Section 2 Contents

AINSE Council
Executive Committee
AINSE Staff and Consultants
Specialist Committees
Conference Planning Committees6
Financial Statements
AINSE Postgraduate Research Awards19
Summary of AINSE Grants21
Summary of Experiments at ISIS
ISIS Recent Publications39
Publications
Performance Indicators for AINSE76
University Codes80
Specialist Committee Codes

A INSE Council Member Organisations and Representation Two Council Meetings were held in 2000

	Membership Commenced	Councillor	Meetings Attended
ANSTO	1958	Professor Helen Garnett	2
ANSTO, Environment		Professor Ann Henderson-Sellers	2
ANSTO, Materials		Dr Adam Jostsons	2
ANSTO, Nuclear Technology		Mr Ken Horlock	0
ANSTO, Physics		Dr Brian Spies	2
ANSTO, Radiopharmaceuticals		Dr Stuart Carr	2
The University of Queensland	1958	Professor Ken Collerson	0
The University of New England	1958	Professor Brian Stoddart	0
The University of Sydney	1958	Professor Len Lindoy	2
The University of New South Wales	1958	Professor Hans Coster	2
The Australian National University	1958	Professor John White	1
The University of Melbourne	1958	A/Professor Ron Cooper	_
The only of neadoune	2/50	Vice President	2
University of Tasmania	1958	Professor Garth Paltridge	0
University of Tasmania	1958	Professor Allan Canty	1
The University of Adelaide	1958	A/Professor Gerald Laurence	2
The University of Western Australia	1958	Professor Brian Stone	1
Monash University	1961	Dr Trevor Hicks	2
The University of Newcastle	1965	Professor Ron MacDonald, President	
Flinders University of SA	1966	Professor Peter Teubner	2
La Trobe University	1966	Professor Paul Pigram	2
Macquarie University	1966	Professor Peter Bergquist	1
James Cook University	1970	Professor Richard Keene	1
University of Wollongong	1975	A/Professor Anatoly Rozenfeld	2
Griffith University	1975	A/Professor Evan Gray	1
Murdoch University	1985-1997	N/1101C5501 Evall Gray	1
Muldoch Oniversity	rejoined 1998	A/Professor Stephen Thurgate	1
University of Technology, Sydney	1988	Professor Evan Leitch	2
Royal Melbourne Institute of	1700	1 Tolessor Evall Echell	2
Technology University	1988	Professor Dinesh Sood	1
Curtin University of Technology	1989	Professor Brian O'Connor	1
Central Queensland University	1989		
University of South Australia	1991	A/Professor Graham Pegg Professor Roger Smart	1
		Dr Eddie Bakshi	2
Swinburne University of Technology	1991	Dr Riaz Akber	0 2
Queensland University of Technology	1992		2
University of Western Sydney	1993	Dr Robyn Crumbie	
Victoria University	1994	Professor Vaughan Beck	0
Southern Cross University	1994	A/Professor Bill Boyd	1
The University of Auckland	1995	Professor Ralph Cooney	0
Charles Sturt University	1995	A/Professor Kevin Robards	0
Northern Territory University (non-voting	_	A/Professor Charles Webb	0
Edith Cowan University	1996	Professor Patrick Garnett	0
University of Canberra	1996	A/Professor Andrew Cheetham	1
The University of Southern Queensland		Duefeers Malasla M. W.	0
(non-voting)	1996	Professor Malcolm McKay	0
Deakin University	1997	Professor Pip Hamilton	0
University of Ballarat	1997	Mr Stafford McKnight	0
Secretary to Council (non-voting)		Dr Dennis Mather, AINSE	2

Organisation	Councillor	Meetings Attended
Invited to attend Council Meetings		
ANSTO, International Facilities (non voting)	Professor John Boldeman	1
University of Wollongong (C2/00)	Professor Allan Chivas	1
Alternate Representatives		
The University of Auckland	Dr Robert Anderson	1
The University of Auckland	A/Professor James Metson	1
Edith Cowan University	Dr Steven Hinckley	1
Edith Cowan University	Dr Geoffrey Swan	1
James Cook University	Dr Rob Robson	1
The University of New England	Dr Matthew Fewell	2
The University of Queensland	Dr Ian Gentle	1
Charles Sturt University	Dr Michael Antolovich	2
Macquarie University	Professor Trevor Tansley	1
Murdoch University	Dr Rolf Koch	1
University of Tasmania	Dr Andrew McMinn	1
Curtin University of Technology	Dr Arie van Riessen	1
Northern Territory University	Dr David Parry	1
Royal Melbourne Institute of Technology	Dr Liam Ward	1
Swinburne University of Technology	Dr Peter Alabaster	1
Victoria University of Technology	Dr Leo Cussen	1
University of Western Australia	Dr Terry Quickenden	1

Executive Committee

(4 Executive Meetings held in 2000)

Councillor	Office/Position	Organisation	Meetings Attended
Professor Ron MacDonald	President	The University of Newcastle	4
A/Professor Ron Cooper	Vice – President	The University of Melbourne	4
Professor Hans Coster		The University of New South Wales	4
Dr Brian Spies		ANSTO	3
Professor Ann Henderson-Sellers	S	ANSTO	4
Professor Helen Garnett		ANSTO	1
Dr Dennis Mather		AINSE	4
Invited to attend Execu	tive		
Professor Ken Collerson (E2/00)		University of Queensland	1
Dr Robert Robinson (E3/00)		ANSTO (alternate Professor Garnett)	1
Professor Garth Paltridge (E3/00)	University of Tasmania	0

A INSE Staff

Scientific Secretary Dr Dennis Mather

Secretariat Mrs Irene Parker

Mrs Nerissa Phillips

Miss Melissa Farlow (to October) Miss Tanya Irvine (from November) Mrs Sandy O'Connor (part-time)

Specialist Committees for 2000

The Scientific Secretary, AINSE, is an ex-officio (non-voting) member of all Committees

Accelerator Science Specialist Co	ommittee	Meetings Attended
Professor Dinesh Sood, Convenor	Royal Melbourne Institute of Technology	2
A/Professor Peter Johnston (a)	Royal Melbourne Institute of Technology	0
Dr Rob Elliman	The Australian National University	2
Professor George Dracoulis	The Australian National University	0
Dr Brian Spies	Director, Physics, ANSTO (ex officio)	1
Dr David Cohen	Physics Division, ANSTO	2
Dr John Boldeman	Director, ASRP Facility, ANSTO	1
Dr Rainer Siegele (a)	Physics, ANSTO	1
Dr Peter Grave	University of New England	1
Mr Les Simons	Business Manager, Physics, ANSTO	1
Accelerator Mass Spectrometry	Specialist Committee	
Professor Allan Chivas, Convenor	University of Wollongong	2
Professor Eric Colhoun	The University of Newcastle	0
Dr Ian Goodwin (a)	The University of Newcastle	1
Professor Ken Collerson	The University of Queensland	1
Dr Brian Spies	Director, Physics Division, ANSTO (ex officio)	1
Dr Ewan Lawson	Physics Division, ANSTO	2
Mr Les Simons	Business Manager, Physics, ANSTO	2
AMS Advisory Group		
Professor John Dodson	The University of Western Australia	0
Professor Dan Potts	The University of Sydney	0
Dr Karl Heinz-Wyrwoll	The University of Western Australia	0
Dr Ian Davidson	The University of New England	0
Dr Bill Budd	University of Tasmania	0
Dr Peter Nixon	The University of Queensland	0
Dr Mike Barbetti	The University of Sydney	1
Dr David Fink	Physics Division, ANSTO	2
Dr Bert Roberts	La Trobe University	0
Mr John Head	The Australian National University	0
Dr Alan Watchman	James Cook University	0
Dr Glenn Summerhayes Dr Peter Bellwood	The Australian National University The Australian National University	0
	·	V
•	Irradiation Specialist Committee	2
Professor Leon Kane-Maguire, Convenor	University of Wollongong The University of Melbourne	2
Dr Roger Martin	· · · · · · · · · · · · · · · · · · ·	2
Professor Ian McDougall Dr Andrew Katsifis	The Australian National University Radiopharmaceuticals, ANSTO	2 1
Mr Ken Suter	ARI, ANSTO	2
Dr Stuart Carr	Director, Radiopharmaceuticals, ANSTO	2
Dr Bill Burch	Radiopharmaceuticals, ANSTO	2
Dr Patrick Butler	St George Hospital	1
		1
	Technology Specialist Committee	2
Professor Roger Smart, Convenor	University of South Australia	2
Professor Brian Stone	The University of Western Australia	2
Professor Barry Muddle	Monash University	1
Dr Adam Jostsons	Director, Materials Division, ANSTO (ex officio)	1
Dr Kaye Hart (a)	Materials Division, ANSTO	1
Mr Ken Horlock	Director, Nuclear Technology, ANSTO (ex officio) 1

Dr Matthew Fewell (a)	University of New England	1
Mr John Blackley	Business Manager, Materials, ANSTO	1
Dr John Bartlett	Materials Division, ANSTO	0
Engineering, Materials & Nuclear	r Technology Advisory Group	
Dr Dan Perera	Materials Division, ANSTO	2
Environmental Science Specialist	t Committee	
A/Professor Gerald Laurence, Convenor	The University of Adelaide	1
A/Professor Rod Buckney	University of Technology, Sydney	1
Dr Andrew McMinn	University of Tasmania	2
Professor Ann Henderson-Sellers	Director, Environment Division, ANSTO (ex officio)	2 2
Dr David Garnett	Becquerel Laboratories (ex officio)	
Dr Riaz Akber	Queensland University of Technology	1
Dr Bill Maher (a)	University of Canberra	0
Ms Janelle Jenkins Dr Ross Jeffree (a)	Business Manager, Environment Division, ANSTO Environment Division, ANSTO	1 2
Environmental Science Advisory Group	,,	
Dr Kathryn Prince	Environment Division, ANSTO	2
Dr Henk Heijnis	Environment Division, ANSTO	1
Dr David Cohen	Physics Division, ANSTO	1
Neutron Scattering Specialist Co	mmittee	
A/Professor Evan Gray, Convenor	Griffith University	1
Professor Brian O'Connor	Curtin University	2
Professor John White	The Australian National University	0
Dr Robert Robinson	Neutron Scattering Division, ANSTO (ex officio)	1
Dr Margaret Elcombe	Physics Division, ANSTO	2
Dr Brendan Kennedy	The University of Sydney	2 1
Dr Brian Spies Mr Les Simons	Director, Physics Division, ANSTO (ex officio) Business Manager, Physics Division, ANSTO	1
Dr Shane Kennedy (a)	Physics Division, ANSTO	1
Dr Philip Reynolds (a)	The Australian National University	1
Plasma Fusion Specialist Commi	ttee	
A/Professor Andrew Cheetham, Convenor	University of Canberra	2
Professor Robin Storer	Flinders University	1
A/Professor Rod Cross	University of Sydney	0
Professor Jeffrey Harris	Australian National University	1
Dr John Howard (a)	Australian National University	0
Dr Xuehua Shi (a) A/Professor Brian James (a)	Central Queensland University University of Sydney	0 1
•		1
Radiation Science Specialist Con		2
A/Professor Ron Cooper, Convenor Mr David Sangster	University of Melbourne AINSE (Honorary Fellow)	2 2
A/Professor David Hill	The University of Queensland	1
Dr Brian Spies	Director, Physics Division, ANSTO (ex officio)	1
Dr Bob Anderson	The University of Auckland	1
Dr Dimitri Alexiev	Physics Division, ANSTO	0
Mr Les Simons	Business Manager, Physics, ANSTO	1
Radiation Advisory Group		_
Dr David Webb	Australian Radiation Laboratory	0
Mr Gavin Gant	Physics Division, ANSTO	2
A/Professor Jan Gebicki A/Professor Doug Moore	Macquarie University The University of Sydney	0
Dr Roger Martin	The University of Sydney The University of Melbourne	0
Di Rogei manni	The otherony of Melbourne	U

Conference Planning Committees

2nd AINSE Symposium on Neutron Scattering Powder Diffraction - June 2000

A/Professor Evan Gray Griffith University

Professor Brian O'Connor Curtin University of Technology

Dr Erich Kisi University of Newcastle

Dr Brett Hunter ANSTO
Dr Shane Kennedy ANSTO
Dr Andrew Studer ANSTO
Dr Dennis Mather AINSE
Mrs Irene Parker AINSE

Neutron Scattering Workshop- October 2000

Dr Brett Hunter ANSTO
Dr Shane Kennedy ANSTO
Dr Robert Robinson ANSTO
Dr Dennis Mather AINSE
Mrs Irene Parker AINSE

Bio/SIMS Workshop - November 2000

Dr Ross Jeffree ANSTO
Dr Kathryn Prince ANSTO

Dr Richard Lim University of Technology Sydney

Dr Dennis Mather AINSE
Mrs Irene Parker AINSE

Radiation 2000 - November 2000

A/Professor Ron Cooper, Conference Chairman

Mr David Sangster

Professor Robert Gilbert

A/Professor David Hill

The University of Melbourne
The University of Sydney
The University of Sydney
The University of Queensland

A/Professor Jan Gebicki Macquarie University

Dr Dennis Mather AINSE
Mrs Irene Parker AINSE

Plasma 2000 - December 2000

A/Professor Andrew Cheetham, Conference Chairman

A/Professor Brian James

University of Canberra

The University of Sydney

Professor Jeff Harris The Australian National University

Professor Robin Storer Flinders University

A/Professor Gerald Woolsey University of New England

Dr Dennis Mather AINSE
Mrs Irene Parker AINSE

18th Nuclear and Particle Physics Conference - December 2000

Dr Andrew Stuchbery, Conference Chairman

A/Professor Laurie Peak

A/Professor Anthony Williams

Dr Stuart Tovey

The University of Adelaide

The University of Melbourne

Professor George Proceeding

The Australian National University

The Australian National University

Professor George Dracoulis

The Australian National University
Dr Brian Robson

The Australian National University

Dr John Boldeman ANSTO
Dr Dennis Mather AINSE
Mrs Irene Parker AINSE

Environment Conference - September 2001

A/Professor Gerald Laurence, Conference Chairman

The University of Adelaide

The University of Sydney

Dr Richard Lowson

ANSTO

Professor John Morrison University of Wollongong

Dr Dennis Mather AINSE
Mrs Irene Parker AINSE

International Congress of Radiation Research 2003 Conference - August 2003

Professor Lester Peters, Conference President Peter McCallum Cancer Institute

Professor Martin Lavin, Chair International Program Committee Queensland Institute of Medical Research

Dr Roger Martin, Secretary General Peter McCallum Cancer Institute

Dr Dennis Mather, Treasurer A

A/Professor Ron Cooper The University of Melbourne Dr Graeme Dickie Queensland Radium Institute

Dr Suzanne Smith
ANSTO
Mrs Nola Miles-Clark
ICMS

Financial Statements as at 31 December 2000

Auditors' Report

To the Members of the Australian Institute of Nuclear Science and Engineering Incorporated

Scope

We have audited the attached special purpose financial report of the Institute for the financial year ended 31 December, 2000 as set out on schedules 1 to 10. The Institute's Executive Committee is responsible for the preparation and presentation of the financial report and the information contained therein, and have determined that the basis of accounting used is appropriate to the needs of the members. We have conducted an independent audit of the financial report in order to express an opinion to the members of the Institute on its preparation and presentation. No opinion is expressed as to whether the basis of accounting used is appropriate to the needs of the members.

The financial report has been prepared for distribution to members for the purpose of fulfilling the Executive committee's accountability requirements under the Institute's constitution. We disclaim any assumption of responsibility for any reliance on this report or on the financial report to which it relates to any person other than the members, or for any purpose other than that for which it was prepared.

Our audit has been conducted in accordance with Australian Auditing Standards. Our procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial report and significant accounting estimates. These procedures have been undertaken to form an opinion as to whether, in all material respects, the financial report is presented fairly in accordance with the basis of accounting described in Note 1 to the Financial Statements. (These policies do not require the application of all Accounting Standards and UIG Consensus Views).

The audit opinion expressed in this report has been formed on the above basis.

Audit Opinion

In our opinion the financial report presents fairly, in accordance with Accounting policies described in note 1 to the financial statements, as well as the provisions of the Associations Incorporation Act 1984, the financial position of the Institute, as at 31 December, 2000 and the results of its operations and cash flows for the year then ended.

Gardner Escott & Co Chartered Accountants

P R Escott

Partner

Sydney, dated this

28 TH

day, of FEBRUARY

2001

Australian Institute of Nuclear Science and Engineering Executive Committees Report

The Executive Committee of the Australian Institute of Nuclear Science and Engineering Incorporated submits the financial accounts of the Institute for the financial year ended 31 December 2000

Committee Members

Professor Ron McDonald, President
Assoc. Professor Ron Cooper, Vice President
Professor Hans Coster
Professor Helen Garnett
Dr Brian Spies
Professor Ann Henderson-Sellers
Dr Dennis Mather, Scientific Secretary

Principal Activities

The Principal activities of the Institute during the financial year were

- To carry out research and investigations in connection with matters associated with nuclear science and engineering;
- To arrange for the training of scientific research workers and the establishment and award of scientific research studentships in matters associated with nuclear science and engineering;
- To collect and distribute information relating to nuclear science and engineering.

Significant Changes

No significant change in the nature of these activities occurred during the year.

Operating Result

The surplus for the year amounted to \$337,022.00.

Serms Mather

Signed in accordance with a resolution of the Members of the Committee.

Dr Dennis Mather

Public Officer & Scientific Secretary

Dated this 23711 day of February

2001.

THE AUSTRALIAN INSTITUTE OF NUCLEAR SCIENCE AND ENGINEERING INCORPORATED BALANCE SHEET AS AT 31 DECEMBER 2000

		31 Dec 2000	31 Dec 1999
	Notes	\$	\$
Current Assets			
Cash (Refer schedule of committed cash in note 2)	2	54,564	389,846
Receivables	3	1,107,246	2,081
Investments	4	4,890,141	3,102,895
Other	5	45,697	52,605
Total Current Assets		6,097,648	3,547,427
Non-Current Assets			
Plant and Equipment	6	45,626	61,638
Total Non-Current Assets		45,626	61,638
Total Assets		6,143,274	3,609,065
Current Liabilities			
Creditors	7	817,546	472,214
External Grants Received in Advance	8	2,178,498	329,419
Membership Subscriptions Received in Advance		-	-
Provisions for Employee Entitlements	9	13,701	15,058
Total Current Liabilities		3,009,745	816,691
Non-Current Liabilities			
Provisions for Employee Entitlements	9	21,005	16,872
Total Non-Current Liabilities		21,005	16,872
Total Liabilities		3,030,750	833,563
NET ASSETS		3,112,524	2,775,502
Equity			
Grants Reserve	15	2,744,719	2,061,174
Long Term Projects Reserve		500,000	500,000
Accumulated results of operations		(132,195)	214,328
TOTAL EQUITY		3,112,524	2,775,502

THE AUSTRALIAN INSTITUTE OF NUCLEAR SCIENCE AND ENGINEERING INCORPORATED INCOME AND EXPENDITURE STATEMENT FOR THE PERIOD ENDED 31 DECEMBER 2000

31 Dec 2000	31 Dec 1999
\$	\$
175,572	171,059
26,185	26,323
	252,666
	957,601
	46,043
	568,285
178,196	203,457
2,389,825	2,225,434
1,876,077	1,795,700
· · · · · · · · · · · · · · · · · · ·	521,666
· · · · · · · · · · · · · · · · · · ·	153,886
, -	4,442
17,769	43,396
_ 2,726,847	2,519,090
337,022	293,656
214,328	521,665
551,350	815,321
683,545	600,993
year (132,195)	214,328
	\$ 175,572 26,185 357,020 977,326 57,234 618,292 178,196 2,389,825 1,876,077 585,691 247,310

THE AUSTRALIAN INSTITUTE OF NUCLEAR SCIENCE AND ENGINEERING INCORPORATED STATEMENT OF CASH FLOWS FOR THE PERIOD ENDED 31 DECEMBER 2000

		31 Dec 2000	31 Dec 1999
		\$	\$
No	tes	Inflows/	Inflows/
		(Outflows)	(Outflows)
CASH FLOWS PROVIDED BY (USED IN) OPERATING	ACTIVITIES		
Inflows:			
Receipts from members		788,681	1,852,981
Receipts from grants		2,434,770	618,729
Interest received		253,803	118,130
		3,477,254	2,589,840
Outflows:			
Grant expenditures		(1,659,872)	(1,474,595)
Payments to suppliers and employees		(360,716)	(613,305)
		(2,020,588)	(2,087,900)
Net cash flows provided by (used in)			
operating activities 16		1,456,666	501,940
CASH FLOWS PROVIDED BY (USED IN) INVESTING	ACTIVITIES		
Outflows:			
Plant and equipment		(4,702)	(27,667)
Net cash flows provided by (used in) investing	activities	(4,702)	(27,667)
Net increase in cash held		1,451,964	474,273
Cash at beginning of reporting period as at 31/12/99*		* 3,492,741	3,018,468
Cash at end of reporting period		4,944,705	3,492,741

For the purposes of the Statement Of Cashflows, the cash balance as at 31 December 2000 comprises Cash-Operating, Money Market and Other Deposits. A reconciliation of cash at the end of the reporting period to the Balance Sheet is set out as follows:

Balance Sheet	Cash	54,564	389,846
	Investment	4,890,141	3,102,895
Cash Flow Statement		4,944,705	3,492,741

THE AUSTRALIAN INSTITUTE OF NUCLEAR SCIENCE AND ENGINEERING INCORPORATED NOTES TO AND FORMING PART OF THE ACCOUNTS

1. Statement of accounting policies

(a) Basis of accounting

These financial statements are a special purpose financial report prepared in order to provide accounts which satisfy the requirements of the Institute's constitution and the Associations Incorporation Act NSW to prepare accounts. The Executive Committee has determined that the Institute is not a reporting entity and therefore, as there is no requirement to apply Accounting Standards and other mandatory professional reporting requirements (Urgent Issues Group Consensus Views) in the preparation and presentation of these statements, they have been adopted only to the extent shown in Note 1 to the accounts.

The statements have been prepared in accordance with the requirements of the Associations Incorporation Act. The statements are prepared on an accrual basis of accounting. They are based on historic costs and do not take into account changing money values, or except where specifically stated, current valuations of non-current assets.

The Executive Committee has, however prepared the financial report in accordance with all Australian Accounting Standards with the following exceptions:

- AAS1 Profit and Loss or other operating statements
- AAS22 Related party disclosures
- AAS30 Accounting for employee entitlements

The accounting policies have been consistently applied, unless otherwise stated. The following is a summary of the significant accounting policies adopted by the Institute in the preparation of the financial statements.

