.*

Vincent Brian Hyam, BE

Robert Frank Moore, BA MSc *Macq.*

Robert Risson, ARMIT

ELECTRICAL ENGINEERING

Peter Michael J Adams, BE *Q.I.T.*

Vasantha Pushpa Kumara Banagala, BSc (Eng) *Perad'ya*

Thomas Darliston Davies, BE

Andrew Graham Dempster, BE

Gregory Neville Milford, BE *Qld.*

David Alan Richardson, BEng *D.D.I.A.E.*

MASTER OF INFORMATION SCIENCE MInfSc

Christopher John Dowd, BSc

Kenneth George Fairs, BE *Leeds*

Richard John Fullford, BE BSc

Henry Richard John Gregory, BA Computing Studies *Canberra C.A.E.*

Hong Xing He, BSc *Peking*, PhD *Mich.*

Shih Yeh Yeow, BCS *Acad.*

MASTER OF SCIENCE MSc

COMPUTER SCIENCE

Ian Andrew French, BA *Canberra C.A.E.*, GDipSc *ANU*

MASTER OF ENGINEERING ME

ELECTRICAL ENGINEERING

Mark Richard Pickering, BE *C.I.A.E.*

DOCTOR OF PHILOSOPHY PhD

CIVIL ENGINEERING

Shao Qing Li, BSc (Eng) *Zhejiang*

Thesis: Coupled Finite Element Analysis of Reinforced Embankments on Soft Clay

COMPUTER SCIENCE

Michael Glynn Barlow, BMath *W'gong*

Thesis: Prosodic Acoustic Correlates of Speaker Characteristics

Leisa Elizabeth Condie, BSc *Syd*

Thesis: Speech Signal Analysis and Investigations in Cryptography

Xian-Mo Zhang, MSc *Nankai*

Thesis: Constructing Orthogonal Matrices and Some Cryptographic Techniques

Weiping Zhu, BE *Hunan*, ME *C.U.M.T.*

Thesis: The Development of an Environment to Study Load Balancing Algorithms, Process Migration and Load Data Collection

ELECTRICAL ENGINEERING

Christopher John Hollier, BE, MEngSc

Thesis: Robust Video Data Compression Using Subband Decomposition

MATHEMATICS

Rainer Ignatik, MSc *Monash*

Thesis: Asymptotic Representation of Transient Electromagnetic Fields in Geophysical Prospecting

Neil Richard Viney, BSc *Tas*

Thesis: Modelling Fine Fuel Moisture Content

PHYSICS

Huang Xu, MS PhD *H.U.S.T.*

Thesis: A Search for Nuclear Super-Radiance

LiamEdwin Waldron, BSc *ANU*

Thesis: A Search for High-Energy Gamma-Rays from Supernova SN1987A

Zongnan Ye, BSc *ANU*

Thesis: An Ultra-High Pressure Proportional Counter for Hard X-Ray Astronomy

THE UNIVERSITY OF NEW SOUTH WALES

VICE-CHANCELLOR'S AWARD FOR TEACHING EXCELLENCE

These awards were established in 1989 to encourage and reward excellence in teaching by individual members of staff.

MICHAEL CHARLES CAVENOR, BSc *Aston*, PhD *N.E.*, MIEEE, MIEAust, for his superior ability to communicate with the students, and his enthusiasm for teaching, particularly in laboratory-based tuition at all levels of education including continuing education short-courses in Australia and Southeast Asia.