(b) Depreciation of property, plant and equipment

Property, plant and equipment are stated at cost and depreciated over their useful lives using the straight line method.

(c) Employee Entitlements

Recreation Leave and Long Service Leave entitlements are provided for annually.

(d) Inventories

As at 31 December 2000 AINSE did not hold any inventory.

(e) Membership subscriptions

Membership subscriptions are paid to the Institute by its members.

(f) Grants

All grant monies received have been treated as a balance sheet item under the heading of 'External Grants Received In Advance'. As money is expended on the grants the equivalent amount of expenditure is drawn down from the balance sheet to grants income.

	NI 4	31 Dec 2000	31 Dec 1999
	Notes	\$	\$
2. CASH		54,064	389,346
Petty Cash		500	500
		54,564	389,846
Commitments for Expenditure			
Tandem		2,899,652	
ISIS		25,000	
Trade Creditors		817,546	
Grants and Studentships Awarded in 2000			
for payment in 2001	Note 1	2,095,702	
		5,837,900	

Note A

Invoices for membership fees are raised in January and payment is subsequently received over the first three quarters. Grant reserve was established in line with advice from the auditors. Accordingly, funds received from membership fees in 2000 are used for grants and studentships during 2001.

Note B Existing studentships at 31 December 2000 and committed for years 2002 and 2003 amount to \$497,894.

3. RECEIVABLES		
Trade Debtors	1,044,067	2,081
Grant Receivables	-	-
Other Receivables	63,179	-
	1,107,246	2,081
4. INVESTMENTS		
Cash Deposit Account	3,831,141	1,102,895
Term Deposit Account	1,059,000	2,000,000
	4,890,141	3,102,895
5. OTHER CURRENT ASSETS		
Prepayments	3,586	4,001
Interest Accrued	42,111	48,604
	45,697	52,605
6. PLANT AND EQUIPMENT		
Plant & Machinery		
Costs	92,265	64,318
Additions/(Disposals)	-	23,245
Accumulated Depreciation	65,066	49,166
Closing Written Down Value	27,200	38,397
Motor Vehicles		
Costs	24,072	21,734
Additions/(Disposals)	-	2,338
Accumulated Depreciation	5,645	831
Closing Written Down Value	18,427	23,241
Total	45,626	61,638

	31 Dec 2000	31 Dec 1999
	\$	\$
7. CREDITORS		
Accruals	770,385	472,214
GST Collected on Inputs	47,161	., ,
1	817,546	472,214
3. EXTERNAL GRANTS RECEIVED IN ADVANCE		
AINSE ARC AMS Grant '98 - UWA	-	20,551
AINSE ARC AMS Grant '95 - UNSW	-	,
AINSE ARC AMS Grant '96 - UWA	-	
AINSE ARC N/S Grant '96	0	
AINSE ARC N/S Grant '98	-	65,139
AINSE ARC SIMS Grant '96	-	
AINSE ARC FUSION Grant '96	-	
AINSE ARC N/S Grant '99	113,729	243,729
AINSE ISIS Grant		
AINSE Grant ARC Tandem	2,064,769	
	2,178,498	329,419
O. PROVISIONS FOR EMPLOYEE ENTITLEMENTS		
Current		
Recreation Leave	13,701	15,058
Non-Current		
ong Service Leave	21,005	16,872
	34,706	31,930
10. AINSE AWARDS		
AINSE AWARDS - Students		
ucas Heights Costs	140,382	100,536
University Travel and Equipment	15,438	14,680
Stipends	191,250	123,750
Ainse Winter School	9,950	13,700
	357,020	252,666
AINSE AWARDS - Grants		
ucas Heights Costs	825,921	847,260
Minor Equipment and Materials	3,560	18,463
Travel and Accommodation	94,654	91,834
University Costs Other Costs	53,191	45
	977,326	957,602

11. SEGMENT REPORTING

The Institute operates in the research sector providing funds for research to members within Australia and New Zealand.

	31 Dec 2000 \$	31 Dec 1999
		\$
2. EXTERNAL GRANTS	4	
INSE ARC AMS grant '95 - UNSW		
Grant Revenue	-	4,020
Grant Expenditure External Payments	_	4,020
otal Expenditure		4,020
INSE ARC AMS Grant '96 - UWA Grant Revenue	-	1,701
Grant Expenditure		
External Payments		1,701
otal Expenditure	-	1,701
INSE ARC AMS Grant '97 - UWA Grant Revenue		-
Grant Expenditure		
external Payments	-	3,615
University Travel and Accommodation Contract Labour/Consultancies	- -	708
otal Expenditure		4,323
INSE AMS Grant '98 - UWA		
Grant Revenue	20,551	26,899
Grant Expenditure		-/
xternal Payments otal Expenditure	23,153 23,153	26,899 26,899
UNSE ARC N/S Grant '96 Grant Revenue	130,000	21,947
Grant Expenditure		
quipment and Materials	130,000	13,408
Contract Labour/Consultancies Cotal Expenditure	130,000	8,539 21,947
AINSE ARC SIMS Grant '96 Grant Revenue		7,238
Grant Expenditure		
quipment and Materials Contract Labour/Consultancies	-	2/, 510
ontract Labour/Consultancies otal Expenditure		24,519 24,519

	31 Dec 2000	31 Dec 1999
	\$	\$
12. EXTERNAL GRANTS		
AINSE ARC ISIS Grant	370.001	375,000
Grant Revenue	370,001	375,000
Grant Expenditure		
External Payments	400,000	400,015
Total Expenditure	400,000	400,015
AINSE N/S Grant '98		
Grant Revenue	65,139	84,861
Grant Expenditure		
External Payments	-	-
Equipment and Materials	65,139	30,660
Contract Labour/Consultancies		54,201
Total Expenditure	65,139	84,861
Grants - ARC Tandem		
Grant Revenue		
Grant Expenditure		
External Payments	-	-
Equipment and Materials	-	-
Contract Labour/Consultancies		
Total Expenditure		
Reconciliation		
Total External Grants Revenue	1,711,702	521,666
less transferred to Grants Received In Advance (Balance Sheet)	1,126,011	
External Grant Revenue (Income & Expenditure Statement)	585,691	521,666
Represented by:		
Total Grant Expenditure (Income & Expenditure Statement)	618,292	568,285
Amount to be met by AINSE	32,601	(46,619)
External Grants Expenditure	585,691	521,666

^{*} Consisting of:

ARC AMS Grant '97- UWA :YTD expenditure in excess of revenues received.

ARC ISIS Grant '98- net of revenue received YTD as expenditure exceeds LTD total of grant.

Publications and Promotions 13,467 14,66 Meetings and Committees 64,911 64,33 AINSE Secretariat 3 5,004 5,66 Depreciation 20,714 16,55 64,911 16,51 64,911 16,51 64,91 16,51 64,91 16,52 64,91 16,52 64,74 7,53 7,54 7,62 7,445		31 Dec 2000	31 Dec 1999
Conference Management 26,197 55,60 Publications and Promotions 13,467 14,60 Meetings and Committees 64,911 64,33 AINSE Secretariat Sudit Fees and Bank Charges 5,004 5,6 Depreciation 20,714 16,5 Advertising and Printing - 1,5 Office Supplies 3,895 3,5 Postage and Telephone 5,944 7,5 Insurance 8,816 9,9 Entertaining 2,111 1,3 Books and Software 450 1,0 Office Equipment Repairs 1,964 1,7 Administration and Staff Training 1,693 6 Other Travel 12,303 11,18 Building Maintenance 134 14 Vehicle Expenses 4,118 3,6 Miscellaneous 6,476 4,4 Total AINSE Secretariat 73,622 68.8 Total Other Expenditure 178,197 203,4 14. OTHER INCOME 7,445 27,1		\$	\$
Publications and Promotions 13,467 14,6 Meetings and Committees 64,911 64,3 AINSE Secretariat South Secretariat 5,004 5,6 Depreciation 20,714 16,5 Advertising and Printing - 1,5 Office Supplies 3,895 3,5 3,5 1,5 Office Supplies 3,895 3,5 3,5 9,9 1,5 Office Supplies 8,816 9,9 9,9 1,11 1,3 1,3 1,2 1,1 1,3 1,3 1,2 1,1 1,3 1,3 1,2 1,1 1,3 1,3 1,2 1,3 1,3 1,2 1,3 1,4 1,4 1,4 1,7 1,4 <td< td=""><td>13. OTHER EXPENDITURE</td><td></td><td></td></td<>	13. OTHER EXPENDITURE		
Meetings and Committees 64,911 64,33 AINSE Secretariat 3004 5,66 Depreciation 20,714 16,5 Advertising and Printing - 1,5 Office Supplies 3,895 3,5 Postage and Telephone 5,944 7,5 Insurance 8,816 9,9 Entertaining 2,111 1,3 Books and Software 450 1,0 Office Equipment Repairs 1,964 1,7 Administration and Staff Training 1,693 6 Other Travel 12,303 11,1 Building Maintenance 134 14 Vehicle Expenses 4,118 3,6 Miscellaneous 6,476 4,4 Total AINSE Secretariat 73,622 68,8 Total Other Expenditure 178,197 203,4 14. OTHER INCOME 7,445 27,1 17,769 43,3 15. MOVEMENT IN RESERVES	Conference Management	26,197	55,663
AINSE Secretariat Audit Fees and Bank Charges	Publications and Promotions	13,467	14,665
Audit Fees and Bank Charges 5,004 5,60 Depreciation 20,714 16,50 Advertising and Printing - 1,5 Office Supplies 3,895 3,50 Postage and Telephone 5,944 7,5 Insurance 8,816 9,9 Entertaining 2,111 1,3 Books and Software 450 1,0 Office Equipment Repairs 1,964 1,7 Administration and Staff Training 1,693 6 Other Travel 12,303 11,12 Building Maintenance 134 134 Vehicle Expenses 4,118 3,6 Miscellaneous 6,476 4,4 Total AINSE Secretariat 73,622 68,8 Total Other Expenditure 178,197 203,4 14. OTHER INCOME Conferences 10,324 16,2 Miscellaneous 7,445 27,1 17,769 43,3 15. MOVEMENT IN RESERVES	Meetings and Committees	64,911	64,308
Depreciation	AINSE Secretariat		
Advertising and Printing Office Supplies Office Supplies 3,895 3,5 Postage and Telephone 5,944 7,5 Insurance 8,816 9,9 Entertaining 2,111 1,3 Books and Software 450 1,0 Office Equipment Repairs 1,964 1,7 Administration and Staff Training 1,693 6 Other Travel 12,303 11,13 Building Maintenance 134 Vehicle Expenses 4,118 3,6 Miscellaneous 6,476 4,4 Total AINSE Secretariat 73,622 68,8 Total Other Expenditure Conferences Miscellaneous 11,324 16,2 Miscellaneous 11,324 16,2 Miscellaneous 11,324 16,2 Miscellaneous 11,324 16,2 Miscellaneous 11,769 43,3	Audit Fees and Bank Charges	5,004	5,609
Office Supplies 3,895 3,50 Postage and Telephone 5,944 7,5 Insurance 8,816 9,9 Entertaining 2,111 1,3 Books and Software 450 1,0 Office Equipment Repairs 1,964 1,7 Administration and Staff Training 1,693 6 Other Travel 12,303 11,12 Building Maintenance 134 3,6 Vehicle Expenses 4,118 3,6 Miscellaneous 6,476 4,4 Total AINSE Secretariat 73,622 68.8 Total Other Expenditure 178,197 203,4 14. OTHER INCOME Conferences 10,324 16,2 Miscellaneous 7,445 27,1 17,769 43,3 15. MOVEMENT IN RESERVES	Depreciation	20,714	16,579
Postage and Telephone 5,944 7,5 Insurance 8,816 9,9 Entertaining 2,111 1,3 Books and Software 450 1,0 Office Equipment Repairs 1,964 1,7 Administration and Staff Training 1,693 6 Other Travel 12,303 11,1 Building Maintenance 134 Vehicle Expenses 4,118 3,6 Miscellaneous 6,476 4,4 Total AINSE Secretariat 73,622 68,8 Total Other Expenditure 178,197 203,4 14. OTHER INCOME Conferences 10,324 16,2 Miscellaneous 7,445 27,1 17,769 43,3 15. MOVEMENT IN RESERVES	Advertising and Printing	-	1,551
Insurance		· · · · · · · · · · · · · · · · · · ·	3,562
Entertaining 2,111 1,3 Books and Software 450 1,0 Office Equipment Repairs 1,964 1,7 Administration and Staff Training 1,693 6 Other Travel 12,303 11,13 Building Maintenance 134 14 Vehicle Expenses 4,118 3,6 Miscellaneous 6,476 4,4 Total AINSE Secretariat 73,622 68,8 Total Other Expenditure 178,197 203,4 14. OTHER INCOME Conferences 10,324 16,2 Miscellaneous 7,445 27,1 17,769 43,3 15. MOVEMENT IN RESERVES			7,517
Books and Software			9,905
Office Equipment Repairs 1,964 1,7 Administration and Staff Training 1,693 6 Other Travel 12,303 11,13 Building Maintenance 134 134 Vehicle Expenses 4,118 3,60 Miscellaneous 6,476 4,4 Total AINSE Secretariat 73,622 68,8 Total Other Expenditure 178,197 203,4 14. OTHER INCOME Conferences 10,324 16,2 Miscellaneous 7,445 27,1 17,769 43,3 15. MOVEMENT IN RESERVES			1,375
Administration and Staff Training Other Travel Other Travel Building Maintenance 1134 Vehicle Expenses 4,118 Miscellaneous 6,476 4,44 Total AINSE Secretariat 73,622 68,8 Total Other Expenditure 178,197 203,4 14. OTHER INCOME Conferences 10,324 Miscellaneous 17,445 27,1 17,769 43,3			1,000
Other Travel 12,303 11,13 Building Maintenance 134 Vehicle Expenses 4,118 3,6 Miscellaneous 6,476 4,4 Total AINSE Secretariat 73,622 68,8 Total Other Expenditure 178,197 203,4 14. OTHER INCOME Conferences 10,324 16,2 Miscellaneous 7,445 27,1 17,769 43,3 15. MOVEMENT IN RESERVES			1,776
Building Maintenance 134 Vehicle Expenses 4,118 3,6 Miscellaneous 6,476 4,4 Total AINSE Secretariat 73,622 68,8 Total Other Expenditure 178,197 203,4 14. OTHER INCOME Conferences 10,324 16,2 Miscellaneous 7,445 27,1 17,769 43,3 15. MOVEMENT IN RESERVES			665
Vehicle Expenses 4,118 3,6 Miscellaneous 6,476 4,4 Total AINSE Secretariat 73,622 68,8 Total Other Expenditure 178,197 203,4 14. OTHER INCOME Conferences 10,324 16,2 Miscellaneous 7,445 27,1 17,769 43,3 15. MOVEMENT IN RESERVES			11,183
Miscellaneous 6,476 4,4 Total AINSE Secretariat 73,622 68,8 Total Other Expenditure 178,197 203,4 14. OTHER INCOME Conferences 10,324 16,2 Miscellaneous 7,445 27,1 17,769 43,3		_	-
Total AINSE Secretariat 73,622 68,8 Total Other Expenditure 178,197 203,4 14. OTHER INCOME Conferences 10,324 16,2 Miscellaneous 7,445 27,1 17,769 43,3 15. MOVEMENT IN RESERVES			3,609
Total Other Expenditure 178,197 203,4 14. OTHER INCOME Conferences 10,324 16,2 Miscellaneous 7,445 27,1 17,769 43,39			4,490
14. OTHER INCOME Conferences 10,324 16,2 Miscellaneous 7,445 27,1 17,769 43,3 15. MOVEMENT IN RESERVES	Total AINSE Secretariat	73,622	68,821
Conferences 10,324 16,2 Miscellaneous 7,445 27,1 17,769 43,3	Total Other Expenditure	178,197	203,457
Miscellaneous 7,445 27,1 17,769 43,3 15. MOVEMENT IN RESERVES	14. OTHER INCOME		
Miscellaneous 7,445 27,11 17,769 43,39 15. MOVEMENT IN RESERVES	Conferences	10,324	16,240
17,769 43,39 15. MOVEMENT IN RESERVES	Miscellaneous		27,156
			43,396
Grants Reserve			
Transfer 2000/1999 research grants committed 683,545 600,99		683,545	600,993

	31 Dec 2000	31 Dec 1999
	\$	\$
16. RECONCILIATION OF OPERATING RESULT WITH CASHFLO	OWS FROM OPERATIONS	
Surplus for the year	337,022	293,656
Movements in Balance Sheet		
(Increase)/Decrease in Receivables	(1,105,165)	22,085
Increase/(Decrease) Creditors	345,332	106,486
(Increase)/Decrease Accrued Interest	6,493	(35,756)
(Increase)/Decrease Prepayments	415	67
Increase/(Decrease) Employee Entitlements	2,776	14,402
Increase/(Decrease) Other Current Liabilities	-	(8,200)
Increase/(Decrease) Grants Received in Advance	1,849,079	97,063
	1,098,930	196,147
Non-Cash Items		
Depreciation	20,714	16,579
Gain on sale of asset	-	(4,442)
	20,714	12,137
Net cash provided by (used in) operating activities	1,456,666	501,940

A INSE Postgraduate Research Awards

To nominate for one of these awards, an applicant must hold an Australian Postgraduate Award (APA) or equivalent scholarship. In addition to providing a student with a tax-free supplement for up to 3 years, the award gives additional access to ANSTO's world-class facilities and expertise. The stipend is \$7500 pa and \$5500 pa is provided towards the costs involved in using Lucas Heights facilities. Travel and accommodation costs are also awarded to enable students to work at Lucas Heights.

Sixteen new AINSE postgraduate research projects were supported by an award which commenced in 2000. Through its postgraduate research award scheme, AINSE has now helped train 175 students in aspects of nuclear science and associated techniques of analysis. Many more students have been assisted with their research by gaining access to Lucas Heights facilities through AINSE Grants awarded to their supervisors. Council believes that one of the most valuable roles fulfilled by AINSE is the provision of these AINSE postgraduate awards.

Projects Supported During 2000

The self assembly of phospholipid dispersions

Karen Aberdeen (nee Gunton) Chemistry, University of Queensland

Commenced 2/3/98

Human impact and natural climate variability: their impact on the landscape

Ainsley Atkinson (nee Noakes) Environmental Science, University of Wollongong

Commenced 1/2/99

The impact of residue returns with varying breakdown rates on soil carbon fractions, carbon sequestration and the physi-

cal fertility of soils

Nelly Blair Agronomy and Soil Science, University of New England

Commenced 1/2/00

Monitoring of freshwater heavy metal contamination using turtle shell

Carol Browne Centre Integrated Catchment Management, University of Western Sydney

Commenced 16/2/00

Biomineralisation in caves

Annalisa Contos (nee Dixon) School of Chemistry, University of Sydney

Commenced 23/2/99

Fine resolution AMS ¹⁴C chronology for the greater Lake Bolac lunette-lake sediment sequence

Ellyn Cook Geography & Environmental Science, Monash University

Commenced 1/3/98

Utilising a heavy ion probe in the development of semiconductor nanodosimetry for radiation oncology

Iwan Cornelius Engineering Physics, University of Wollongong

Commenced 1/1/00

An environmental record of the last quarter of a million years from eastern Australia

Nicola Franklin Geography, University of Sydney

Commenced 2/3/98

Donor-acceptor compounds as potential radiation activated cytotoxins

Alison Funston Chemistry, University of Melbourne

Commenced 2/2/98

Studies of diffusion in II-VI semiconductor structures

Faramarz Gard Physics, La Trobe University

Commenced 1/1/99

The impact of igneous intrusions on coal mining and the alienation of coal reserves

Alexandra Golab Geosciences, University of Wollongong

Commenced 1/3/00

Human response to shifts in environmental boundaries in the Sydney Basin during the holocene

Rosalind James Human & Environmental Studies, University of New England

Commenced 3/2/00

Targeting of 125I-labelled ligands to the DNA of tumour cells

Tom Karagiannis Pathology, University of Melbourne

Commenced 16/3/99

Crucible corrosion in the melt processing of ceramic oxide superconductors

Nigel Kirby Applied Physics, Curtin University of Technology

Commenced 21/2/00

Nutrient cycling in a tropical macrotidal environment

Megan Langeveld Mathematical & Physical Sciences, Northern Territory University

Commenced 30/5/00

Investigation of crystallisation of scale in the Bayer process

Jennifer Lowe Applied Chemistry, Curtin University of Technology

Commenced 1/4/00

Investigation of interaction of artificial pinning centres with magnetic flux lines in high temperature superconductors

Damian Marinaro Radiation Physics Group, University of Wollongong

Commenced 8/1/99

The geoarchaeology of the Mun River floodplain in Thailand

Roger McGrath School of Resource Science & Management, Southern Cross University

Commenced 1/1/99

Hydrogen in metallic and metal-like systems

Keith McLennan School of Science, Griffith University

Commenced 17/1/00

Development and application of a portable instrument for atmospheric radon and thoron progeny concentration measur-

ments as a function of aerosol size

Peter Murry Medical & Health Physics, Queensland University of Technology

Commenced 31/8/00

Characterisation of reduced polypyridyl ruthenium species

Bradley Patterson Chemistry & Chemical Engineering, James Cook University

Commenced 1/3/98

Environmental analysis using ion-selective electrodes

Bobby Pejcic Applied Chemistry, Curtin University of Technology

Commenced 8/3/00

Characterisation of Sr binding with the hydration products of cementitious systems cured at elevated temperatures

Vanessa Peterson Materials, Chemistry & Forensic Science, University of Technology Sydney

Commenced 21/2/00

Ceramic production and exchange in the early and later historic periods at Akra, NWFP Pakistan

Cameron Petrie Archaeology, University of Sydney

Commenced 1/2/00

Fundamental mechanisms in rf and dc nitriding plasmas

Jayson Priest Physics & Electronics Engineering, University of New England

Commenced 1/2/98

Geochemistry of ochres and rock art paints in the Selwyn Ranges North West Queensland

Malcolm Ridges Archaeology & Palaeoanthropology, University of New England

Commenced 01/06/97

Dynamic susceptibility of transition metal alloys by neutron scattering **David Robinson**Physics, Monash University

Commenced 9/2/98

Disordered and low dimensional magnetic systems

Kirrily Rule Physics, Monash University

Commenced 4/3/00

Development of stable magnetic photocatalysts for the solar detoxification of organic polluted water

Timothy TanChemical Engineering & Industrial Chemistry, University of New South Wales

Commenced 28/2/00

Mobilisation of heavy metals from metal sulfides in aquatic environments

Jeffrey Tsang Biological, Environment & Chemical Sciences, Northern Territory University

Commenced 31/3/00

Geoarchaeological interpretation of sandstone landscapes in the Keep River region, Northern Territory

Ingrid Ward Geosciences, University of Wollongong

Commenced 1/7/00

Summary of AINSE Grants

The primary purpose of AINSE Grants is to facilitate access by university researchers and research students to nuclear science and technology facilities at Lucas Heights, including travel and accommodation during periods of attachment. These awards are principally in the form of "credits" against which payments are made by AINSE on behalf of the award holder on receipt of appropriate invoices. In this manner, some allowance can be made for the uncertainties associated with research and enables AINSE to achieve the high degree of flexibility and control needed to ensure the allocation of time on the facilities is fully utilised. AINSE Grants very often provide the valuable initial support which leads to additional external funding, estimated to have been worth several million dollars to member organisations.

The disciplines involved during 2000 included the following branches of science and engineering

physics applied, electronic materials, mathematical, nuclear and high energy, plasma

chemistry applied, biochemistry, chemical technology, polymer science

engineering chemical, electrical, mechanical, microelectronics

biology biological science, biomaterials, biomedical science and engineering, biophysics, genetics

environmental &

earth sciences environmental biology, environmental geology, geochemistry, geography, information,

coastal management, marine science

medicine medical and health physics, nuclear, positron emission tomography

plus Aboriginal and Torres Strait Studies, Antarctic and Southern Ocean studies, anthropology,

applied geology, archaeology, botany, cultural studies, earth sciences, geology,

geophysics, geomorphology, materials science and engineering, microscopy and microanalysis, natural history, resource science and management, safety science, and zoology

The awards for 2000 are shown in the accompanying tables arranged in order of university, school and grant holder to highlight the diversity of institutions and disciplines within which projects occur. This includes arrangements for general research students' access to Lucas Heights facilities but does not include access arrangements for AINSE postgraduate scholars, see page 19. The total amount of the grants for each university is also shown. Nearly all of these projects involved close cooperation between university people and ANSTO staff and required

substantial use of the reactor, accelerators and other facilities at the Lucas Heights Research Establishment.

For information on particular facilities utilised see progress reports on our home page.

During 2000 two hundred and one projects were awarded to a value of \$1,335,957 involving thirty five of the thirty six member universities. The following table shows the distribution of awards by university and by specialist area.

University *				Speciali	st Area *				Total Grants
	ACC	AMS	ENV	ISO	MAT	NS	PLA	RAD	
ADE		2	1	1		1			5
AKL	4		2		3				9
ANU	1	2		2	1	1			7
CBR			3				2		5
CQU			1			1	1		3
CSU				2					2
CUR			2		1	7			10
DEA				1					1
ECU	1							1	2
FLI	1				1	1	1		4
GRI			2		1	1			4
JAM		2	2			1			5
LAT		2			1				3
MAC			2		1				3
MEL	2			3		2		1	8
MON		4	3	2		2			11
MUR	1		1	2					4
NCT		3		1	1	3			8
NSW	1	2	2	6	3	2		1	17
QLD				3	1	1		1	6
QUT			2		1				3
RMI	6				1				7
RMIT						1			1
SCU	1	3	1						5
SWI						1			1
SYD	4	8		3		4	2	2	23
TAS		1	3	1					5
UNE	3	1	1		1				6
USA	1		3						4
USQ		1							1
UTS	1		3						4
UWA	2	1			1				4
UWS						1	1	1	3
VIC	1								1
WOL	2	2	2		1	1			8
Total	32	34	36	27	19	31	7	7	193

 $[\]ensuremath{^{*}}$ Note: Full names of universities and specialist committees are given on page 80

Australian National University

Archaeolog	y & Anthropology	
00/020	Dr David Bulbeck	2 (00
00/1//	The origins of complex society in south Sulawesi (OXIS)	2,680
00/146	Dr Glenn Summerhayes Sourcing of prehistoric chert from New Hanover (New Ireland Province) and Aitape (Sandaun Province) Papua New Guinea	9,292
Archaeolog	y & Natural History	
00/120	Dr Susan O'Connor Dating of Celtis sp. samples from archaeological sites in Northern Australia and SE Asia	5,360
Chemistry		
00/135P	E/Professor Alan Sargeson Biological studies of metal ion cage complexes	3,347
00/198S	Professor John White SAXS investigations of micellar species from precursor solutions of silicate film synthesis	4,984
Earth Scien	ces	
00/102	Professor Ian McDougall ⁴⁰ Ar/ ³⁹ Ar age determination of rocks	3,810
Electronic M	laterials Engineering RSPhysS	
00/164	Professor James Williams Crystal structure of strontium ferrite $SrFeO_{3-\delta}$ at elevated temperature in ambient atmospheres	3,372
Australian I	National University Total	32,845
	Queensland University	
	Biomedical Sciences Dr. Wieler Wienerte Beekett	
00/172	Dr Vicky Vicente-Beckett Determination of metal associations in sediments from Fitzroy River - Keppel Bay Waters	10,539
Engineering	& Physical Sciences	
00/138	Dr Xuehua Shi Time-frequency analysis of H-1NF diagnostic data using wavelets	2,734
00/199S	Dr Richard Metcalfe Diffraction studies of semi solid alloy materials	1,400
Central Que	ensland University Total	14,673
Charles S	Sturt University	
Science & 7		
00/178S	A/Professor Kevin Robards	
JU, 1, 00	Phenolic compounds in olives	1,400
00/187S	Dr Paul Prenzler A pulse radiolysis study of the oxidation products of phenolic antioxidants	2,258
Charles Stu	rt University Total	3,658

Curtin University of Technology

Applied Che	emistry	
00/036	Dr Roland De Marco	
	Towards a deeper understanding of the response mechanism of the iron chalcogenide glass chemical sensor in natural waters	5,561
Applied Geo	ology	
00/032P	Dr Peter Collins	
	Characterisation of Ta-Nb-Sn minerals in the Wodgina rare metal pegmatite field, Western Australia	8,472
Applied Phy	vsics	
00/017P	Dr Craig Buckley A quantitative analysis of the morphology of CA ₆ grains in a layer and graded alumina/calcium hexaluminate composite	2,431
00/018	Dr Craig Buckley Characterisation of the pore-size distribution and the pore morphology of alumina preforms using SANS and MSANS	5,231
00/019	Dr Craig Buckley SANS investigation on the effects of thermal etching on the microstructure of sintered ceramics	11,312
00/090P	Dr It-Meng Low Effect of grain size on the mechanical and thermal properties of Ti ₃ SiC ₂	9,951
00/091P	Dr It-Meng Low	
	Optimisation of phase formation of calcium aluminates and aluminium titanate by high temperature neutron diffraction	9,601
00/157P	Dr Arie Van Riessen Investigation of high temperature characteristics of wear resistant zirconia-dispersed alumina	7,832
Environmer	ntal Biology	
00/083P	Professor Byron Lamont Using SIMS to verify environmental history of grasstrees obtained by conventional techniques	5,561
Physical Sci	ences	
00/119P	Professor Brian O'Connor Diffraction-based physical modelling of crystallite strain fields in ceramic microstructures	5,401
Curtin Univ	rersity of Technology Total	71,353
Deakin U	niversity	
	•	
00/136P	nd Chemical Sciences Dr Peter Scammells Synthesis and pharmacological evaluation of radiolabelled adenosine receptor ligands	10,876
Deakin Uni	versity Total	10,876
	•	,
Edith Cov	van University	
	a & Mathematics	
00/068	Dr Stephen Hinckley Defect structure of chemically-deposited CdS thin films by DLTS	2,550
00/069P	Dr Stephen Hinckley Composition analysis of chemically deposited CdS thin films	7,746
Edith Cowa	n University Total	10,296

Flinders University

Biological So	tiences	
00/124P	Dr Adele Pile Bioaccumulation of heavy metals by algae and invertebrates which comprise pier fouling communities	7,488
Chemistry		
00/137	Dr Joseph Shapter Large scale STM investigations of DNA on gold substrates	6,428
00/150P	Dr Max Taylor <i>Ab initio</i> structure determination of inorganic materials from powder diffraction data	3,344
Physics		
00/145	Professor Robin Storer Resistive magnetohydrodynamics for heliacs	2,583
Flinders Uni	versity Total	19,843
Griffith Ur Microelectro	niversity nic Engineering Dr Philip Tanner	
00, 2, 3	SIMS analysis of thermal and UV-enhanced oxynitrides on silicon and SiC	8,910
Science		
00/196S	A/Professor Evan Gray Neutron irradiation induced order in CuMn	11,398
00/064	A/Professor Peter Healy Solid state NMR and NQR spectra of phosphine complexes of copper(I) and gold(I) salts	2,910
Griffith Univ	versity Total	23,218
James Co	ook University	
Anthropolog	y & Archaeology	
00/160	Dr Alan Watchman Trace element chemistry of laminated rock surface crusts	4,020
Biochemical	& Molecular Sciences	
00/1868	Dr Graham Jones The use of GC-mass spectroscopy to identify volatile trace sulphur compounds in the Antarctic sea ice zone	1,997
Chemistry &	Chemical Engineering	
00/100P	Dr Brian McCool Supramolecular complexation - neutron and x-ray diffraction and DFT computational studies	7,722
Earth Science	es	
00/038	Dr Gerald Dickens Late Quaternary evolution of continental margin off Ingham	5,360
00/089	Dr Bernd Lottermoser Radionuclide characterisation of tailings and tailings seepage precipitates at the Mary Kathleen uranium mine	7,561
James Cook	University Total	26,660

La Trobe University

Earth Scien	ices	
00/162P	Dr John Webb Recent history of river incision along the southern margin of the South-eastern Highlands, using cosmogenic ¹⁰ Be and ²⁶ Al dating of quartz in sediments	8,500
00/1798	Dr Richard Roberts Late Quaternary environments and prehistoric site patterning in south-western New South Wales	6,700
Physics		
00/127P	A/Professor John Riley Diffusion process in ZnSe/GaAs epilayers	4,688
La Trobe U	niversity Total	19,888
Macquai	rie University	
Information	a & Communication Sciences	
00/148P	Professor Trevor Tansley	
	SIMS and electron microbeam characterisation of ultra-low contact resistance p- and n-type ohmic contacts for advanced nano-scale quantum devices	7,200
Physical Ge	eography	
00/056	Dr Damian Gore Subsurface storage of contaminants in urban floodplains	6,208
00/170P	Dr Paul Hesse Sediment sourcing and budgeting in a small arid zone catchment, Fowlers Gap, NSW	5,760
Macquarie	University Total	19,168
Monash	University	
Earth Scien	ce	
00/016	Dr Joel Brugger Substitution mechanisms for rare earth elements in scheelite from gold deposits	6,773
00/082	Dr Yann Lahaye Identification of the source of the sulphur in archaean nickel sulphide deposits associated with komatiitic volcanism	6,773
00/105P	Dr Derry McPhail Accumulation of heavy metals by Australian native flora	2,500
C		- ,500
	& Environmental Science Dr Bruno David	
00/035	Nonda rock dating project	4,020
00/060	Dr Simon Haberle High-resolution record of el niño-driven fire in tropical Australia	6,700
00/079	Professor Peter Kershaw The Pleistocene-Holocene transition in Victoria	5,360
00/156	Dr Sander van der Kaars Kau Bay, Halmahera, Indonesia as a recorder of environmental and sea level change	11,640
Materials E	naineerina	
00/033P	A/Professor Wayne Cook Design and SANS analysis of IPNs with controlled structure	5,728

Neurology		
00/070P	Professor Malcolm Horne The study of the mechanism of Parkinsonium Diskinesia using β -CIT	10,150
Physics	,	,-3-
00/065P	Dr Trevor Hicks Static and dynamic atomic and magnetic correlations in metallic alloys	9,886
00/066P	Dr Trevor Hicks Disordered and low dimensional magnetic systems	4,613
00/193	A/Professor John Cashion Structure, bonding and magnetic properties of sorbed metal species and novel materials	3,000
Monash Un	iversity Total	77,143
Murdoch	University	
Chemistry		
00/174S	Professor John Webb Biological evaluation of synthetic and biosynthetic substances	13,000
Nuclear Me	dicine	
00/154P	Professor Harvey Turner Samarium-153 and lutetium-177 bifunctional tumour-targetting chelating agents for radioimmunotherapy	8,796
Physics and	Energy Studies	
00/181S	Dr Chris Lund Analysis of the role of hydrogen in the photo-degradation and regeneration of hydrogenated amorphous silicon solar cells	6,040
00/151	A/Professor Stephen Thurgate SIMS analysis of preg-robbing ores	9,646
Murdoch U	niversity Total	37,482
Queensla	nd University of Technology	
	ource Sciences	
00/190S	Dr Brendan Brooke Sedimentation rates in Moreton Bay during the last 200 years: identifying the scale of human impact	4,170
Physical Sci	ences	
00/001	Dr Riaz Akber A portable instrument for measurement of atmospheric radon progeny concentration as a function of aerosol size	5,210
00/049P	Dr Ray Frost Surface characteristics of alumina sols	8,620
Queensland	University of Technology Total	18,000
Roval Me	elbourne Institute of Technology	
Applied Che		
00/009	Dr Suresh Bhargava	,
	Vehicle emission control - increasing the life of exhaust catalyst	4,203

Applied Phy	rsics	
00/075P	A/Professor Peter Johnston Plural scattering, multiple scattering and energy loss straggling studies of heavy ions in condensed matter	11,886
00/101P	Dr Dougal McCulloch Tribological and structural investigation of metal implanted polymers	5,176
00/133P	Dr Salvy Peter Russo Distribution characterisation of p-type dopants in TiO ₂ thin films by heavy ion elastic recoil detection analysis	8,876
00/201S	Dr Peter Daivis Preliminary investigation of small angle neutron scattering from polymer solutions	4,567
Chemical ar	nd Metallurgical Engineering	
00/159	Dr Liam Ward Implantation of refractory and light elements into metal nitride coatings for improved corrosion and wear resistance	14,036
Electronic &	Computer Systems Engineering	
00/141P	Professor Dinesh Sood Nano-phases produced by ion implantation in materials and their characterisation at high temperatures	22,004
00/142P	Professor Dinesh Sood Ion beam modification and characterisation of thin films of smart materials suitable for micromachine technology	14,204
Royal Melbo	ourne Institute of Technology Total	84,952
Southern	Cross University	
	oastal Management	
00/099P	Professor David McConchie Trace elements in sedimentary phosphorites	9,903
00/029P	Mr Malcolm Clark	
	Geochemical charactersation of sulfide oxidation surfaces and the mechanisms of heavy metal release to the environment	16,656
Resource So	cience & Management	
00/012	Professor Bill Boyd Accurate dating of ash deposits in Garu Swamp, West New Britain, Papua New Guinea	
	•	4,020
00/013	Professor Bill Boyd Early Holocene and Pleistocene chronostratigraphy of the north coast of West New Britain, Papua New Guinea	5,360
00/023	Mr Richard Bush Transformation of diagenic FeS to pyrite: a SEM, TEM and SIMS study of active sulfide genesis in weakly reducing conditions	20,151
00/147	Dr Kathryn Taffs The environmental history of coastal lakes in northern NSW	2,010
Southern Ca	ross University Total	41,444
Swinburn	e University of Technology	
Engineering	and Science	
00/182S	Mr Kerry McManus Study of the sound absorption/reflection properties of concrete and their relationship to the structural properties of recycled aggregate concrete	16,975
Swinburne	University Total	16,975

University of Adelaide

O'll Colone	y or riadianae	
Chemistry		
00/152P	Dr Edward Tiekink	
	Neutron diffraction study of the 1,10-phenanthroline adduct of	6.720
	dimethyltin dichloride	6,729
	Geophysics	
00/155	Dr Rowland Twidale	£ 260
	Dating palaeoseismic events on the Australian continent	5,360
	es & Physics	
00/191	Professor John Prescott Padioactive disagnilibrium in love level uranium determinations and trace	
	Radioactive disequilibrium in low level uranium determinations and trace elements in natural quartz	1,020
Mauroon G	raduate Centre for Environmental Studies	,
00/165	Professor Martin Williams	
00/103	Late Quaternary alluvial history and climatic fluctuations in the Nile Basin	6,700
O		-,,
00/130P	beth Hospital Dr Peter Roselt	
00/130F	The development of iodine-123 labelled radiopharmaceuticals for the	
	study of the NMDA receptor system	6,104
University	of Adelaide Total	25,913
Universit	y of Auckland	
Auckland C	ancer Society Research Centre	
00/037P	Professor William Denny	
	Reduction potentials of nitroheterocyclic carbamates used as triggers for prodrugs	3,200
Chemistry		
00/011	A/Professor Graham Bowmaker	
	Solid state nuclear magnetic resonance spectroscopy	6,450
00/106P	A/Professor Jim Metson	2.025
00/40=	Composition and properties of TiO_xN_y solar absorber films	3,025
00/107	A/Professor Jim Metson Alteration layers on Li battery cathode materials	6,000
00/108	A/Professor Jim Metson	0,000
00, 100		
	Molecular ion formation in static SIMS	7,110
Geography		7,110
Geography		7,110
<i>Geography</i> 00/118		7,110
	Dr Scott Nichol	7,110 4,800
00/118	Dr Scott Nichol Geochemical and sedimentary evidence for catastrophic inundation of coastal	
00/118	Dr Scott Nichol Geochemical and sedimentary evidence for catastrophic inundation of coastal lowlands, West Coast, New Zealand	
00/118 Institute of	Dr Scott Nichol Geochemical and sedimentary evidence for catastrophic inundation of coastal lowlands, West Coast, New Zealand Geological and Nuclear Sciences Dr Andreas Markwitz Helium bubble structures and oxides produced by pulsed-plasma immersion	4,800
00/118 Institute of 00/094P	Dr Scott Nichol Geochemical and sedimentary evidence for catastrophic inundation of coastal lowlands, West Coast, New Zealand Geological and Nuclear Sciences Dr Andreas Markwitz Helium bubble structures and oxides produced by pulsed-plasma immersion ion-implantation (PI ³)	
00/118 Institute of	Dr Scott Nichol Geochemical and sedimentary evidence for catastrophic inundation of coastal lowlands, West Coast, New Zealand Geological and Nuclear Sciences Dr Andreas Markwitz Helium bubble structures and oxides produced by pulsed-plasma immersion ion-implantation (PI³) Dr Andreas Markwitz	4,800 10,000
00/118 Institute of 00/094P 00/095	Dr Scott Nichol Geochemical and sedimentary evidence for catastrophic inundation of coastal lowlands, West Coast, New Zealand Geological and Nuclear Sciences Dr Andreas Markwitz Helium bubble structures and oxides produced by pulsed-plasma immersion ion-implantation (PI³) Dr Andreas Markwitz Light elemental depth profiling of thin TiON films using HERDA	4,800
00/118 Institute of 00/094P	Dr Scott Nichol Geochemical and sedimentary evidence for catastrophic inundation of coastal lowlands, West Coast, New Zealand Geological and Nuclear Sciences Dr Andreas Markwitz Helium bubble structures and oxides produced by pulsed-plasma immersion ion-implantation (PI³) Dr Andreas Markwitz	4,800 10,000
00/118 Institute of 00/094P 00/095	Dr Scott Nichol Geochemical and sedimentary evidence for catastrophic inundation of coastal lowlands, West Coast, New Zealand Geological and Nuclear Sciences Dr Andreas Markwitz Helium bubble structures and oxides produced by pulsed-plasma immersion ion-implantation (PI³) Dr Andreas Markwitz Light elemental depth profiling of thin TiON films using HERDA Dr Andreas Markwitz	4,800 10,000

University of Canberra

Applied Scie	nce	
00/149	A/Professor Graham Taylor Characterisation of the basal Cambrian cherty breccia facies from north-west Queensland using NAA	9,000
00/110	Dr Leah Moore Characterisation of syn-diagenetic processes within carbonate sequences from the Georgina Basin from sulphur isotope values by SIMS	8,547
Electronics E	ngineering and Applied Physics	
00/027	A/Professor Andrew Cheetham Australian Fusion Research Group collaboration	4,762
00/028	A/Professor Andrew Cheetham Weekend School in Plasma and Applications	3,770
Science & D	esign	
00/044	Dr Graeme Esslemont Harbour dredging in the Townsville region: cross-evaluation between proxy records in coral skeletons and environmental monitoring records	4,377
University o	f Canberra Total	30,456
University	of Melbourne	
Chemical En	gineering	
00/184S	Professor Jannie Van Deventer The use of x-ray and neutron small angle scattering to elucidate the structure and mechanism of formation of geopolymers	4,876
Chemistry		
00/034P	A/Professor Ron Cooper Mechanisms of radiation chemical degradation of aqueous halocarbon solutions	4,580
00/112P	Dr Paul Mulvaney Small angle neutron scattering from nanoparticle crystals	2,478
00/153P	A/Professor Peter Tregloan Induced dissociation of cobalt and chromium complexes	3,200
Classics & A	rchaeology	
00/134	A/Professor Antonio Sagona Cultural interaction in late prehistoric trans-Caucasus	13,418
Earth Scienc	es	
00/054	Professor Andrew Gleadow The application of fission track analysis to fundamental problems in the earth sciences	s 5,000
Fine Arts, Cla	assical Studies	
00/123	Dr Elizabeth Pemberton Analysis of clays used in the manufacture of artefacts from a Hellenistic housing insula in North Syria	5,133
Genetics		
00/024P	A/Professor James Camakaris Copper radioisotopes in the study of Alzheimer's disease and Menkes disease	7,253
Nuclear Med	licine and Centre for PET	
00/131P	Dr Christopher Rowe Localisation of temporal lobe epileptic foci in patients displaying normal or inconclusive MRI	4,200
Peter MacCa	llum Cancer Institute	
00/098	Dr Roger Martin Comparison of radiobiological efficacy of DNA-associated decay of ¹²³ I & ¹²⁵ I	3,300
omversity o	f Melbourne Total	53,438