ACADEMIC PRIZES AWARDED 1992

BOARDS OF STUDIES PRIZES

HUMANITIES AND SOCIAL SCIENCES

First Year:	Nerolie Irene McDonald
Second Year:	Gavin Michael Keating
Third Year:	Seow Aik Desmond Chong

SCIENCE

First Year:	Michael Mastus
Second Year:	Grant Coleman
Third Year:	Chin Han Wong

ENGINEERING

First Year: (shared)	Niall Geoffrey Pigott Leonard Putu Hendrik Rouwhorst
Second Year: (shared)	Lin Pue Ang Ian Michael Brace
Third Year:	Robert James Green

DONATED PRIZES

The E R Bryan Prize (English):
Stephen Michael Ramm

The Alan Carter Prize (Oceanography 1):
Kelly Amanda Gray

The Sir Leslie Martin Prize (First Year Physics) (shared):
Michael Mastus
Niall Geoffrey Pigott

The Rockwell Electronics Award (Electrical Engineering 1):
Troy Bruce Denley

The Royal Australian Chemical Institute Prize:
Lee Anton Drury

The Australian Institute of Physics Prize (Second Year Physics) (shared):
Ian Michael Brace
Adrian Jon Brown

The Second Year Computer Science Prize:
Glenn Peter Bruhn

The Second Year Information Systems Prize, donated by the Australian Computer Society:

Stephen Dickfos

The Royal Aeronautical Society Canberra Branch Prize (Second Year Aeronautical Engineering):

Lin Pue Ang

The Professor Grahame Johnston Prize (Australian Literature):

Gavin Michael Keating

The Dorothy Green Prize (Australian Literature):

Jonathon Mark Durden

The Barry Andrews Shakespeare Prize:

Scott Alexander Winter

The Computer Science Project Prize, donated by Aspect Computing (shared):

Andrew John Dobson

Alistair James Green

Cheng Hai Teo

The Information Systems Project Prize, donated by Aspect Computing (shared):

Stephen Jeffrey Hogden

Frank Ronald Teunissen

The L C F Turner Prize (History):

Stuart James Hill

The Science Prize, donated by British Aerospace Australia:

Chin Han Wong

The R J A Barnard Memorial Prize (Three Years of Mathematics):

Chin Han Wong

The Institution of Engineers, Australia, College of Electrical Engineers' Prize (Third Year Electrical Engineering):

Ian Gregory Johnston

The Institution of Radio and Electronic Engineers Australia (Canberra Division) Prize:

Darren Rene Spee

The Wing Commander John Yeaman Prize (Transportation Engineering) (shared):

Mark Steven Blake

Jason Yves Markham

The Siemens-Plessey Award in Electrical Engineering (Communications and Electronics):

John Paul Davies

The A H Corbett Prize (Top Graduate in Engineering):

Jason Yves Markham

ACADEMIC DEPARTMENT PRIZES

Chemistry

First Year:

Michael Mastus

Second Year:

Glenn Peter Bruhn

Fourth Year (Head of
Department Prize):

Trevor Alan Watt

Civil Engineering

Fourth Year:

Jason Yves Markham

Computer Science

Third Year Computer Science:

Robyn Louise Phillips

Third Year Information Systems:

Danielle Maree Hethorn

Economics and Management

First Year:

Nerolie Irene McDonald

Third Year Economics:

Seow Aik Desmond Chong

Third Year Management:

Alex Loo Pak Hong

English

Third Year:

Elizabeth Grace Boulton

Geography and Oceanography

Third Year Geography:

Donna Maree Douglass

Third Year Oceanography:

Stephen Dickfos

History

Third Year (C.E.W. Bean Prize)
(shared):

Stefan John Michie

Tane Hohepa Woodley

Mathematics

First Year:

Michael Mastus

Second Year (shared):

Grant Coleman

Gregory John Lawson

Mechanical Engineering

Second Year (shared):

Dominic Barton

Peter Andrew Williams

Third Year

Robert James Green

Fourth Year:

Katherine Anne Reid Bayliss

Physics

Third Year:

Glenn Carlton Croft

Politics

Second Year:

Gavin Michael Keating

Third Year:

Andrew Llewellyn Rees

GRADUATE PRIZES

The Australian Institute of Project
Management Prize:

Richard James Fechner

The Defence Studies Prize (shared):

John Damian McKinlay
Kumar Ramakrishna

The Ria de Groot Prize (shared):

Thea Lesley Fisher
Xiao Tang Wu