University of New England

Archaeology		
00/161P	Dr Pamela Watson PIXE/PIGE characterisation of late Roman pottery from a kiln site in the north Jordan Valley, Jordan	6,013
Biological Sci	ences	
00/139P	A/Professor Rod Simpson Pilot investigation on the use of mollusc shells as archival indicators of metal contamination in the Australian Antarctic marine environment	2,961
Human and E	nvironment Studies	
00/057P	Dr Peter Grave PIXE/PIGE analysis of archaeological ceramics from central Turkey	7,983
00/058	Dr Peter Grave	
	Sourcing agate and carnelian ornaments from south-east Asia with PIXE/PIGE analysis	6,098
00/059	Dr Peter Grave	
	AMS dating and palaeoenvironmental analysis of historic irrigation systems from Kamphaeng Phet, Central Northern Thailand	8,040
00/063P	Dr Robert Haworth	
	Determination of late Holocene sedimentation rates from wetlands in south-east Australia using lead-210 and AMS dating	3,813
Physics & Ele	ctronics Engineering	
00/047P	A/Professor Matthew Fewell Studies in low-pressure rf-plasma nitriding (continuation)	10,939
University of	New England Total	45,847
University	of New South Wales	
Biological Sci	ience	
00/097	Dr Helene Martin A further study of the lake clays at Burraga Swamp, Barrington National Park	5,100
Biomedical E	ngineering	
00/109P	A/Professor Bruce Milthorpe Encapsulation and hot isostatic pressing of hydroxyapatite-316L fibre composites	6,000
Biotechnolog	y	
00/194	Dr John Foster Bacteria as bioindicators of pollution: concentration and composition of biopolymer accumulation	4,200
Cardiology Ea	astern Heart Clinic	
00/125	Dr Mark Pitney Endovascular radiotherapy to prevent recurrent restenosis after coronary stenting	8,750
Chemistry		
00/055P	Dr Justin Gooding A fundamental investigation of the immobilisation of enzymes onto self-assembled monolayers	3,129

Civil & Envi	ironmental Engineering	
00/192	Dr Ian Acworth Groundwater flux investigation in the hyporheic zone of a coastal sand dune aquifer at Hat Head using a radio tracer	5,000
Electron Mi	croscope Unit	
00/113	A/Professor Paul Munroe Microstructural analysis of carbonitrided austenitic steels	6,000
Geography		
00/188S	A/Professor Mike Melville Using <i>in-situ</i> produced cosmogenic isotopes to understand the formation of stone pavements and aeolian deposited soils at Fowlers Gap, western New South Wales	6,540
Microbiolog	gy & Immunology, Life Sciences	
00/117P	Dr Brett Neilan Extant stromatolites of Shark Bay as a model of geomicrobiological processes and their use as indicators of environmental perturbations	6,000
Nuclear Me	edicine	
00/061	Dr Walter Haindl The pre-operative assessment of patients with intractable epilepsy using F-18 FDG positron coincidence detection (PCD) imaging	6,300
00/128	Dr Monica Rossleigh The properative assessment of patients with metastatic colon carcinoma using F-18 FDG and coincidence detection	7,000
00/129	Dr Monica Rossleigh The preoperative assessment of patients with lung cancer using F-18 FDG and coincidence detection	7,000
Pathology		
00/071P	Professor Rolfe Howlett The effect on skeletal tissues and their cells by ion implanted bioceramics	9,600
Physics		
00/025P	Professor Stewart Campbell Crystal and magnetic structures of strontium ferrite SrFeO _{3-δ} and related compounds	4,387
00/026P	Professor Stewart Campbell The magnetic structures of novel quaternary compounds $R_3T_{29}Si_4B_{10}$	6,334
00/072	Dr Wayne Hutchison Applications of nuclear magnetic resonance on oriented nuclei (NMRON) to solids	1,050
00/144	Dr Glen Stewart High speed Mössbauer investigation of rare earth based materials	1,500
Polymer Sc	ience	
00/021	Professor Robert Burford	
	Interpenetrating polymer networks based on TPEs and isoprene and/or butadiene using gamma routes	1,600
University	of New South Wales Total	95,490

University of Newcastle

Om Crone,	of retroadule	
Chemistry		
00/022P	Dr Robert Burns Neutron diffraction studies of $Cs_{3-x}D_x[PMo_{12}O_{40}]$ redox and acid catalysts	8,130
00/158P	A/Professor Ellak Von Nagy-Felsobuki Clusters of sulfur	2,460
Goography		
Geography 00/030	Professor Eric Colhoun	
00/030	Cosmogenic isotope dating of glacial and associated landforms and deposits, Mourne Mountains, Ireland	5,100
00/031	Professor Eric Colhoun Cosmogenic dating of glacial deposits at Cradle Mountain, Tasmania	10,200
Geography	& Environmental Science	
00/122	Dr Stuart Pearson	
	Fine (annual) resolution environments of the Paroo area (north-western NSW) from tree rings	3,350
Mechanical	Engineering	
00/080P	Dr Erich Kisi	
	In-situ neutron diffraction study of materials in simulated service or	26.070
00/1/70	synthesis environments	26,040
00/167P	Dr Erdong Wu Studies of metal hydride structures in Zr-Al-D system	6,025
00/200	Dr Lyazid Djenidi	5.240
University o	LDV measurements in a boundary layer over various surface conditions	5,340 66,645
Offiversity C	f Newcastle Total	00,045
University	of Queensland	
Chemistry		
00/007	Dr Paul Bernhardt Single electron transfer reactions of multi redox centre complexes	7,729
00/051	Dr Ian Gentle	
	Small angle neutron studies of lipid-protein complexes	5,990
00/067	A/Professor David Hill	2 (• 2
	Radiation chemistry of fluorinated polymers	3,650
Haematolog	У	
00/111P	Dr James Morton	
	Phase I/II study of Sm-153 lexidronam, limb irradiation and stem cell	7.000
	transplantation for the treatment of multiple myeloma	7,000
Mining Mine	erals and Materials Engineering	
00/195S	A/Professor Andrej Atrens	
	Measurement of grain boundary carbon concentration for pipeline steels and its relation to intergranular stress corrosion cracking (SCC)	6,320
Nuclear Med	dicine	
00/092P	Dr David Macfarlane	
	Development of iodine-123 labelled analogs of vasoactive intestinal peptide	0.2/5
T T • • ·	(VIP) for specific VIP receptor (VIPR) tumour imaging in humans	8,345
University of	of Queensland Total	39,034

University of South Australia

lan Wark Re	search Institute	
00/052	Dr Andrea Gerson	
	A SIMS investigation of the mechanism of copper activation of pyrite, pentlandite and phrrhotite	9,748
00/081P	Dr Sunil Kumar	
	Characterization of plasma nitrided aluminium and aluminium-silicon alloy surfaces by RBS and PIXE	9,203
00/140	Professor Roger Smart	
	Development of data analysis protocols in SIMS studies of adsorption and reaction at mineral surfaces	9,918
00/175S	Dr Bill Skinner	1.0//
University o	Mechanism and kinetics of silicate dissolution of South Australia Total	1,044 29,913
University C	of South Australia Total	29,913
University	√ of Southern Queensland	
Humanities	& Social Science	
00/183	Dr Bryce Barker	
	The prehistoric use of coasts and islands in north-eastern Australia: the Whitsunday region mainland coast	6,700
University o	of Southern Queensland Total	6,700
	2	
University	y of Sydney	
Anatomy &	Histology	
00/040P	Dr Denise Donlon	
	Dietary analysis of 19th century juvenile human skeletal remains using trace element analysis	7,200
00/041	Dr Denise Donlon Dating of Aboriginal burials in the Sydney Basin	3,040
Applied Phy	rsics	
00/085P	Dr Manfred Lenzen	
	Hydrogen profiling of soda-lime glass samples	7,400
00/103P	Professor David McKenzie Binary alloy implantation into polymers	2,600
Archaeology	/	
00/008	Dr Alison Betts	
	AMS dating of organic residues in mudbrick: a test study in Uzbekistan	5,360
00/180S	A/Professor Roland Fletcher	
	Elemental determination of earthenware by proton-induced x-ray emission and proton-induced gamma-ray emission (PIXE/PIGE) and AMS dating of carbon samples from Bagan, the medieval capital of Myanmar	4,020
00/163	Dr Peter White	4,020
00/103	Pleistocene and early Holocene obsidian exchange in Papua New Guinea	16,200
Chemistry		
00/053	Professor Robert Gilbert Polymerisation of rubbery and water-soluble polymer colloids	2,000
00/045P	Dr Ronald Fenton Structural studies of isomeric platinum(II) complexes	9,065
00/046P	Dr Ronald Fenton	,
	Polymorphs of lithium aluminium oxides	3,600

00/077P	Dr Brendan Kennedy Powder diffraction of perovskite type oxides	9,300
00/078P	Dr Brendan Kennedy	9,500
00, 0, 01	Powder diffraction studies of metal oxides	14,300
00/087	Professor Len Lindoy Copper-64 radiolabelling of antibodies using linked tetraaza macrocyclic chelators for use in imaging and therapy	8,950
00/116	Professor Don Napper	
	Gamma radiation-induced polymerisation and grafting	1,400
Geography	,	
00/043	A/Professor Deirdre Dragovich The stability of channels and floodplains in forested areas during the late Holocene	13,400
Nuclear Me	edicine	
00/084P	Dr George Larcos β-CIT study of drug induced Parkinsonism (DIP)	6,650
0		0,000
Quaternary 00/002	A/Professor Mike Barbetti	
00/002	Dating Holocene coastal evolution and changes in sea level from the upper gulf of Thailand	2,680
00/003P	A/Professor Mike Barbetti Class technology in the page aget, before 1000 PC	5 500
00/004	Glass technology in the near east, before 1000 BC A/Professor Mike Barbetti	5,500
00/001	Upwelling in the Indian Ocean: ¹⁴ C in annual tree rings from Thailand and Australia, AD 1938-1951	6,800
00/005	A/Professor Mike Barbetti Antarctic deep water formation during the little ice age: pilot measurements of ¹⁴ C in tree rings from Thailand and Australia, AD 1650-1750	8,500
00/006	A/Professor Mike Barbetti High-resolution dating of ancient ceramic kilns in Thailand, Laos and Burma by radiocarbon and palaeomagnetism	2,680
Physics		
00/074P	A/Professor Brian James	
00/4=40	Measurement of electric fields in the H-1 Heliac	800
00/171S	A/Professor Laurie Peak Accelerator boron neutron capture therapy by Li ⁷ (p,u) reaction	450
University	of Sydney Total	141,895
Universit	ty of Tasmania	
Antarctic &	Southern Ocean Studies	
00/104	Professor Andrew McMinn Introduction of the toxic dinoflagellate, <i>Gymnodinium catenatum</i> , to Port Lincoln	4,280
Applied Sc	iences	
00/062	Mr David Hannan Age variability due to pre-exposure inheritance and differential sub-glacial erosion: implications for cosmogenic exposure modelling	7,650
Chemistry		
00/169P	Dr Brian Yates Modelling of radiopharmaceuticals for tumour diagnosis and therapy	15,780

00/050		
00,090	Dr Caleb Gardner Validation of radiometric estimation of shell age in crustaceans	8,700
Zoology		
00/1898	Dr Catherine Samson Changes in Tasmanian estuarine and sheltered marine ecosystems since European settlement: impacts of human activity	9,665
University	of Tasmania Total	46,075
l lei tonoi	to a de Ta alema la conse Conselha cons	
	ty of Technology Sydney Materials & Forensic Science	
00/143	Dr Mike Stevens Ion implantation of polymers for metallisation	7,720
Environme	ntal Sciences	
00/010	Dr David Booth Metal and nutrient signals on otoliths of marine and estuarine fishes	2,000
00/086	Dr Richard Lim Biokinetics of copper in rainbowfish in relation to its tolerance to copper using Cu-64 and Cu-67	10,000
Materials S	Science	
00/126	A/Professor Abhi Ray Characterisation of Australian precious opals by SIMS	6,040
University	of Technology Sydney Total	25,760
		- / ·
Universi	ty of Western Australia	
	ty of Western Australia Ind Electronic Engineering Dr Charles Musca Characterization of doping mechanisms in reactive ion etching processed HgCdTe using secondary ion mass spectroscopy	
Electrical a	nd Electronic Engineering Dr Charles Musca Characterization of doping mechanisms in reactive ion etching processed HgCdTe using secondary ion mass spectroscopy	
Electrical a	nd Electronic Engineering Dr Charles Musca Characterization of doping mechanisms in reactive ion etching processed HgCdTe using secondary ion mass spectroscopy	
Electrical a 00/114 Fremantle	nd Electronic Engineering Dr Charles Musca Characterization of doping mechanisms in reactive ion etching processed HgCdTe using secondary ion mass spectroscopy Hospital	20,938
Electrical a 00/114 Fremantle	nd Electronic Engineering Dr Charles Musca Characterization of doping mechanisms in reactive ion etching processed HgCdTe using secondary ion mass spectroscopy Hospital Professor Harvey Turner Samarium-153 and lutetium-177 bifunctional tumour-targetting chelating agents for radioimmunotherapy	20,938
Electrical a 00/114 Fremantle 00/154	nd Electronic Engineering Dr Charles Musca Characterization of doping mechanisms in reactive ion etching processed HgCdTe using secondary ion mass spectroscopy Hospital Professor Harvey Turner Samarium-153 and lutetium-177 bifunctional tumour-targetting chelating agents for radioimmunotherapy	20,938 11,292
Electrical a 00/114 Fremantle 00/154 Geography	Dr Charles Musca Characterization of doping mechanisms in reactive ion etching processed HgCdTe using secondary ion mass spectroscopy Hospital Professor Harvey Turner Samarium-153 and lutetium-177 bifunctional tumour-targetting chelating agents for radioimmunotherapy Professor John Dodson	20,938 11,292 4,800
Electrical at 00/114 Fremantle 00/154 Geography 00/039	Dr Charles Musca Characterization of doping mechanisms in reactive ion etching processed HgCdTe using secondary ion mass spectroscopy Hospital Professor Harvey Turner Samarium-153 and lutetium-177 bifunctional tumour-targetting chelating agents for radioimmunotherapy Professor John Dodson Environmental history and prehistory in south-western Australia Dr Karl-Heinz Wyrwoll	20,938 11,292 4,800
Electrical a 00/114 Fremantle 00/154 Geography 00/039 00/168	Dr Charles Musca Characterization of doping mechanisms in reactive ion etching processed HgCdTe using secondary ion mass spectroscopy Hospital Professor Harvey Turner Samarium-153 and lutetium-177 bifunctional tumour-targetting chelating agents for radioimmunotherapy Professor John Dodson Environmental history and prehistory in south-western Australia Dr Karl-Heinz Wyrwoll	20,938 11,292 4,800 6,800
Electrical a 00/114 Fremantle 00/154 Geography 00/039 00/168 Zoology	Dr Charles Musca Characterization of doping mechanisms in reactive ion etching processed HgCdTe using secondary ion mass spectroscopy Hospital Professor Harvey Turner Samarium-153 and lutetium-177 bifunctional tumour-targetting chelating agents for radioimmunotherapy Professor John Dodson Environmental history and prehistory in south-western Australia Dr Karl-Heinz Wyrwoll 10Be dating of alluvial terrace successions in north-east Tibet Professor Don Bradshaw	20,938 11,292 4,800 6,800 5,000 6,637

University of Western Sydney Civic Engineering & Environment

Civic Engin	neering & Environment	
00/197	Dr Loo-Teck Ng Radiation synthesis of hydrogels for controlled-release studies	2,750
Mathemati	CS	
00/121	Dr Fred Osman Microwave plasma interactions	2,772
Engineerin	g and Industrial Design	
00/042	Dr Ken Doolan Identification of microstructures in polypropylenes	1,400
00/093	Dr Saravanamuthu Maheswaran Heavy ion elastic recoil detection analysis of light elements including sodium and silicon from leached glasses	8,760
University	of Western Australia Total	15,682
Universit	ty of Wollongong	
Engineerin	g Physics	
00/048	Professor Peter Fisher Compensation of boron-doped silicon by neutron transmutation doping with phosphorus	13,950
00/132P	A/Professor Anatoly Rozenfeld Study of heavy ion track structure using new silicon sensors and TLD materials	6,205
00/185S	A/Professor Roger Lewis Colossal magnetoresistance films grown by laser ablation	5,740
Geology		
00/076	A/Professor Brian Jones A history of Wingecarribee Swamp	6,180
Geoscience	98	
00/115	A/Professor Gerald Nanson A chronological investigation into the downstream pattern of floodplain formation on the Bellinger River, NSW: a comparative analysis with radiocarbon, OSL and TL dating techniques	6,700
00/166	A/Professor Colin Woodroffe Sedimentation in the Minnamurra Estuary: extrapolating historical rates into the Holocene	6,700
Suparcana	lucting and Electronic Materials	-,,
00/073	Dr Mihail Ionescu Implant of amorphous tracks in Bi-2212 thin films	5,035
00/088P	Professor Hua Kun Liu <i>In-situ</i> neutron diffraction for Ag/Bi-2223 tapes with different	
University	processing conditions of Wollongong Total	4,200 54,710
	<u> </u>	
Victoria	University of Technology	
Life Scienc	es & Technology	
00/176	Dr Domenico Caridi Leaching of metallic species from cement stabilised waste	6,173
University	of Victoria Total	6,173

Summary of experiments at ISIS

	Days Allocated
Magnetic structures of the novel compounds $R_3T_{29}Si_4B_{10}$ S J Campbell, School of Physics, University of New South Wales	3
Pressure-induced magnetic transitions in LaMn ₂ Si ₂ S J Campbell, School of Physics, University of New South Wales	4
Reaction path and kinetics of Ti ₃ Sic ₂ synthesis studies by in-situ neutron powder diffraction Erdong Wu, Department of Mechanical Engineering, University of Newcastle	3
Interactions between charged PEG-modified liposomes and phospholipid monolayers I R Gentle, Department of Chemistry, University of Queensland	3
Phases and phase transitions in the substitutes perovskite, $Ca_{(1-x)}Sr_xTiO_3$ C J Howard, ANSTO	3
Phases and phase transitions in the substitute perovskite, $Ca_{(1-x)}Sr_xTiO_3$ C J Howard, ANSTO	2
High temperature tetragonal to cubic phase transitions in perovskite type oxides B J Kennedy, School of Chemistry F11, University of Sydney	2
High temperature rhombohedral to cubic phase transition in the perovskites $La_{(1-x)}Pr_xAiO_3$ B J Kennedy, School of Chemistry F11, University of Sydney	3
Surface structure of concentrated emulsions J W White, Research School of Chemistry, Australian National University	2
Shear induced alignment of surfactant templated silicate films J W White, Research School of Chemistry, Australian National University	2
Novel insight in spin crossover phenomena in Fe(II) compounds S J Campbell, School of Physics, University of New South Wales	4
MuSR study of neutron irradiated CuMn T Blach, School of Science, Griffith University	4

Australian scientists have access to the most powerful pulsed neutron source in the world, located in Oxfordshire UK, as a result of a membership, the fee for which is coordinated by AINSE. AINSE gratefully acknowledges contributions from the Australian Research Council Research Infrastructure and Equipment Fund, The Australian National University, Griffith University, The University of Sydney, The University of Newcastle, The University of New South Wales, and ANSTO.

Proposals for experiments are submitted to ISIS and are reviewed by their peer review groups. The very high success rate that the Australian proposals achieve is well above the international average and attests to the very high quality of the proposals being put forward by those scientists who use this facility.

ISIS Recent Publications

F J Burghart, W Potzel, G M Kalvius, E Schreier, G Grosse, D Noakes, W Schafer, W Kockelmann, S J Campbell, W A Kaczmarek, A Martin, M K Krause Magnetism of crystalline and nanostructured $\rm ZnFe_2O_4$ Physica B 289-290 286 (2000)

S J Campbell, M Hofmann, A Calka The synthesis of TiN by ball-milling - a neutron diffraction study Physica B 276-278 899 (2000)

S J Campbell, J M Cadogan, X L Zhao, M Hofmann, Li Hong-Shuo Magnetic transitions in $La_{1-x}Y_xMn_2Si_2$ – Mössbauer investigation (4.2 - 520K) J Phys:Condens Matter 11 7835 (1999)

E P Gilbert, P A Reynolds, P Thiyagarajan , D Wozniak, and J W White
Microphase separation kinetics in n-alkane mixtures,
Phys Chem Chem Phys, 1, 2715–2724 (1999)

E M Gray, E H Kisi, R I Smith Observation of a continuous phase transformation in $LaNi_5D_3$ J Alloys Comp 293-295 135 (1999)

M Hofmann, S J Campbell, S J Kennedy, X L Zhao and A V J Edge Competing magnetic interactions in $La_{0.8}Y_{0.2}Mn_2Si_2$ Mat Sci Forum 278-182 455 (1998)

M Hofmann, S J Campbell and S J Kennedy Competing magnetic interactions in La_{0.8}Y_{0.2}Mn₂Si₂ J Phys:Condens Matter 12 3241 (2000)

S A Holt, P A Reynolds, and J W White Growth of silicated films at the solid/liquid interface Phys Chem Chem Phys 2, 5667–5671 (2000)

S A Holt, and J W White The molecular structure of the surface of commercial cow's milk Phys Chem Chem Phys, 1 (22), 5139-5145, (1999)

C J Howard, K S Knight, B J Kennedy and E H Kisi Structural phase transitions in strontium zirconate revisited J Phys:Condens Matter 12, L677-L683, (2000)

W Kockelmann, W Schafer, A Kirfel, F J Burghart, W Potzel, G M Kalvius, S J Campbell
Nanocrystalline ferromagnetic ZnFe₂O₄ spinel studied by neutron diffraction
Z Krist Suppl 16 165 (1999)

P A Reynolds, B N Figgis, and D Martin y Marero Magnetic structure and covalence in tetrachlorobis (N-phenylacetamidinato)rhenium(IV) by neutron diffraction J Chem Soc, Dalton Transactions, 945–950 (1999)

P A Reynolds, E P Gilbert, and J W White High internal phase water-in-oil emulsions studied by small angle neutron scattering J Phys Chem B, 104, 7012–7022 (2000)

J L Ruggles, S A Holt, P A Reynolds, A S Brown, D C Creagh, J W White Observation of a cubic phase in mesoporous silicate films grown at the air/water interface Phys Chem Chem Phys 1 323 (1999)

J L Ruggles, S A Holt, P A Reynolds, and J W White Synthesis of silica films at the air/water interface: effect of template chain length and ionic strength Langmuir, 16, 4613–4619 (2000)

B R Saunders, H M Crowther, G E Morris, S J Mears, T Cosgrove, B Vincent Factors affecting the swelling of poly(N-isopropylacrylamide) microgel particles: fundamental and commercial implications Coll Surf A 149 57 (1999)

P M Saville, and J W White Polymeric surfactant structure Chinese J Polym Sci, 2, 135- (2001)

W Schafer, W Kockelmann, S J Campbell et al Magnetism of crystalline and nanostructured ZnFe₂O₄ Physica B (in press 2000)

W Schafer, W Kockelmann, A Kirfel, W Potzel, F J Burghart, G M Kalvius, A Martin, W A Kaczmarek, S J Campbell Structural and magnetic variations of $\rm ZnFe_2O_4$ spinels – neutron powder diffraction studies Mat Sci Forum 321-324 802 (2000)

E Wu, S J Campbell, W A Kaczmarek, M Hofmann Mechanochemical treatment of BaFe₁₂O₁₉ - Mössbauer investigation J of Metastable and Nanocrystalline Materials 2-6 127 (1999)

y of Medicalize and Parioetystamic Materials 2 v 12/ (17/7)

E Wu, S J Campbell, W A Kaczmarek, M Hofmann, S J Kennedy, A J Studer Mechanochemical treatment of haematite - neutron diffraction investigation J of Metastable and Nanocrystalline Materials 2-6 121 (1999)

E Wu, S J Campbell, W A Kaczmarek, M Hofmann, S J Kennedy, A J Studer Mechanochemical treatment of haematite - neutron diffraction investigation Mat Sci Forum 312-314 121 (1999)

Publications

Notification of the following papers incorporating results from AINSE projects were received by AINSE in 2000. This list may not be a comprehensive list of all publications arising from AINSE-supported work nor does it necessarily relate to grants held in 2000. Advice concerning the availability of these papers and reports can be obtained from the AINSE office.

The publications are listed in university order under the name of the chief investigator, who is not necessarily the first author on the paper. Publications arising from AINSE Postgraduate Research Awards (PGRA) are also listed.

The references are as supplied by the chief investigator in the Annual Progress Report and other notifications provided to AINSE. The Progress Reports for 2000 are published on our home page.

Project Number	Chief Investigator (Co-Authors)	Title of Publication	Reference
Australia	n National University		
92/077	Summerhayes G Hotchkis M	Recent advances in Melanesian obsidian sourcing: results of the 1990 and 1991 PIXE/PIGE analyses	Poterie Lapita et Peuplement 127- 134 1992 ORSTOM Noumea
93/072	Summerhayes G	Lapita Interaction	Terra Australis No 15, Centre of Archaeology, Australian National University 2000
93/072	Summerhayes G Bird R; Fullagar R; Gosden C; Torrence R; Specht J	The sourcing of prehistoric obsidian from the Bismarck Archipelago	8th Nuclear Techniques of Analysis Conference 107-110 1993 Lucas Heights Australia
93/072	Summerhayes G Gosden C; Webb J; Marshall B	Lolmo Cave: a mid to late Holocene site, the Arawe Islands, West New Britain Province, Papua New Guinea	Asian Perspectives 33 97-119 1994
93/072	Summerhayes G Allen J	The transport of Mopir obsidian to late Pleistocene New Ireland	Archaeology in Oceania 28 145-149 1993
93/072	Summerhayes G Gosden C; Fullagar R; Specht J; Torrence R; Bird R; Shagholi N; Katsaros A	West New Britain obsidian: production and consumption patterns	Archaeometry Studies in Australia 1991 Department of Prehistory, Research School of Pacific Studies, Australian National University, Canberra 57-68 1993
94/045	Sargeson A Behm C; Boreham P; Creaser I; Korybut- Daszkiewicz B; Maddalena D; Snowden G	Novel cationic surfactants derived from metal ion cage complexes: potential antiparasitic agents	Australian Journal of Chemistry 48 1009-1030 1995
95/148	Jones R Roberts R; Galbraith R; Laslett G; Yoshida H; Olley J	Optical dating of single and multiple grains of quartz from Jinmium rock shelter, northern Australia: part I, experimental design and statistical models	Archaeometry 41 339-364 1999
95/R148	Jones R Roberts R; Spooner N; Cane S; Olley J; Murray A; Head M	Preliminary luminescence dates for archaeological sediments on the Nullarbor Plain, South Australia	Australian Archaeology 42 7-16 1996
95/R148	Jones R Roberts R; Bird M; Olley J; Galbraith R; Lawson E; Laslett G; Yoshida H; et al	Optical and radiocarbon dating at Jinmium rock shelter in northern Australia	Nature 393 358-362 1998

93/072	Summerhayes G Torrence R	Sociality and the short distance trader: intra- regional obsidian exchange in the Willaumez Peninsula, Papua New Guinea	Archaeology in Oceania 32 74-84 1997
96/107	Summerhayes G	Losing your temper: the effect of mineral inclusion on pottery analysis	Archaeology in Oceania 32 108- 118 1997
93/072	Summerhayes G Bird R; Torrence R; Bailey G	New Britain obsidian sources	Archaeology in Oceania 32 61-67 1997
92/077	Summerhayes G Torrence R; Specht J; Fullagar R	Which obsidian is worth it? A view from the West New Britain sources	Oceanic Culture History: Essays in Honour of Roger Green New Zealand Journal of Archaeology Special Publication 211-224 1996
97/181S	Sargeson A Königstein C; Mau A; Osvath P	Energy versus electron transfer processes involving a novel cobalt cage complex	Chem Commun 423-424 1997
97/181S	Sargeson A Bingham M; McArdle H	Characterisation of intra-cellular copper pools in rat hepatocytes using the chelator diamsar	Amer J Physiol G1400-1407 1997
97/192R	Spriggs M	The Island Melanesians	Oxford: Blackwell Publishers 326+xxv pp 53 plates 41 figures and maps 3 tables 1997
97/202R	Spriggs M Bedford S	Results from excavations at the Mangaasi type site: a re-assessment of the ceramic sequence and its implications for Melanesian prehistory	Association 19 159-166 2000
98/002	Summerhayes G	Interaction in the New Ireland-North Solomon corridor	Bulletin of the Indo-Pacific Prehistory Association 17 73 1998
98/137R	Spriggs M Bedford S; Wilson M; Regenvanu R	The Australian National University – National museum of Vanuatu archaeology project, 1994-1997: a preliminary report on the estab- lishment of cultural sequences and rock art research	Asian Perspectives 37(2) 165-193 1998
98/137R	Spriggs M Bedford S	Pieces of the Vanuatu Puzzle: archaeology of the north, south and centre	PhD Thesis 2000
98/137R	Spriggs M Bedford S	Crossing the Pwanmwou: preliminary report on recent excavations adjacent to and south west of Mangaasi, Efate, Vanuatu	Archaeology in Oceania 35 120- 126 2000
98/145R	Bellwood P Sayavongkhamdy T; Bulbeck D	Recent archaeological research in Laos	Bulletin of the Indo-Pacific Prehistory Association 19 101-110 2000
99/018	McDougall I Batt G; Kohn B; Braun J; Ireland T	New insight into the dynamic development of the Southern Alps, New Zealand, from detailed thermochronological investigation of the Mataketake Range pegmatites	Geological Society London, Special Publications 154 261-282 1999 1-863239-025-8
99/018	McDougall I Fossen H; Dunlap W	Age and tectonic significance of the North Sea rift-related dykes in southwestern Norway	Norsk Geologisk Tidskrift 79 169- 178 1999
99/021	De Deckker P van der Kaars S; Takahashi K; Barrows T; Fifield L; Santos G; et al	Palaeoenvironmental change on land and sea in the vicinity of Cape Range of Western Australia: a 50,000 years record unravleed using numerous proxies on a deep-sea core	Quaternary Studies Meeting, ANU 21-23 2000 Canberra
00/020	Bulbeck D Caldwell I	The land of iron: the historical archaeology of Luwu and the Cenrana Valley	Results of the origin of complex society in south Sulawesi project (OXIS) Hull: the University of Hull Centre for South-East Asian Studies, with the school of Archaeology & Anthropology, ANU 2000 Canberra Australia 0-903122-11-1

00/102P	McDougall I Camacho A	Intracratonic, strike-slip partitioned transpresson and the formation of eclogite facies rocks: an example from the Musgrave block, central Australia	Tectonics 19 978-996 2000
00/102P	McDougall I Fraser G; Ellis D; Williams I	Timing and rate of decompression in Pan- African granulites from Rundvagshetta, east Antarctica	J Metamorphic Geology 18 441-454 2000
00/102P	McDougall I Weinberg R; Dunlap W	Growth and deformation of the Ladakh Batholith, NW Himalayas: implications for timing of continental collision and origin of calc-alkalinc batholiths	J Geology 108 303-320 2000
00/102P	McDougall I Batt G; Braun J; Kohn B	Thermochronological analysis of the Southern Alps, New Zealand	Bulletin Geological Society America 112 250-266 2000
00/102P	McDougall I Spell T; Tulloch A	Thermochronologic constraints on the breakup of the Pacific Gondwana margin: The Paparoa metamorphic core complex, South Island, New Zealand	Tectonics 19 433-451 2000
00/120	O'Connor S Veth P	The world's first mariners: savannah dwellers in an island continent	J Modern Quaternary Research in Southeast Asia 16 99-137 2000
00/120	O'Connor S Veth P	East of Wallace's line: an introduction	East of Wallace's line: past and present maritime cultures in the Indo-Pacific by Balkema, Rotterdam 16 1-11 2000
00/146	Summerhayes G	Recent archaeological investigations in the Bismarck Archipelago, Anir – New Ireland province, Papua New Guinea	Bulletin of the Indo-Pacific Prehistory Association 19 167-174 2000
Central C	Queensland University		
00/172	Vicente-Beckett V Ashwath N; Tentori E; Bello F; Venugopal V; Ragupathy S; Poomrabeab A	Characterisation of sediments from the lower Fitzroy catchment in central Queensland, Australia	21st Annual Meeting, Society of Environmental Toxicology and Chemistry, 12 - 16 November 45 2000 Nashville USA
Curtin Ur	niversity of Technology		
90/097	O'Connor B Li D; van Riessen A	Rietveld analysis of zirconia-alumina ceramics – complementary use of x-ray and neutron diffraction	8th AXAA (WA) Annual School and Conference 93-102 24-26 August 1990 Geraldton Australia
90/097	O'Connor B Li D; Stead R; van Riessen A	Characterisation of zirconia-alumina ceramics by Rietveld procedures with x-ray and neutron diffraction	International Ceramics Conference (Austceram 90) 26-31 August 20- 26 1990 Perth Australia
95/107	Li D; O'Connor B; MacKinnon C; van Riessen A	Characterisation of Hg-substituted (Bi,Pb) ₂ Sr ₂ Ca ₂ Cu ₃ O _x (2223) high-Tc phase using synchrotron radiation and neutron diffraction data	1996 Joint Conference WASEM and AXAA 27-29th September 25 1996 Pemberton Australia
95/110	O'Connor B Browne J	High temperature neutron diffraction of zirconia-dispersed alumina ceramics	Honours Dissertation 1995
95/110	O'Connor B; Browne J; van Riessen A	High temperature neutron diffraction of zirconia-dispersed alumina ceramics	AXAA-96 Conference February 34-44 1996 Sydney Australia
95/110	van Riessen A O'Connor B; Browne J	High temperature neutron diffraction study of thermally cycled zirconia-dispersed alumina ceramics	1996 Joint Conference WASEM and AXAA 27-29th September 34- 44 1996 Pemberton Australia
96/144	O'Connor Li D; van Riessen A	Use of neutron and synchrotron radiation data in alumina ceramics processing research	1997 Joint Conference WASEM and AXAA 19-21st September 47

97/141	Low I	Physical characteristics of an <i>in-situ</i> layered and graded alumina/aluminium titanate composite	Mater Res Bull 33 1475-1481 1998
97/2118	van Riessen A Hamilton-Brown P; O'Connor B; Li D	X-ray and neutron diffraction studies of chalcocite oxidation	AXAA99 11th National Conference of the Australian x-ray Analytical Association 8-12th February 88 1999 Melbourne Australia
97/2118	van Riessen A Hamilton-Brown P; Buckley C	The effects of thermal etching on the microstructure of sintered ceramics	Joint AINSE-ANU Symposium on Small Angle Scattering and Reflectometry 30th September - 1 October AINSE 22 1999 Lucas Heights Australia 0 9577217 1 4
97/2118	O'Connor B van Riessen A	Depth profiling of the near-surface of As-fired zirconia-alumina ceramics – phase abundance	
97/2118	van Riessen A Suherman P; O'Connor B; Li D	Determination of amorphous phase in Portland cement clinker	1998 Joint Conference WASEM and AXAA 26-27th September 103-107 1998 Mandurah Australia
97/2118	van Riessen A Suherman P	Crystallographic characterisation of Portland cement clinker	MSc Thesis 1998
98/010	Low I	<i>In-situ</i> processing of layered and graded Bi(Pb)SrCaCuO (2223) superconductor	J Mater Sci Lett 17 819-822 1998
98/010	Low I	Processing of <i>in-situ</i> layered and graded BSCCO and YBCO superconductors	Mater Res Bull 33 803-809 1998
98/164	Arne D Bierlein F; Waldron H	Behaviour of rare earth and high field strength elements during hydrothermal alter- ation of meta-turbidites associated with mesothermal gold mineralization in central Victoria, Australia	J Geochemical Exploration 67 109-125 1999
98/164	Arne D Stott J; Waldron H	Biogeochemistry of the Ballarat East goldfield, Victoria, Australia	J Geochemical Exploration 67 1-14 1999
99/029	Low I Skala R; Asmi D; Manurung P	Infiltration processing of novel functionally- graded ceramic materials	Powder Metallurgy World Congress and Exhibition 106 November 12-16 2000 Japan
99/030	Low I Manurung P; Kennedy S; O'Connor B	Effect of beta-spodumene on the phase development of alumina/AT ceramics	2nd AINSE Symp on Neutron Scattering Powder Diffraction 22 June 16 2000 Lucas Heights Australia 0-9577217-2-2
99/030	Low I Asmi D; Kennedy S; O'Connor B	Quantitative phase analysis of alumina/calci- um-hexaluminate composites using neutron diffraction data and the Rietveld method	2nd AINSE Symp on Neutron Scattering Powder Diffraction 22 June 17 2000 Lucas Heights Australia 0-9577217-2-2
99/030	Low I Asmi D	Use of spodumene for liquid-phase-sintering of alumina/calcium-hexaluminate composites	Powder Metallurgy World Congress and Exhibition 12-16 November 106 2000 Japan
99/031	Low I Manurung P; Buckley C	Physical modelling of liquid infiltration kinetics into porous alumina preforms	Joint AINSE-ANU Symposium on Small Angle Scattering and Reflectometry 30 September - 1 October 24 1999 Lucas Heights Australia 0-9577217-1-4
00/018	Buckley C Hamilton-Brown P; van Riessen A	The effects of thermal etching on the microstructure of sintered ceramics	Joint AINSE-ANU Symposium on Small Angle Scattering and Reflectometry 30 September - 1 October 22 1999 Lucas Heights Australia 0-9577217-1-4

00/032P	Collins P Sweetapple M; Lumpkin G	Characteristics of tantalum-niobium-tin oxide minerals from the Wodgina and Mount Cassiterite pegmatites, Pilbara Craton, Western Australia	15th Australian Geological Conference 59 426 2000 Sydney Australia
00/036	De Marco R Bejcic B; Prince K	Response mechanism of the iron(III) chalcogenide glass ion-selective electrode in seawater	11th Australasian Electrochemistry Conference 10-14 December 149 2000 Sydney Australia
00/157P	van Riessen A Paul Hamilton-Brown	X-ray and neutron diffraction studies of chalcocite oxidation	MSc Thesis 2000
PGRA	Kirby N Buckley C; Wittorff V; van Riessen A	Crucible corrosion in the melt processing of YBCO 123 superconductors	14th National Congress of the Australian Institute of Physics 10-15 December MT136 2000 Adelaide Australia
Griffith U	 Jniversity		
89/12	Gray E Kisi E; Buckley C;	The hydrogen activation of LaNi ₅	J Alloys and Compounds 185 369-384 1992
93/088	Gray E Kisi E;	Neutron scattering studies of LaNi ₅ D	2nd Summer School on Neutron Scattering 127 1994 Zuoz Switzerland
94/124	Simpson R Chan A; McTainsh G; Vowles P; Cohen D; Bailey G	Source apportionment of PM2.5 and PM10 aerosols in Brisbane (Australia) by receptor modelling	Atmos Environ 33 3251-3268 1999
94/124	Simpson R Chan A; McTainsh G; Vowles P; Cohen D; Bailey G	Characteristics and sources of PM10 aerosols in Brisbane, Australia	International Symposium of Environmental Chemistry and Toxicology July 80 1996 Sydney Australia
94/124	Simpson R Chan A; Vowles P; McTainsh G; Cohen D; Bailey G	Use of a modified Walkley-Black method to determine the organic and elemental carbon content of urban aerosols collected on glass fibre filters	Chemosphere 31 4403-4411 1995
94/124	Simpson R Chan A; McTainsh G; Vowles P; Cohen D; Bailey G	Applications of PIXE analysis to urban aerosol samples collected on Whatman 41 filters	J Environ Analyt Chem 68 33-45 1997
95/097	Simpson R Chan A; McTainsh G; Vowles P; Cohen D; Bailey G	Source apportionment of visibility degradation problems in Brisbane (Australia) using the multiple linear regression techniques	Atmos Environ 33 3237-3250 1999
97/130	Simpson R Chan A; McTainsh G; Vowles P; Cohen D; Bailey G	The chemical composition and sources of size-fractionated PM10 aerosols in Brisbane, Australia	International Conference Enviro Tox'99 7-10 February 22 1999 Geelong Australia
97/130	Simpson R Chan A; Vowles P; McTainsh G; Cohen D; Bailey G; McOrist G	Simultaneous collection of airborne particulate matter on several collection substrates with a high-volume cascade impactor	Atmos Environ 34 2645-2651 2000
97/130	Simpson R Chan A; Vowles P; McTainsh G; Cohen D; Bailey G; McOrist G	Characterisation and source identification of PM10 aerosol samples collected with a high volume cascade impactor in Brisbane (Australia)	Science of the Total Environment 262 5-19 2000
98/013	Gray E Blach T	Nitrogen-induced degradation of $\mathrm{Nd_2Fe_{14}B}$	J Magn Magn Mater 177-181 985 1998
98/013	Gray E Wu E; Kisi E	Modelling dislocation-induced anisotropic line broadening in Rietveld refinements using a Voigt function. I: General principles	J Applied Crystallography 31 356 1998

98/013	Gray E Kisi E	Structure determination by neutron powder diffraction	Complementarity Between Neutron and Synchrotron X-Ray Scattering (Proceedings of the Sixth Zuoz Summer School on Neutron Scattering) World Scientific, "Structure determination by neutron powder diffraction". 61-82 1998 Singapore
99/037	Perera S Rowen C	Radiation degradation of MG rubber studied by dynamic mechanical analysis and solid state NMR	Polymer 41 323-334 2000
99/038	Chan A McTainsh G; Simpson R; Vowles P; Cohen D; Bailey G	Primary and secondary contributions of different emission sources to airborne particles in Brisbane, Australia	7th International Conference on Atmospheric Sciences and Applications to Air Quality 31 October - 2 November 32 2000 Taipei Taiwan
99/039	Gray E Pitt M; Kisi E; Hunter B	<i>In-situ</i> neutron diffraction study of the LaNi ₅ -D phase diagram during activation	J Alloys and Compounds 293- 295 118 1999
James C	Cook University		
98/143R	Carter R Dunbar G; Dickens G	Sediment flux across the great barrier reef shelf to the Queensland trough over the last 300 ky	Sedimentary Geology 133 49-92 2000
98/159R	Watchman A Jones R	Dating rock images in the tropical monsoon region of northern Australia	Australian Aboriginal Studies 2 64-70 1998
00/038	Dickens G Dunbar G; Carter	Sediment flux from the Great Barrier Reef platform: quantified Queensland trough	Sedimentary geology 133 49-92 2000
PGRA	Patterson B Anderson P; Anderson R; Keene F; Yeomans B	One-electron reduced forms of a series of ruthenium(II) diimine complexes	International Chemical Congress of Pacific Basin Societies December 54 2000 Honolulu, Hawaii
PGRA	Patterson B Anderson R; Keene F	Protonation sudies of reduced ruthenium(II) complexes with polypyridyl ligands	Radiation Conference 3 2000 Lucas Heights Australia 0- 9577217-3-0
PGRA	Patterson B Anderson P; Anderson R; Furue M; Junk P; Keene R; Yeomans B	Protonation studies of reduced ruthenium(II) complexes with polypyridyl ligands	Inorg Chem 39 2721-2728 2000
La Trobe	University		
99/045	Riley J Gard F; Usher B; Prince K	Studies of the ZnSe/GaAs interface using SIMS	Conference on Optoelectronic and Microelectronic Materials and Devices 422-425 1999 0-7803-4513-4
99/045	Riley J Gard F; Usher B; Prince K; Burke P	Quantitative study of elemental inter-diffusion across ZnSe/GaAs interface by using SIMS	11th NTA/VSA Conference 24-26 November 99-102 1999 Lucas Heights 1325-1694
Hon Fel	Parsons P	Hormesis: an adaptive expectation with emphasis on ionizing radiation	J Applied Toxicology 20 103-112 2000
Hon Fel	Parsons P	Low level exposure to ionising radiation: do ecological and evolutionary considerations imply phantom risks	Perspectives in Biology and Medicine 43 57-68 1999
PGRA	Gard F May M; Riley J; Usher B	RHEED investigation of MBE growth of ZnSe epilayer on GaAs (001) B	11th International Semiconducting and Insulating Materials Conference (SIMC-XI 2000) 3-7 July 2000 Canberra Australia

PGRA	Gard F Riley J; Prince K	Studies of the ZnSe/GaAs interface using SIMS	Conference on Optoelectronic and Microelectronic Materials and Devices (COMMAD'98) 14-16 December 1998 Perth Australia
PGRA	Gard F Riley J, Usher B; Prince K; Burke P	Quantitative study of elemental inter-diffusion across ZnSe/GaAs interface by using SIMS	11th Australian Conference on Nuclear Techniques of Analysis and 5th Vacuum Society of Australia Congress 24-26 November 99 1999 Sydney Australia
Macquai	rie University		
97/201R	Brierley G Fryirs K	A fluvial sediment budget for upper Wolumla catchment, South Coast, New South Wales	Australian Geographer 29 107- 124 1998
97/201R	Brierley G Fryirs K	The character and age structure of valley fills in upper Wolumla Creek catchment, south coast, New South Wales, Australia	Earth Surface Processes and Landforms 23 271-287 1998
97/201R	Brierley G Brooks A	Geomorphic responses of lower Bega River to catchment disturbance 1851-1926	Geomorphology 18 291-304 1997
97/201R	Brierley G Fryirs K	Tributary-trunk stream relations in a cut-and fill landscape: a case study from Wolumla catchment, New South Wales, Australia	Geomorphology 28 61-73 1999 International Symposium on Antarctic Earth Sciences July 123 1999 Wellington New Zealand 0-908654-92-8
98/027	Gore D Augustinus P; Colhoun E; Leishman M; Rhodes E; Zwartz D	Bunger Hills - partly ice free at last glacial maximum	International Symposium on Antarctic Earth Sciences July 123 1999 Wellington New Zealand 0-908654-92-8
98/027	Gore D Lehmann C; Bell K	Fossils in till at Vetfold and Bunger Hills – contrasts in distribution and abundance	International Symposium on Antarctic Earth Sciences July 123 1999 Wellington New Zealand 0-908654-92-8
99/046	Cant N Patterson M; Angove D	The effect of carbon monoxide on the oxidation of four C_6 to C_8 hydrocarbons over platinum, palladium and rhodium	Environmental 25 47-57 2000
99/046	Cant N Angove D	Position dependent phenomena during the deactivation of three-way catalytic converters on vehicles	Catalysis Today 63 371-378 2000
99/046	Cant N Angove D; French D; Kinealy K	The effect of temperature on a ceria-alumina- baria-cordierite monolith combination under oxidising and reducing conditions	Applied Catalysis A: General 194-195 27-34 2000
99/1558	Brierley G Ferguson R	Downstream changes in valley confinement as a control on floodplain morphology, lower Tuross River, New South Wales, Australia	Varieties of Fluvial Form 377-407 1999
99/155S	Brierley G Cohen T	Channel instability in a forested catchment, East Gippsland, Australia	Geomorphology 32 109-128 2000
99/155S	Brierley G Ferguson R	Levee morphoogy and sedimentology along the lower Tuross River, southeastern Australia	Sedimentology 46 627-648 1999
99/1558	Brierley G Fryirs K	Slope-channel decoupling in Wolumla catchment, New South Wales, Australia: the changing nature of sediment sources following European settlement	Catena 35 41-63 1999
99/155S	Brierley G Cohen T; Brooks A	Post-European changes to the fluvial geomorphology of Bega catchment, Australia: implications for river ecology	Freshwater Biology 41 1-10 1999

	DIOOKS A	metamorphosis of lower bega river	2000
Monash	University		
92/062	Finlayson T Griffiths J; Gross A; Kisi E	Stress-induced tetragonal orthorhombic transformation in Mg-PSZ	Science and Technology of Zirconia V 77-85 1993
92/062	Finlayson T Kisi E; Griffiths J; Gross A	Creep of magnesia partially stabilised zirconia at room temperature	J American Ceramic Society 77(3) 671-624 1994
95/R137	David B Roberts R; Tuniz C; Jones R; Head J	New optical and radiocarbon dates from Ngarrabullgan Cave, a Pleistocene archaeo- logical site in Australia: implications for the comparability of time clocks and for the human colonization of Australia	Antiquity 71 183-188 1997
97/091	Finlayson T Ersez T; Kennedy S	Polarised neutron scattering investigation of magnetic correlations and spin dynamics in $La_{0.875}Sr_{0125}MnO_{(3+\delta)}$	24th Australian New Zealand Institute of Physics, Condensed Matter Physics Meeting WP19 2000 Wagga Wagga Australia 1037-1214
97/091	Finlayson T Ersez T; Kennedy S	Polarised neutron scattering and magnetic studies of rhomohedral $La_{1\text{-}x}Sr_xMnO_{(3+\delta)}$	18th Nuclear and Particle Physics Conference December 10-15 53 2000 Adelaide Australia 0-9577217-5-7
99/056	Hicks T Mulders A; Ersez T; Kennedy S; Goossens D; Hicks T	Crystal field levels of PrAl ₃ determined with polarised neutron spectroscopy	24th Australian New Zealand Institute of Physics, Condensed Matter Physics Meeting WP6 2000 Wagga Wagga Australia 1037-1214
99/056	Hicks T Goossens D; Wildes A; Ritter C	Ordering and the nature of the spin flop phase transition in MnPS ₃	J Physics: Condensed Matter 12 1845 2000
99/058	Kershaw P Anshari G; Van der Kaars S	Evidence of climatic change in lowland Pemerak peatland forest within the Danau Sentarum wildlife reserve, West Kalimantan over the last 28,000 years BP	2nd International Conference on Science and Technology for the Assessment of Global Climate Change and its Impacts on Indonesian Maritime Continent B2.1-B2.13 1999 Jakarta Indonesia
99/058	Kershaw P Van der Kaars S; Moss P	Implications of continental collision for late Quaternary climates and vegetation in the maritime continent region	Where Worlds Collide: Faunal and Floral Migrations and Evolution in SE Asia-Australasia 43 1999 Armidale Australia
99/058	Kershaw P Van der Kaars S; Anshari G; Penny D; Thamotherampillai A	Glacial lowland vegetation of Sundaland	Where Worlds Collide: Faunal and Floral migrations and Evolution in SE Asia-Australasia Asia-Australasia 1 1999 Armidale Australia
99/059	Cashion J Gagliardi F	Metal extraction using tri-n-butyl phosphate	24th A&NZ Condensed Matter Physics Meeting TP1 2000 Wagga Wagga Australia
99/059	Cashion J McGrath A; Brown L; Hall J	pH dependence of the Au-CN species adsorbed onto activated carbon	International Symposium on the Industrial Applications of the Mössbauer Effect T4a106 2000 Norfolk VA USA
99/059	Cashion J Gagliardi F	Metal extraction using tri-n-butyl phosphate	23rd A&NZ Condensed Matter Physics Meeting TP17 1999 Wagga Wagga Australia

The role of European disturbance in the metamorphosis of lower Bega River

River Management: The Australasian Experience 221-246

Brierley G Brooks A

99/155S

99/059	Cashion J Rule K; Taheri E	The magnetic properties of thin multilayered two-phase magnets	24th A&NZ Condensed Matter Physics Meeting WA4 2000 Wagga Wagga Australia
99/059	Cashion J Thong A; Brown L	Magnetic properties of ball milled $\mathrm{Nd_2Fe_{14}B\text{-}Gd}$	International Conference Applications of the Mössbauer Effect T7-T11 1999 Garmish Partenkirchen
99/059	Cashion J Thong A; Brown L	Magnetic properties of ball-milled $\mathrm{Nd_2Fe_{14}B\text{-}Gd}$ two phase magnets	23rd A&NZ Condensed Matter Physics Meeting TP4 1999 Wagga Wagga Australia
00/105P	McPhail D Menon D; Hallam N	The effects of pH and adsorption on metal speciation and mobility and its relation to heavy metal hyperaccumulation by native Australian flora	Geological Society of Australia 62 10 2000
PGRA	Goossens D Wilson K	A neural network model of an Ising spin glass	Acta Physica Polonica A 97(5) 983-986 2000
PGRA	Goossens D Cussen L; Hicks T	³ He neutron polarising filters – theoretical comparison with supermirrors and Heusler alloy polarisers	Nuclear Instruments and Methods in Physics Research A 440-442 309-320 2000
Queensl	and University of Techno	ology	
00/049P	Frost R Kloprogge J; Szetu J; Russell S; Martens W	Dehydration and dehydroxylation of alumina gels prepared from tri <i>sec</i> butoxyaluminium(III) modified with short chain aliphatic acids	Thermochimica Acta 362(1-2) 37-48 2000
98/039	Frost R Venz P; Kloprogge J; Bartlett J; Woolfrey J	Thermal transformations of titania hydrolysates prepared from tetraisopropoxytitanium	Thermochimica Acta 346 73-82 2000
98/039	Frost R Venz P; Kloprogge J	Chemically modified titania hydrolysates. Part 2 chemical properties	J Non-crystalline Materials 276(1-3) 95-112 2000
98/039	Frost R Venz P; Kloprogge J	Chemically modified titania hydrolysates. Part 1 physical properties	Langmuir 16(11) 4962-4968 2000
99/086	Frost R Kloprogge J; Szetu J	Dehydroxylation and structure of alumina gels prepared from <i>sec</i> butoxyaluminium	Thermochimica Acta 329 47-56 1999
Royal M	lelbourne Institute of Tec	hnology	
98/041	Johnston P Bubb I; El Bouanani M; Cohen D; Dytlewski N	The effects of multiple and plural scattering on heavy ion elastic recoil detection analysis	15th International Conference on the use of accelerators in Research and Industry November 4-7 475 517 1998 Denton Texas 1-56396- 825-8
99/087	Johnston P Franich R; Bubb I; El Bouanani M; Cohen D; Dytlewski N; Siegele R	The effects of large angle plural scattering on heavy ion elastic recoil detection analysis	Nuclear Instruments and Methods in Physics Research B 161-163 314-317 2000
99/088	Sood D Shivalingappa L; Mohan S; Ghantasala M	Analysis of NdFeB thin films prepared by facing target sputtering	11th Australian Conference on Nuclear Techniques of Analysis and 5th Vacuum Society of Australia Congress 270-273 1999 Lucas Heights Australia
99/088	Sood D	Recent research on microfabrication and advanced materials at RMIT	APEC/ITIT Symposium on High Performance Metal Matrix Composites for Manufacturing Technology of Advanced Materials 2-4 March 267-275 1999 Tsukuba

99/088	Sood D Mollica S; Ghantasala M; Kothari R; Evans P; Collins G	RBS and XRD analysis of silicon doped titanium diboride films	11th Australian Conference on Nuclear Techniques of Analysis and 5th Vacuum Society of Australia Congress 147-150 1999 Lucas Heights Australia
99/088	Sood D Wang Y; Ghantasala M; Kothari R; Short K; Evans P; Prince K	Characterisation of magnetron sputtered SmCO ₅ thin films	11th Australian Conference on Nuclear Techniques of Analysis and 5th Vacuum Society of Australia Congress 120-123 1999 Lucas Heights Australia
99/089	Sood D Cantalini C; AtashbarM; LiY; Ghantasala M; Santucci S; Wlodarski W; Passacantando M	Characterization of sol-gel prepared WO_3 thin films as a gas sensor	J Vac Sci & Tech B 17(4) 1873-1879 1999
99/089	Sood D Li Y; Ghantasala M; Galatsis K; Wlodarski W	Oxygen gas sensing and microstructure characterization of sol-gel prepared ${\rm MoO_3\text{-}TiO_2}$ thin films	SPIE international conference on Microelectronics and MEMS-99 364-371 27-29 October 1999
99/089	Sood D Cantalini C; AtashbarM; LiY; Ghantasala M; Santucci S; Wlodarski W; Passacantando M	Characterization of sol-gel prepared WO_3 thin films as a gas sensor	J Vac Sci & Tech B 17(4) 1873- 1879 1999
99/089	Sood D Duong H; Srivastava P; Badwal S	The use of RBS technique in characterising rf-magnetron sputtered perovskite films	11th Australian Conference on Nuclear Techniques of Analysis and 5th Vacuum Society of Australia Congress 173-176 1999 Lucas Heights Australia
99/089	Sood D Ghantasala M	Ion implantation seeding of electroplated permalloy films on silicon	5th International Symposium on Magnetic Materials, Processes, & Devices-Applications to Storage & Micro Electromechanical Systems (MEMS) 98-20 619-632 1999 Boston USA
Southerr	n Cross University		
99/092	McConchie D Walsh S	Determination of trace elements in sedimentary phosphorites with ultraviolet laser ablation ICP-MS	
99/148	Boyd W McGrath R; Higham C	The geoarchaeology of the prehistoric ditched sites of the upper Mae Nam Mun valley N E Thailand. II: stratigraphy and morphological sections of the encircling earthworks	Bulletin of the Indo-Pacific Prehistory Association 18 169-179 1999
99/148	Boyd W McGrath R; Higham C	The geoarchaeology of the Iron Age "moated" sites of the upper Mae Nam Mun valley N E Thailand. I: palaeodrainage, site-landscape relationships and the origins of the "moats"	Geoarchaeology 14 675-716 1999
00/023	Bush R Sullivan L; White I; Prince K	Contemporary pyrite formation at the oxidation front in a coastal floodplain acid sulfate soil	Soil 2000: New horizons for a new century. Australian and New Zealand Second Joint Soils Conference 2 41-42 2000 New Zealand
PGRA	McGrath R Boyd W	A developing chronology for prehistoric moated sites in northeast Thailand	2nd Quaternary Dating Workshop 8-9 April 51 1999 Lucas Heights Australia 0 9577217 06

Swinbu	rne University of Techno	logy	
99/094P	McManus K Krezel Z	Recycled aggregate concrete sound barriers for urban freeways	4th International conference on the environmental and technical implications of construction with alternative material, WASCON 2000 May 31-2 June 884-892 2000 Leeds/Harrowgate UK 0-08-043790-7
00/1828	McManus K Krezel A; Knott R; Aldridge L	Examining porosity of recycled concrete aggregate and recycled aggregate concrete using small angle neutron scattering	3rd Australian National University Australian Small Angle and Surface Scattering Meeting 11-13 October 2000 Canberra Australia ISBN 0957721714
00/182S	McManus K Krezel A	Use of recycled concrete aggregate in road infrastructure	10th Road Engineering Association of Asia and Australasia Conference 4-9 September 1-8 2000 Tokyo
00/182S	McManus K Krezel A	Recycling demolition waste to fight noise pollution	4th Annual Australian Environmental Engineering Research Event 21-24 November 2000 Victor Harbour CD ROM 0642 448 663
Universi	ity of Adelaide		
96/080	Prescott J Murray-Wallace C; Belperio A; Cann J; Huntley D	Late Quaternary uplift history, Mount Gambier region, South Australia	Geomoph N F Suppl Bd 106 41-56 1996
96/080	Prescott J Campbell E; Twidale C; Hutton J	Preliminary investigations of dunes of the Gawler Ranges province, South Australia	Transactions of the Royal Society of South Australia 120(1) 21-36 1996
97/084	Prescott J Bowler J; Duller G; Perret N; Wyrwoll K	Hydrologic changes in monsoonal climates of the last glacial cycle: stratigraphy and lumi- nescence dating of lake woods, NT, Australia	Palaeoclimates 3 179-207 1998
97/084	Prescott J Scholefield R	The red thermoluminescence of quartz: 3-D spectral measurements	Radiation Measurements 30 83-95 1999
99/001	Williams M	Quaternary Australia: extremes in the last glacial-interglacial cycle	Billion-year earth history of Australia and neighbours in Gondwanaland 55-59 2000
00/165	Williams M Adamson D; Talbot M; Aharon P	Quaternary lakes, palaeochannels and dunes in the White Nile Valley	9th Australia and New Zealand geomophology group conference 11-15 101 December 2000 Wanaka New Zealand
00/191	Prescott J Clay R	Cosmic ray dose-rates for luminescence and ESR dating: measured with a scintillation counter	Ancient TL 18 11-14 2000
00/191	Prescott J Franklin A; Robertson G	Comparison of blue and red thermoluminescence from quartz	Radiation Measurements 32 633-639 2000
Universi	ity of Auckland		
95/056	Augustinus P Short S; Pollington M; MacPhail M	Dating the late Cenozoic glacial sequence, Pieman River basin, Western Tasmania	2nd ANZ Meetings on Quaternary Dating February 10 1995 Canberra Australia
96/167	Augustinus P Duller G	Luminescence studies of dunes from NE Tasmania	8th International Conference on Luminescence and Electron Spin Resonance Dating April 34 1996 Canberra Australia

97/161R	Augustinus P Gore D; Colhoun E; Leishman M; Rhodes E; Zwartz D	Bunger Hills - partly ice free at last glacial maximum	8th International Symposium on Antarctic Earth Sciences 5-9 July 123 1998 Wellington New Zealand
97/161R	Augustinus P Duller G	Luminescence studies of dunes from north- eastern Tasmania	Quaternary Science Reviews 16 357-365 1997
97/161R	Augustinus P Short S; Heijnis H	U/Th dating of ferricrete from middle to late Pleistocene glacial sediments	J Quaternary Science 12 295-308 1997
98/054	Sheppard P Sand C	Long distance prehistoric obsidian imports in New Caledonia: characteristics and meaning	C R Acad Sci Sciences de la Terre et des Planetes 331 235-243 2000
98/054	Sheppard P Anson D	Excavations at Vunavaung (SDI), Rakival Village, Watom Island, Papua New Guinea	New Zealand Journal of Archaeology 20 (1998) 95-118 2000
98/058	Wright G Dahm K; Dearnley P	On the nature, properties and wear response of s-phase (nitrogen-alloyed stainless steel) coatings on AISI 316L	Proceedings of the Institution of Mechanical Engineers Part L4 214 181-198 2000
98/058	Wright G Betts A; Dahm K; Dearnley P	Evaluation of the corrosion performance of s-phase coatings	Corrosion and Prevention '97 65- 1-65-10 1997 Melbourne Australia 1328-3901
98/058	Wright G Liang J; Dahm K; Liu Z; Gao W	Corrosion-wear behaviour of s-phase coatings with different nitrogen contents	2nd International Conference Advanced Materials Development and Performance 744-749 1999 Tokushima 4-9980810-20
98/058	Wright G Liang J; Dahm K; Liu Z; Gao G	Corrosion-wear of modified stainless steels	Corrosion and Prevention 2000 111.1-111.8 2000 Melbourne Australia
98/058	Wright G Clarke C; Jordan L; Dahm K	Characterisation of the corrosive wear resistance of novel stainless steel coatings produced by unbalanced magnetron sputtering	IPENZ Annual Conference 104- 109 1998 Auckland New Zealand
98/166	Nichol S Chague-Goff C; Jenkinson A; Heijnis H; Hayward B	150 years of change in a New Zealand estuary: earthquake, floods, humans and tsunami	International Geological Correlation Programme - Project 437: Coastal Interactions During Sea-level Highstands 31 October – 3 November 21-24 2000 Puerto Madryn Argentina
98/166	Nichol S Chague-Goff C; Ditchburn R; Trompetter W; Sutherland V	Earthquake and human impact on the sedimentology and geochemistry of Ahuriri Estuary, Hawkes Bay	Institute of Geological and Nuclear Sciences Report 98/23 43 1998
98/166	Nichol S Chague-Goff C; Jenkinson A; Heijnis H	Signatures of natural catastrophic events and anthropogenic impact in an estuarine environment, New Zealand	Marine Geology 167 285-301 2000
99/007	Augustinus P Gore D; Rhodes E; Zwartz D; Colhoun E	Late Pleistocene glacial history of the Bunger Hills, east Antarctica	15th International Association for Quaternary Research Congress 3-11 August 69 1999 Durban Republic of South Africa
99/007	Augustinus P Fink D; Hannan D	$^{10}\mathrm{Be}$ exposure ages for the Quaternary glacial sequences, Pieman River basin, Tasmania	15th International Association for Quaternary Research Congress 3-11 August 13 1999 Durban Republic of South Africa
99/007	Augustinus P Watson M; Nichol S	Ground penetrating radar imaging of raised beaches, McMurdo Sound, Antarctica	8th International Symposium on Antarctic Earth Sciences 5-9 July 32 1999 Wellington New Zealand
99/007	Augustinus P Duller G	Luminescence and radiocarbon dating of fossil marine sediments, Bunger Hills, east Antarctica	8th International Symposium on Antarctic Earth Sciences 5-9 July 94 1999 Wellington New Zealand

99/007	Augustinus P Fink D; Hannan D	¹⁰ Be and ³⁶ Cl exposure ages for Quaternary glacial sequences, central plateau and northern valleys, Tasmania, Australia	15th International Association for Quaternary Research Congress 3-11 August 63 1999 Durban Republic of South Africa
99/007	Augustinus P	Dating the late Cenozoic glacial system, Peiman River basin, Western Tasmania, Australia	Quaternary Science Reviews 18 1335-1350 1999
99/007	Augustinus P Dickinson W; Shulmeister J; Holme P; Rowe J; Carter J; Prebble M	Graphical logs, radiometric dates, photographs and background information for Lake Waipori Core 99-1, Taieri Plain, New Zealand	School of Earth Sciences Victoria University of Wellington Research Report 5 98 2000
99/010	Markwitz A Johnson P; Gilberd P; Cohen D; Collins G	IBA of nanoporous surfaces produced by Heimplantation and oxidised by plasma-immersion ion-implantation	Nuclear Instruments and Methods B 161-163 1048 2000
99/013	Metson J Tornquist L; Prince K; Bittar A	Degradation studies of IAD produced ${\rm TiO_xN_y}$ selective solar absorbers	Solar 99 December 1999 Melbourne CD ROM 0-95861920-4
99/013	Metson J Prince K	SIMS depth profiling of ${\rm TiO_xN_y}$ films	Surface and interface anlaysis 28 159-163 1999
99/016	Williams P Marshall A; Ford D; Jenkinson A	Palaeoclimate interpretation of stable isotope data from Holocene speleothems of the Waitomo district, North Island, New Zealand	The Holocene 9(6) 649-657 1999
99/017	Metson J Hyland M; Dunlop H	The surface chemistry of aluminium and its oxides	Advanced Materials Development and Performance November 42- 47 1999 Japan
99/017	Metson J Prince K; Dunlop H	The formation of molecular ions in the analysis by sputtering of oxide surfaces	Advanced Materials Development and Performance November 347- 352 1999 Japan
00/037P	Denny W Siim B; Hicks K; Pullen S; van Zijl P; Wilson W	Comparison of aromatic and aliphatic Noxides of acridine DNA intercalators as bioreductive drugs: cytotoxicity, DNA binding, celular uptake and metabolism	Biochem Pharmacol 60 969-978 2000
00/095	Markwitz A Trompetter W; White G; Brown I; Dytleswki N; Cohen D	Improving the understanding of the synthesis of thin silicon nitride and oxide films	1st International Conference on Advanced Materials Processing 469-474 19 - 23 November 2000 Rotorua New Zealand
Universit	y of Canberra		
99/024	Cheetham A Howard J; Glass F; Michael C; Last A	Optical coherence techniques for plasma Doppler spectroscopy	5th Japan-Australia workshop on plasma diagnostics 10-20 December 1999 Japan
99/024	Cheetham A	H-1 National Facility program and diagnostic systems	11th Gaseous electronics meeting February 32 2000 Armidale
99/024	Cheetham A Harris; Blackwell B; Glass F; Howard J; et al	Status of the H-1 Heliac experiment	12th International stellarator workshop September/October 1999 USA CD ROM
99/024	Cheetham A Michael C; Howard J	Drive circuitry for the MOSS spectrometer	5th Japan-Australia workshop on plasma diagnostics 133-136 December 1999 Japan

Universi	University of Melbourne			
95/052	Sagona A Erkmen M; Sagona C	Sos Höyük 1995	XVIIth International Symposium of Anatolian Excavation, (Kazi Sonuçlari Toplantisi) 137-144 1996	
95/052	Sagona A Erkmen M; Sagona C; Thomas I	Excavations at Sos Höyük 1995: second pre- liminary report	Anatolian Studies 56 27-48 1996	
95/052	Sagona A Sagona C; Özkorucuklu H	Excavations at Sos Höyük - 1994	XVIIth International Symposium of Anatolian Excavation, (Kazi Sonuçlari Toplantisi) 151-156 1995	
95/052	Sagona A	Excavations at Sos Höyük 1995 and 1996	Bulletin of the Archaeological and Anthropological Society of Victoria 5 2-4 1996	
95/052	Sagona A Brennan P	Obsidian in the Bayburt-Erzurum area, Eastern Anatolia	Cultural Interaction in the Near East. Papers read at a Symposium held at the University of Melbourne 5 27-36 1995	
96/081	Rowe C Boundy K; Black A; Kitchener M; Barnden L; Sebben R; Kneebone M; Kassiou M; et al	Localization of temporal lobe epileptic foci with iodine-123 iododexetimide cholinergic neuroreceptor single-photon emission com- puted tomography	Neurology 47 1015-1020 1996	
96/105	Gleadow A O'Sullivan P; Currie L	Tectonic implications of multiple episodes of middle to late Cenozoic denudation of Mt Logan, Yukon Territory, Canada	Earth and Planetary Science Letters 144 251-262 1996	
97/106	Gleadow A Cooper G; Hill K	The application of cross section balancing technology and thermochronology in basin analysis: implications for the Mesozoic development of the eastern Otway Basin	Australian Petroleum Exploration Association Journal 390-414 1997	
97/106	Gleadow A Mitchell M	Identification of multiple detrital sources for Otway Supergroup sedimentary rocks: impli- cations for basin models and chronostrati- graphic correlations	Australian Journal of Earth Sciences 44 743-750 1997	
97/106	Gleadow A Mitchell M; Duddy I; O'Sullivan P	A reappraisal of the age and origin of the Casterton Formation, western Otway Basin, Victoria	Australian Journal of Earth Sciences 44 819-830 1997	
97/106	Gleadow A Peapples P; Wallace W; Hanks C; O'Sullivan P; Layer P	Style, controls, and timing of fold-and-thrust deformation of the Jago stock, northeastern Brooks Range, Alaska	Canadian Journal of Earth Sciences 34 992-1007 1997	
97/106	Gleadow A Coyle D; Wagner G; Hejl E; Brown R; Van den haute P	The Cretaceous and younger thermal history of the KTB site (Germany): apatite fission-track data from the Vorbohrung	Geologische Rundschau 86 203- 209 1997	
97/106	Gleadow A Foster D; Fanning C	Geochronology of the northern Idaho batholith and Bitterroot metamorphic core complex: magmatism preceding and contem- poraneous with extension	Geological Society of America Bulletin 109 379-394 1997	
94/105	Gleadow A	Fission track thermochronology of south- eastern Australia: unique perspectives on the evolution of our continental margins and mountains	Proceedings of the Royal Society of Victoria 108(2) 9-15 1996	
97/106	Gleadow A Hill K	Tectonics, timing and economic deposits in Papua New Guinea	Australian Institute of Mining and Metallurgy 233-234 1997	

Sagona A Erkmen M; Sagona C; Howells S	Murphy inliers Excavations at Sos Höyük 1996: third preliminary report	Conference, Australian Geodynamics Cooperative Research Centre 19-21 February 133 1997 Ballarat Australia
Spikings R; Foster D;		Conference, Australian Geodynamics Cooperative Research Centre 19-21 February
01 1 4	Denudation and tectonics of the Mt Isa and	Geodynamics and Ore Deposits
Gleadow A Belton D; Brown R	Mesozoic tectonothermal history of the Limpopo belt, Zimbabwe	Intraplate Magmatism and Tectonics of Southern Africa September 3-4 1997 Harare Zimbabwe
Gleadow A Mitchell M; Kohn B; Foster D	Apatite fission track thermochronology of eastern South Australia	Geodynamics and Ore Deposits Conference, Australian Geodynamics Cooperative Research Centre 19-21 February 125 1997 Ballarat Australia
Gleadow A Brown R; Gallagher K	The legends, myths and science of diamond exploration	Chemistry in Australia 64 7-10 1997
Gleadow A Noble W; Belton D; Brown R; Foster D	Evidence for Phanerozoic tectonics in the Zambezi mobile belt and Zimbabwe craton, northern Zimbabwe: a fission track study	Intraplate Magmatism and Tectonics of southern Africa, Geological Society of Zimbabwe, Harare, 8-12 September 37 1997 Harare Zimbabwe
Gleadow A Kohn B; O'Sullivan P; Cox S; Foster D	Recognition and visualisation of basement reactivation in eastern Australia using apatite fission track thermochronology	Geodynamics and Ore Deposits Conference, Australian Geodynamics Cooperative Research Centre 19-21 February 55-58 1997 Ballarat Australia
Gleadow A Kohn B; Gallagher K	From tectonics to topography in eastern Australia: imaging the denudation history of the crust using apatite fission track ther- mochronology	Geodynamics and Ore Deposits Conference, Australian Geodynamics Cooperative Research Centre 19-21 February 13-14 1997 Ballarat Australia
Gleadow A Brown R	Fission track thermochronology, denudation and tectonics	IV International Conference on Geomorphology August/September 1997 Bologna Italy
Gleadow A Feinstein S; Kohn B; Osadetz K; Bezys R; O'Sullivan P	Apatite fission-track thermochronology of the western margins of the Canadian Shield	Israel Geological Society Annual Meeting 19 1997 Kefar Gil'adi
Gleadow A O'Sullivan P; Kohn B; O'Sullivan A	Late Mesozoic and Cenozoic thermotectonic evolution of Tasmania	Geodynamics and Ore Deposits Conference, Australian Geodynamics Cooperative Research Centre 19-21 February 129 1997 Ballarat Australia
Gleadow A Arne D; Worley B; Wilson C; Chen S; Foster D; Luo Z; Liu S; Dirks P	Differential exhumation in response to episodic thrusting along the eastern margin of the Tibetan Plateau	Tectonophysics 280 239-256 1997
Gleadow A Cole F; Bird K; Toro J; Roure F; O'Sullivan P; Pawlewicz M; Howell D	An integrated model for the tectonic development of the northern Brooks Range and Colville Basin, Alaska	Journal of Geophysical Research 102:20 685-20, 708 1997
Gleadow A Mitchell M	Elevated mid-Cretaceous palaeotemperatures in the western Otway Basin: consequences for hydrocarbon generation models	Australian Petroleum Exploration Association Journal 505-523 1997
Gleadow A Kleeman J; Plimer I; Lu J; Foster D; Davidson R	Timing of thermal and mineralisation events associated with the Mole Granite, New South Wales	Geological Society of Australia Special Publication 19 254-265 1997
	Kleeman J; Plimer I; Lu J; Foster D; Davidson R Gleadow A Mitchell M Gleadow A Cole F; Bird K; Toro J; Roure F; O'Sullivan P; Pawlewicz M; Howell D Gleadow A Arne D; Worley B; Wilson C; Chen S; Foster D; Luo Z; Liu S; Dirks P Gleadow A O'Sullivan P; Kohn B; O'Sullivan A Gleadow A Feinstein S; Kohn B; O'Sullivan P Gleadow A Brown R Gleadow A Kohn B; Gallagher K Gleadow A Kohn B; O'Sullivan P; Cox S; Foster D Gleadow A Kohn B; O'Sullivan P; Cox S; Foster D Gleadow A Kohn B; O'Sullivan P; Cox S; Foster D Gleadow A Kohn B; O'Sullivan P; Cox S; Foster D	Riceman J; Plimer I; Lu J; Foster D; Davidson R Gleadow A Mitchell M Gleadow A Cole F; Bird K; Toro J; Roure F; O'Sullivan P; Pawlewicz M; Howell D Gleadow A Arne D; Worley B; Wilson C; Chen S; Foster D; Luo Z; Liu S; Dirks P Gleadow A O'Sullivan P; Kohn B; O'Sullivan P Gleadow A Brown R Gleadow A Brown R; Gallagher K Gleadow A Noble W; Belton D; Brown R; Foster D Gleadow A Noble W; Belton D; Brown R; Foster D Gleadow A Noble W; Belton D; Brown R; Foster D Gleadow A Noble W; Belton D; Brown R; Foster D Gleadow A Noble W; Reston D; Brown R; Foster D Gleadow A Noble W; Reston D; Brown R; Foster D Gleadow A Noble W; Reston D; Brown R; Foster D Gleadow A Noble W; Reston D; Brown R; Gallagher K Gleadow A Noble W; Reston D; Brown R; Foster D Gleadow A Noble W; Reston D; Brown R; Gallagher K Gleadow A Noble W; Reston D; Brown R; Gallagher K Gleadow A Noble W; Reston D; Brown R; Gallagher K Gleadow A Noble W; Reston D; Brown R; Gallagher K Gleadow A Noble W; Reston D; Brown R; Gallagher K Gleadow A Noble W; Belton D; Brown R; Gallagher K Gleadow A Noble W; Reston D; Brown R; Gallagher K Gleadow A Noble W; Reston D; Brown R; Gallagher K Gleadow A Noble W; Belton D; Brown R; Gallagher K Gleadow A Noble W; Belton D; Brown R; Foster D Apatite fission track thermochronology of dexploration The legends, myths and science of diamond exploration Gleadow A Maesozoic tectonothermal history of the

97/189R	Sagona A Parr E; Briggs C	Physical anthropological analysis of skeletons from Sos Höyük	Ancient Near Eastern Studies 36 150-160 1999
97/189R	Sagona A Sagona C	Excavations at Sos Höyük, 1998	XXIth International Symposium of Anatolian Excavation, (Kazi Sonuçlari Toplantisi) 1 143-144 1999
97/189R	Sagona A Erkmen M; Sagona C	Excavations at Sos Höyük, 1996	XIXth International Symposium of Anatolian Excavation, (Kazi Sonuçlari Toplantisi) 1 245-250 1997
97/189R	Sagona A	Recent campaigns at Sos Höyük, Eastern Turkey	Bulletin of the Archaeological and Anthropological Society of Victoria 2 2-4 1998
97/189R	Sagona A Erkmen M; Sagona C	Excavations at Sos Höyük 1997	XXth International Symposium of Anatolian Excavation, (Kazi Sonuçlari Toplantisi) 1 205-206 1998
97/189R	Sagona A Erkmen M; Sagona C; McNiven I	Excavations at Sos Höyük 1997: fourth pre- liminary report	Anatolica 24 31-64 1998
97/189R	Sagona A	The bronze age-iron age transition in northeast Anatolia: a view from Sos Höyük	Anatolian Studies 49 153-157 1999
97/189R	Sagona A	Sos Höyük and the Erzurum Region in late prehistory: a provisional chronology for northeastern Anatolian	Chronologies des pays du Caucase et de l'Euphrate aux IVe-IIIe millenaires, (Varia Anatolica XI), De Broccard in Marro, C and Hauptmann, H (ed) 329-373 2000 Paris France 2-906053-53-8
98/023	Kohn B Belton D; Brown R; Fink D	The first quantitative erosion rate estimates from "the oldest persistinglandforms in the world"	Geological Society of Australia abstracts 58 19-21 2000
98/051	Rowe C Boundy K; Kitchener M; Barnden L; Kassiou M; Katsifis A; Lambrecht R	Ictal ^{99m} Tc-HMPAO SPECT and ¹²³ I-iododexetimide SPECT in temporal lobe epilepsy	SPECT in Neurology and Psychiatry 219-224 1998
98/051	Rowe C Boundy K; Reid M; Kitchener M; Barnden L; Kassiou M; Katsifis A; Lambrecht R	Comparison of cholinergic neuroreceptor SPECT with ¹²³ I-iododexetimide and Tc-99m HMPAO in the early diagnosis of Alzheimer's disease	SPECT in Neurology and Psychiatry 19-25 1998
98/136	Gleadow A Brown R	Geomorphic evolution of the Gondwana landscape during and following fragmentation	J African Earth Sci 27 39-40 1998
98/136	Gleadow A Fletcher J; Foster D; Kohn B; Ramos-Velazquez E	Differential cooling and uplift of the crystalline basement in the La Paz-Los Cabos region, Baja California Sur, Mexico	Geological Society of America, Cordillera Meeting 14 1998
98/136	Gleadow A Hill S; Kohn B	Morphotectonic evolution of the Mundi Mundi escarpment, Broken Hill Block, NSW	Regolith '98 Conference - New Approaches to an Old Continent (3rd Australian Regolith Conference) 2-9 May 44 1998 Kalgoorlie Australia
98/136	Gleadow A Kohn B; O'Sullivan P; Karner G; Weissel J	Late Palaeozoic cooling of southwest Australian terranes inferred from apatite fis- sion track thermochronology	Geol Soc of Australia Abstracts Series No 49 (Proceedings 14th Australian Geological Convention) 253 1998
98/136	Gleadow A Pillans B; Kohn B	The age of Rangitawa Tephra	Geological Society of New Zealand Newsletter 115 45-52 1998

98/136	Gleadow A O'Sullivan P; Kohn B	Episodic late Palaeozoic cooling/denudation along the northeastern Queensland margin	Geol Soc of Australia Abstracts Series No 49 (Proceedings 14th Australian Geological Convention) 345 1998
98/136	Gleadow A O'Sullivan P; Kohn B; Brown R	The palaeoplain model does not work for the southeast Australian passive margin: evidence from apatite fission track thermochronology	
98/136	Gleadow A O'Sullivan P; Kohn B; Pillans B; Pain C	Late Paleozoic to Cainozoic landscape evolution of the North Parkes mine area, New South Wales: constraints from fission track and paleomagnetic data	8th Biennial Conference of the Australia and New Zealand Geomorphology Group 15-20 November 42 1998 Goolwa Australia
98/136	Gleadow A Belton D; Brown R	Modelling fractured landscapes - a solution to the paradox of tectonic stability and synchro- nous denudation	J African Earth Sci 27 24-25 1998
98/136	Gleadow A Cooper G; O'Sullivan P; Sherwood N; Hill K	Assessing maturity and organic oxidation through the integration of fluorescence alteration of multiple macerals (FAMM) and apatite fission track thermochronology (AFTT)	Petroleum Exploration Society of Australia Journal 26 159-168 1998
98/136	Gleadow A Baxter K; Hill K; Cooper G	Quantitative modelling of the Jurassic- Holocene subsidence history of the Vulcan Sub-basin, North West Shelf: constraints on lithosphere evolution during continental breakup	Australian Journal of Earth Sciences 45 143-154 1998
98/136	Gleadow A Foster D; Gray D; Kwak T; Bucher M	Chronology and tectonic framework of turbidite hosted gold deposits in the western Lachlan Fold Belt, Victoria: ⁴⁰ Ar- ³⁹ Ar results	Ore Geology Reviews 13 229-250 1998
98/136	Gleadow A Gray D; Foster D; Gray C; Cull J; Gibson G	Lithospheric structure of the southeast Australian Lachlan Fold Belt along the Victorian global geoscience transect	International Geology Review 40 1088-1117 1998
98/136	Gleadow A O'Sullivan P; Brown R	Effects of crustal cooling on apatite fission- track data: evidence for Miocene climatic change, North Slope of Alaska	Advances in Fission-Track Geochronology, Kluwer Academic Press 255-267 1998
98/136	Gleadow A O'Sullivan P; Kohn B; Mitchell M	Low temperature thermochronology of Phanerozoic reactivation along a fundamental Proterozoic crustal fault: the Darling River lin- eament, Australia	Earth and Planetary Science Letters 164 451-465 1998
98/136	Gleadow A O'Sullivan P; Morwood M; Raza A; Aziz F	Homo erectus, glorified chimp or legitimate ancestor?	Australasian Science 19 28-31 1998
98/136	Gleadow A Belton D; Brown R	Modelling fractured landscapes: a solution to the paradox of tectonic stability and synchro- nous denudation	Journal of African Earth Sciences 27 24-25 1998
98/136	Gleadow A O'Sullivan P; Brown R; Kohn B	The palaeoplain model for passive margins - does it really work for the SE Australian margin?	Regolith '98 Conference - New Approaches to an Old Continent (3rd Australian Regolith Conference) 2-9 May 5 1998 Kalgoorlie Australia
98/136	Gleadow A	Tectonic implications of rapid cooling of	Geological Society of America
	Scott R; Foster D; Lister G	denuded lower plate rocks from the Buckskin-Rawhide metamorphic core com- plex, west-central Arizona	Bulletin 110 588-614 1998

98/136	Gleadow A House M; Farley K; Kohn B	An empirical test of helium diffusion in apatite using borehole data from the Otway Basin, Australia	EOS Transactions Amer Geophys Union 79 (45) 10 November F930 1998
99/047	Gleadow A O'Sullivan P; Orr M;	Episodic late Palaeozoic to recent denudation of the eastern highlands of Australia: evidence from the Bogong High Plains, Victoria	Australian Journal of Earth Sciences 46 199-216 1999
99/047	Gleadow A McInnes B; Farley K; Sillitoe R; Kohn B	Application of apatite (U-Th)/He dating to the determination of the sense and amount of vertical fault displacement at the Chuquicamata Mine, Chile	Economic Geology 94 937-948 1999
99/047	Gleadow A House M; Farley K; Kohn B	An empirical test of helium diffusion in apatite: borehole data from the Otway Basin, Australia	Earth and Planetary Science Letters 170 463-474 1999
99/047	Gleadow A Kohn B; Cox S	Denudation history of the Snowy Mountains: constraints from apatite fission track thermochronology	Australian Journal of Earth Sciences 46 181-198 1999
99/047	Gleadow A Hill S; Kohn B	Morphotectonic evolution of the Mundi Mundi range front, Broken Hill region, western NSW	Regolith'98 319-334 1999 0642 282 706
99/047	Gleadow A Hill K; Raza A	Arc-continent collision in Papua New Guinea: constraints from fission track thermochronology	Tectonics 18 950-966 1999
99/047	Gleadow A O'Sullivan P	Thermochronology, denudation, and variations in paleosurface temperature: a case study from the north slope Foreland Basin, Alaska	Basin Research 11 191-205 1999
99/047	Gleadow A Fletcher J; Kohn B; Foster D	Dating continental rifting in the Southern Gulf extensional province using fission-track thermochronology	Geological Society of America 25-28 October A-301 1999 Denver USA
99/047	Gleadow A Kohn B; House M; Farley K; Raza A	A comparative study of helium diffusion and fission track annealing in apatites: borehole data from the Otway Basin, Australia	Geological Society of Australia Abstracts Series No 53 (The Specialist Group in Tectonics and Structural Geology Field Conference 137-138 1999 Victoria Australia
99/047	Gleadow A Gallagher K; Brown R	The Mesozoic denudation history of the Atlantic margins of southern Africa and southeast Brazil and the relationship to offshore sedimentation	Geological Society London, Special Publications 153 41-53 1999 1-86239-030-4
99/047	Gleadow A Gallagher K; Brown R	Denudation and uplift at passive margins: the record on the Atlantic margin of southern Africa	Transactions Royal Society of London A 357 835-859 1999 1364-503X
99/047	Gleadow A O'Sullivan P; Kohn B; Cranfield L	Fission track constraints on the Mesozoic to recent thermotectonic history of the northern New England orogen southeastern Queensland	NEO Conference 1-3 February 285-293 1999 Armidale 1-86389- 532-9
99/047	Gleadow A Pease V; Foster D; O'Sullivan P; Wooden J; Argent J; Fanning C	The Northern Sacramento Mountains, Part II: exhumation history and detachment faulting	Geological Society London, Special Publications 164 199-238 1999
99/047	Gleadow A Raza A; Brown R; Balance P; Hill K; Kamp P	Thermal history of the early Miocene Waitemata Basin and adjacent Waipapa Group, North Island, New Zealand	J Geology and Geophysics 42 469-488 1999
99/047	Gleadow A Kohn B; Bishop P	Long-term landscape evolution of the south- eastern Australian margin: apatite fission track thermochronology and geomorphology	Australian Journal of Earth Sciences 46 155-156 1999

99/047	Gleadow A Kohn B; Brown R; Gallagher K	Regional imaging of denudation histories: new directions using low-temperature ther- mochronology	Eos Transactions, AGU 80(46) F1038 1999 0096-3941
99/047	Gleadow A Foster D; John B	Quantifying tectonic exhumation in an extensional orogen with thermochronology: examples from the Southern Basin and Range Province	Geological Society London, Special Publications 154 343-364 1999 1-863239-025-8
99/047	Gleadow A Kohn B; Farley K; Pillans B	U-Th/He dating of zircon and apatite from the Pleistocene Rangitawa Tephra, North Island, New Zealand	Eos Transactions, AGU 80(46) F1169-70 1999 0096-3941
99/047	Gleadow A Evenchick C; Crawford M; McNicoll V; Currie L; O'Sullivan P	Early Miocene or younger normal faults and other Tertiary structures in west Nass River map area, northwest British Columbia, and adjacent parts of Alaska	Current Research 1999-A, Geological Survey of Canada 1-11 1999
99/047	Gleadow A Miller L; Dumitru T; Brown R; Gans P	Rapid Miocene slip on the Snake Range–Deep Creek Range fault system, east- central Nevada	Geological Society of America Bulletin 111:6 886-905 1999
99/047	Gleadow A Miller J; Gray D; Gregory R; Foster D	Exhumation of a high pressure terrain during convergent margin tectonism, Oman: structural and geochronological constraints	Exhumation Processes: Normal Faulting, Ductile Flow, and Erosion Geological Society, London, Special Publications 154 241-260 1999
99/047	Gleadow A Morwood M; Aziz F; O'Sullivan P; Nasruddin E; Hobbs D; Raza A	Archaeological investigations at Boa Leza and Dozi Dali, central Flores, Indonesia	Antiquity 73 273-286 1999
99/050	Camakaris J La Fontaine S; Firth S; Lockhart P; Brooks H; Mercer J	Intracellular localization and loss of copper responsiveness of Mnk, the murine homologue of the Menkes protein, in cells from blotchy (Mo blo) and brindled (Mo br) mouse mutants	Hum Mol Genet 8 1069-1075 1999
99/050	Camakaris J White A; Reyes R; Mercer J; Zheng H; Bush A; Multhaup G; Beyreuther K; Masters C; Cappai R	Copper levels are increased in the cerebral cortex and liver of APP and APLP2 knockout mice	Brain Res 842 439-444 1999
99/052	Mulvaney P Wood A	UV-initiated formation of noble metal nanoparticles on zinc oxide quantum dots	Radiation Conference 26-28 November 5 2000 Lucas Heights Australia 0 9577217 3 0
00/034P	Cooper R	A fifty year perspecive on radiation research	Gordon Conference Plymouth New Hampshire July 2000
00/034P	Cooper R	Current developments in radiation chemistry	Radiation 2000 1 2000 Lucas Heights Australia 0-9577217-3-0
00/034P	Cooper R	Radiolytic degradation of halocarbon contaminated waters	Radiation 2000 41 2000 Lucas Heights Australia 0-9577217-3-0
00/054P	Gleadow A Foster D; Raza A	Tectonic exhumation of the eocene Bitterroot metamorphic core complex, Montana and Idaho	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 97 2000 Lorne 0729-011X
00/054P	Gleadow A Weber U; Kohn B; Nelson D	Apatite fission track dating of the northern Western Shield, Western Australia	14th Victorian Universities Earth Sciences Conference Geological Society of Australia 29 September 30 2000 Monash University Australia

00/054P	Gleadow A Kohn B; O'Sullivan P; Brown R; Gallagher K	Fission track imaging of the Australian continent	Geol Soc of Australia Abstracts Series No 59 Proceedings 15th Australian Geological Convention July 176 2000 Sydney Australia
00/054P	Gleadow A Kohn B; O'Sullivan P; Brown R; Gallagher K	Fission track thermotectonic and denudation imaging of the Australian continent	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 131-132 2000 Lorne 0729-011X
00/054P	Gleadow A Belton D; Gallagher K; Brown R	Axial shortening of fission tracks by volume diffusion of lattice defects: explaining empirical annealing data with a physico-chemical model	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 23-25 2000 Lorne 0729-011X
00/054P	Gleadow A Cockburn H; Brown R; Summerfield M; Seidl M	A combined fission-track and cosmogenic isotope analysis approach to quantifying long-term landscape change: an example from the central Namibian continental margin	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 51-54 2000 Lorne 0729-011X
00/054P	Gleadow A Cox S; Kohn B	Visualising tectonic displacements across a reactivated terrane using apatite fission track data: the Snowy Mountains, southeastern Australia	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 55-57 2000 Lorne 0729-011X
00/054P	Gleadow A Feinstein S; Kohn B; Osadetz K; O'Sullivan P	Indications for the tectonics and petroleum generation history of Williston Basin from apatite fission track thermochronology	GeoCanada 2000 – The Millennium Geoscience Summit May 29-June 2 425 2000 Calgary Canada
00/054P	Gleadow A Feinstein S; Kohn B; Osadetz K; Everitt R; O'Sullivan P	Phanerozoic thermotectonics of the Canadian Shield from a one kilometre deep apatite fis- sion track thermochronology profile at Canada's Underground Research Laboratory, Pinawa, Manitoba	GeoCanada 2000 – The Millennium Geoscience Summit May 29-June 2 432 2000 Calgary Canada
00/054P	Gleadow A Feinstein S; Eyal M; Kohn B; Steckler M; Ibrahim K; Khalil B	Fission track thermo-tectonic history of the northern margin of the Arabo-Nubian shield across the Dead Sea transform	The First Stephan Mueller Conference of the European Geophysical Society (EGS) "From Continental Breakup to Collision" 11-16 June 96-97 2000 Dead Sea Israel
00/054P	Gleadow A Osadetz K; Kohn B; Everitt R; Feinstein S; O'Sullivan P	Phanerozoic thermotectonics of the Canadian Shield: a one kilometre deep apatite fission track thermochronology profile at Canada's Underground Research Laboratory, Pinawa, Manitoba	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 263-265 2000 Lorne 0729-011X
00/054P	Gleadow A Brown R	Fission track thermochronology and the long-term denudational response to tectonics	Geomorphology and Global Tectonics 57-75 2000 0-471- 97193-6
00/054P	Gleadow A Brown R; Gallagher K; Summerfield M	Morphotectonic evolution of the South Atlantic margins of Africa and South America	Geomorphology and Global Tectonics 255-281 2000 0-471- 97193-6
00/054P	Gleadow A Cockburn H; Brown R; Summerfield M; Seidl M	Quantifying passive margin denudation and landscape development using a combined fis- sion-track thermochronology and cosmogenic isotope analysis approach	Earth and Planetary Science Letters 179 429-435 2000
00/054P	Gleadow A O'Sullivan P; Gibson D; Kohn B; Pillans B; Pain C	Long-term landscape evolution of the Northparkes region of the Lachlan fold belt, New South Wales: constraints from apatite fis- sion track and paleomagnetic data	Journal of Geology 108 1-16 2000

00/054P	Gleadow A O'Sullivan P; Mitchell M; O'Sullivan A; Kohn B	Thermotectonic history of the Bassian Rise, Australia: implications for the breakup of eastern Gondwana along Australia's south- eastern margins	Earth and Planetary Science Letters 182 31-47 2000
00/054P	Gleadow A O'Sullivan P; Kelley K; Jennings S	Post-mineralization thermotectonic evolution of the region of the Red Dog Pb-Zn-Ag mine, northwest Alaska	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 255-257 2000 Lorne 0729-011X
00/054P	Gleadow A Fletcher J; Kohn B; Foster D	Heterogeneous neogene cooling and uplift of the Los Cabos block, southern Baja California: evidence from fission track thermochronology	
00/054P	Gleadow A Gibson D; O'Sullivan P; Chan R	Middle Cretaceous denudation in the southeast highlands of Australia: possible reconciliation of fission track and geomorphological results	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 113-115 2000 Lorne 0729-011X
00/054P	Gleadow A Hill K; Raza A	New Guinea arc-continent collision: fission track constraints	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 161 2000 Lorne 0729-011X
00/054P	Gleadow A O'Sullivan P; Gibson D; Kohn B	Long-term landscape evolution of the Murray Basin and its eastern margin, New South Wales: evidence for missing middle to upper Cretaceous	Central West Symposium 69-71 2000 Cobar
00/054P	Gleadow A Osadetz K; Kohn B; Everitt R; Feinstein S; O'Sullivan P	Phanerozoic epeirogeny in the Canadian Shield: a deep apatite fission-track ther- mochronology profile, Pinawa, Manitoba	The First Stephan Mueller Conference of the European Geophysical Society (EGS) "From Continental Breakup to Collision" 11-16 June 101 2000 Dead Sea Israel
00/054P	Gleadow A Fletcher J; Kohn B; Foster D; Mendoza-Borunda R	Slip history and tectonic significance of a major off-axis fault array in the southern Gulf Extensional Province: evidence from low-temperature thermochronology	
00/054P	Gleadow A O'Sullivan P; Kohn B; O'Sullivan A	Mesozoic to Cenozoic thermotectonic evolution of Tasmania: reconciling geological observations with thermochronology data from within a triple rift system	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 251-253 2000 Lorne 0729-011X
00/054P	Gleadow A Osadetz K; Kohn B; Feinstein S; Price R	Aspects of foreland belt thermal and geological history in the southern Canadian Cordillera from fission-track data	GeoCanada 2000 – The Millennium Geoscience Summit, May 29-June 2 Abstract No 434 2000 Calgary Canada
00/054P	Gleadow A Raza A; Kohn B; Hamor- Vido M	An insight into the thermal evolution of Neogene-Quaternary Pannonian Basin, Hungary, as unravelled by new apatite fission track data	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 279-281 2000 Lorne 0729-011X
00/054P	Gleadow A Spikings R; Kohn B; Foster D	⁴⁰ Ar/ ³⁹ Ar and apatite fission track thermochronology of Palaeoproterozoic cratons in NE Australia	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 297-299 2000 Lorne 0729-011X

00/054P	Gleadow A Weber U; Kohn B; Nelson D	Apatite fission track thermochronology of the northern Western Shield, Australia	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 341-343 2000 Lorne 0729-011X
00/054P	Gleadow A Weber U; Kohn B; Nelson D	The Phanerozoic thermotectonic evolution of the northern western Australian shield: evi- dence from apatite fission track ther- mochronology	Geol Soc of Australia Abstracts Series No 59 Proceedings 15th Australian Geological Convention July 528 2000 Sydney Australia
00/054P	Gleadow A O'Sullivan P; Gibson D; Kohn B; Pillans B; Pain C	Constraining long-term landscape evolution using fission track and paleomagnetic data: an example from the Lachlan fold belt, Australia	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 247-249 2000 Lorne 0729-011X
00/054P	Gleadow A Osadetz K; Kohn B; Feinstein S; O'Sullivan P	Clues to the origin, tectonics and hydrocarbon generation history of Williston Basin from apatite fission track thermochronology	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 259-262 2000 Lorne 0729-011X
00/054P	Gleadow A Osadetz K; Kohn B; Feinstein S; Price R	Aspects of foreland belt thermal and geological history in the southern Canadian Cordillera from fission-track and organic maturity data	The First Stephan Mueller Conference of the European Geophysical Society (EGS) "From Continental Breakup to Collision" 11-16 June 102 2000 Dead Sea Israel
00/054P	Gleadow A House M; Kohn B; Farley K; Raza A	(U-Th)/He thermochronometry in southeastern Australia: confirmation of laboratory diffusion experiments and insights into the Cenozoic thermal history of the Otway Basin	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 169-171 2000 Lorne 0729-011X
00/054P	Gleadow A Kohn B; Farley K; Pillans B	(U-Th)/He and fission track dating of the Pleistocene Rangitawa tephra, North Island, New Zealand: a comparative study	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 207-208 2000 Lorne 0729-011X
00/054P	Gleadow A Kohn B; Feinstein S; Eyal M; Steckler M; Ibrahim K; Khalil B	Phanerozoic thermo-tectonic history of the northern margin of the Arabo-Nubian Shield across the Dead Sea Transform	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 209-211 2000 Lorne 0729-011X
00/054P	Gleadow A Kohn B; O'Sullivan P	Phanerozoic denudation history of southwest Australian crystalline terranes inferred from apatite fission track thermochronology	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 213-215 2000 Lorne 0729-011X
00/054P	Gleadow A Kohn B; Brown R; O'Sullivan P; Gallagher K	Low temperature thermochronology: from tectonics to landscape	GeoCanada 2000 – The Millennium Geoscience Summit, May 29-June 2 Abstract No 964 2000 Calgary Canada
00/054P	Gleadow A Noble W; Foster D	Post Pan African tectonic evolution of eastern Africa: an apatite fission track study	9th International Conference on Fission Track Dating and Thermochronology, Geological Society of Australia 245 2000 Lorne 0729-011X
00/153P	Tregloan P Funston A; McFadyen W	Studies in the development of a photoactivated cytotoxin	Abstracts of The Royal Australian Chemical Institute, Inorganic Chemistry Division Conference, IC2000/11RACIC PT3 2000

00/153P	Tregloan P Cooper R; Funston A; Laurence G; McFadyen W; Webb D	Development of a pulse radiolysis control system for the ARPANSA LINAC facility	Radiation 2000 57 2000 Lucas Heights Australia 0-9577217-3-0
PGRA	Funston A McFadyen W; Tregloan P	Radiation induced dissociation of cobalt and chromium complexes	Radiation Conference 21 1998 Melbourne 0-9598472-8-6
PGRA	Funston A McFadyen W; Tregloan P	Pulse radiolysis studies in the development of a photoactivated cytotoxin	Joint Meeting of Inorg Div of the Royal Aust Chem Institute & the Inorg & Organometallic Specialist Group of the New Zealand Institute of Chem W50 1999 0-473-05724-7
PGRA	Funston A McFadyen W; Tregloan P	Studies in the development of a photoactivated cytotoxin	The Royal Australian Chemical Institute, Inorganic Chemistry Division Conference, IC2000/11RACIC PT3 2000
PGRA	Funston A McFadyen W; Tregloan P	Radiation induced ligand loss from cobalt complexes	Radiation Conference 2 2000 Lucas Heights Australia 0-9577217-3-0
PGRA	Funston A Gable R; McFadyen D; Tregloan P	The preparation of a mixed-ligand cobalt(III) complex of DPPZ and ethylenediamine: crystal structures of $[Co(en)_2(DPPZ)]$ ($CIO_4)_3.0.5H_2O$, $[Co(en)_2(bpy)]Br(CIO_4)_2$ and $[Co(en)_2(phen)]Br_3$	Australian Journal of Chemistry 52 817-822 1999
PGRA	Karagiannis T Lobachevsky; Martin R	Iodine-125 and gamma-irradiation induced strand breaks in plasmid DNA; analysis of relative efficiency of free and DNA bound ¹²⁵ I and gamma-irradiation	Radiation Conference 45 26-28 November 2000 Lucas Heights Australia 0 9577217 3 0
PGRA	Karagiannis T Lobachevsky; Martin R	Cellular uptake, nuclear localization and cytotoxicity of ¹²⁵ I-labelled DNA minor groove binding ligands in K562, human erythroleukaemic cells	Radiation Conference 36 2000 Lucas Heights Australia 0 9577217 3 0
PGRA	Karagiannis T Lobachevsky P; Martin R	Cytotoxicity of an ¹²⁵ I-labelled DNA ligand	3rd Peter MacCallum Cancer Institute Symposium, Initiation and Progression of Cancer November 7-10 40 1999 Melbourne Australia
PGRA	Karagiannis T Lobachevsky P; Martin R	Monte Carlo model to simulate the effects of DNA damage resulting from accumulation of ¹²⁵ I decays during development of colonies and clonogenic survival assays	19th AINSE Radiation Chemistry Conference, 16th AINSE Radiation Biology Conference & 7th Meeting of the Society for Free Radical Research Australasia 72 1998 Melbourne Australia 0-9598472-8-6
PGRA	Karagiannis T Lobachevsky P; Martin R	Cytotoxicity of ¹²⁵ I-labelled DNA ligand	19th AINSE Radiation Chemistry Conference, 16th AINSE Radiation Biology Conference & 7th Meeting of the Society for Free Radical Research Australasia 47 1998 Melbourne Australia 0-9598472-8-6
PGRA	Karagiannis T Lobachevsky P; Martin R	Cytotoxicity of an ¹²⁵ I-labelled DNA ligand	ACTA Oncologica 39(6) 681-685 2000

Universit	ty of New England		
96/010R	Morwood M Roberts R; Walsh G; Murray A; Olley J; Jones R; et al	Luminescence dating of rock art and past environments using mud-wasp nests in northern Australia	Nature 387 696-699 1997
97/010	Fewell M Kumar S; Baldwin M; Haydon S; Short K; Collins G; Tendys J	The effect of hydrogen on the growth of the nitrided layer in rf-plasma-nitrided austenitic stainless steel AISI 316	Surf Coat Technol 123 29-35 2000
99/116	Grave P Theunissen R; Bailey G	Doubts on diffusion: a non-destructive geochemical assessment of the assumed Indian origin of agate and carnelian beads in Iron Age Southeast Asia	World Archaeology 32 84-105 2000
PGRA	Priest J Baldwin M; Kumar S; Fewell M; Prince K; Short K	Rf plasma nitrided AISI 316 stainless steel examined by scanning electron microscopy and secondary ion mass spectrometry	Thin Solid Films 345 108 1999
PGRA	Priest J Collins G; Short K; Fewell M; Baldwin M	Low-pressure rf plasmas: a versatile nitriding environment	22nd AINSE Plasma Science and Technology Conference 45 1999 Lucas Heights Australia
PGRA	Priest J Fewell M; Short K; Collins G	Advances in PI ³ and low temperature nitriding	Australian European Plasma Surface Engineering 99 34 1999
PGRA	Priest J Fewell M; Mitchell D; Short K; Collins G	The nature of expanded austenite	Australian European Plasma Surface Engineering 99 81 1999
Universit	ty of New South Wales		
97/051	Stewart G Harker S	An overview of ¹⁶⁹ Tm Mössbauer results for ceramic Tm ₂ BaCoO ₅ and Tm ₂ BaNiO ₅	21st ANZIP condensed matter physics meeting February TP37 1997 Pakatoa New Zealand
97/051	Stewart G Harker S	A Mössbauer spectroscopy study of the intermetallic series $\rm La_{1x}Tm_xNi_9Si_2$	21st ANZIP condensed matter physics meeting February WP39 1997 Pakatoa New Zealand
98/070P	Rosen R El Hajje R	A simultaneous measurement of the angular distribution, mass and kinetic energy of ²³⁵ U and ²³² Th fission fragments	PhD Thesis 2000
98/070P	Rosen R El Hajje R	The interdependence of fission fragment angular and mass distributions	18th Nuclear and Particle Physics Conference December 10-15 38 2000 Adelaide Australia 0-9577217-5-7
98/072	Haneman D Yuan J; Andrienko I; Siegele R; Evans P	Electroluminescence and nature of lightly spark-processed silicon	Semiconductor Science and Technology 13 615-621 1998
99/071	Campbell S Kaczmarek W; Hofmann M	Mössbauer insight to metallurgy; materials science and engineering	Hyperfine Interactions 126(1-4) 175-186 2000 0304-3834
99/072	Stewart G Harker S; Strecker M; Wortmann G	A Mössbauer spectroscopy investigation of the Immm-phase nickelates Gd_2BaNiO_5 and Tm_2BaNiO_5	Physical Review B 61 17-26 2000
99/076	Milthorpe B Miao X; Ruys A; Sorrell C	Bone bonding to inert and bioactive ceramics	Transactions 6th World Biomaterials Conference 15-20 May 1330 2000 Hawaii
99/077	Hutchison W Prandolini M; Chaplin D; Harker S; Bowden G; Bleaney B	A low temperature study of electronic and nuclear states in $YbVO_4$ by NMR thermally detected by nuclear orientation	Physica B 284-288 1712-1713 2000 0921-4526

99/080	Box G Taha G	A study of aerosol properies using a multi- spectral radiometer in Sydney	15th International Clean Air Conference 210-214 2000
99/080	Box G Taha G; Stelcer E; Garton D; Cohen D	The measurement and sources of fine particle elemental carbon at several key sites in NSW over the past eight years	15th International Clean Air Conference 26-30 November 485-490 2000 Sydney Australia
99/144	Burford R Shirodkar B	Thermoplastic elastomer IPNs using radiation methods	Radiation Conference 26-28 November 16 2000 Lucas Heights Australia 0-9577217-3-0
99/144	Burford R Shirodkar B	Thermoplastic elastomer IPNs using gamma radiation	23rd Australian Polymer Symposium 28 November - 2 December Poster 2/7 1999 Geelong Australia
00/025P	Campbell S Hofmann M; Kennedy S	Competing magnetic interaction in $\text{La}_{0.8}\text{Y}_{0.2}\text{Mn}_2\text{Si}_2$ - coexistence of canted ferromagnetism and antiferromagnetism	Journal of Physics: Condensed Matter 12 3241-3254 2000
00/025P	Campbell S Zhang H; Li H-S; Hofmann M; Edge A	Mössbauer study of rare-earth intermetallic compounds $R_3T_{29}Si_4B_{10}$	Journal of Physics: Condensed Matter 12 5021-5032 2000
00/025P	Campbell S Zhang H; Edge A	Formation of the rare-earth intermetallic compounds $R_3T_{29}Si_4B_{10}$	Journal of Physics: Condensed Matter 12 L159-L166 2000
00/128	Rossleigh M Roman M; Angelides S; Walker B; Dixon J	The staging and management of lung tumours using F-18 FDG coincidence detection	Eur J Nucl Med 27 1166 2000
00/129	Rossleigh M Roman M; Angelides S; Walker B; Dixon J	The efficacy of F-18 FDG coincidence detection in the staging and management of lung neoplasms	Nuclear Medicine Communications 21 474 2000
00/144	Stewart G Harker S; Strecker M; Wortmann G	A Mössbauer spectroscopy investigation of the Immm-phase nickelates Gd_2BaCuO_5 and Tm_2BaCuO_5	Phys Rev B 61 6220-6226 2000
00/144	Stewart G Harker S; Gubbens C	Magnetic order and crystal fields in the Pnma phases of Tm_2BaTO_5 (T = Co and Ni)	J Alloys & Compounds 307 70-76 2000
00/144	Stewart G McPherson I; Harker S; Edge A; Chaplin D; Strecker M; Wortmann G	An overview of Mössbauer investigations for some perovskite manganites $R_{2/3}A_{1/3}MnO_3$ (R=La, Gd, Tm; A=Ca, Sr, Ba)	24th ANZIP Condensed Matter Physics Meeting 1-4 February FM5 2000 Wagga Wagga Australia 1037-1214
00/192	Acworth I Jankowski J; Turner I; Soriano R	Interaction among coastal sand-dune aquifers, adjacent wetlands and seawater, New South Wales, Australia	Gambling with Groundwater- Physical, Chemical, and Biological Aspects of Aquifer-stream relations 461-468 2000
Universit	y of Newcastle		
94/095	Kisi E	Rietveld analysis of powder diffraction patterns	Materials Forum 18 135-153 1994
95/079	von Nagy-Felsobuki E Hughes J	Diatomic and triatomic helium clusters seeded with first row atoms	Australian Conference on Physical Chemistry & Sixth Australian Conference on Chemical Reaction Dynamics V36 1995 Canberra Australia
95/079	von Nagy-Felsobuki E Hughes J	Variational calculations of ro-vibrational states of $\mathrm{K}_2\mathrm{Na}^+$	3rd Vacuum Society of Australia Congress 97-99 1995 Newcastle Australia
95/079	von Nagy-Felsobuki E Smart B; Marsden C; Hughes J; Wang F	Ab initio and analytical potential energy hypersurfaces of K ₂ Na ⁺	Australian Conference on Physical Chemistry & Sixth Australian Conference on Chemical Reaction Dynamics V32 1995 Canberra Australia

95/079	von Nagy-Felsobuki E Wang F	Ab initio rovibrational states of the ${\rm ^D3_h}$ and ${\rm ^{C2}_v}$ isotopomers of ${\rm Li^{3+}}$	Spectrochim Acta Part A 51A(11) 1827-1835 1995
96/100	Kisi E Zhang H; Myhra S	A solid solution pumping mechanism for the nitrogenation of titanium during mechanical deformation in air	J Phys D; Applied Physics 29 1367-1372 1996
96/102	von Nagy-Felsobuki E Hughes J	Variational calculations of ro-vibrational states of He $_2\rm C^{2+},\ He_2\rm N^{2+}$ and He $_2\rm O^{2+}$	Fourth World Congress of Theoretically Oriented Chemists A-39 1996 Jerusalem Israel
96/102	von Nagy-Felsobuki E Smart B; Marsden C; Hughes J; Wang F	Ab initio and analytical potential energy functions of $\rm K_2Na^+$	J Mol Struct 376 449-459 1996
96/102	von Nagy-Felsobuki E Smart B; Marsden C; Hughes J; Wang F	Variational calculations of the rovibrational energy levels of ${\rm K_2Na^+}$	Chem Phys Lett 261(1,2) 51-56 1996
97/101	von Nagy-Felsobuki E Wang F; McCourt F	<i>Ab initio</i> potential energy surface and vibrational energies of Li ³ -	Chem Phys Lett 269(1,2) 138-144 1997
97/101	von Nagy-Felsobuki E Hughes J	Theoretical investigations of the electronic structure of HeHO+ and HeHO2+	J Phys Chem A 101(22) 3995-3997 1997
97/101	von Nagy-Felsobuki E Hughes J	<i>Ab initio</i> calculations of the rovibrational states of He ² -C ²⁺	J Mol Struct (THEOCHEM) 398-399 347-358 1997
97/101	von Nagy-Felsobuki E Hughes J	<i>Ab initio</i> investigations of the electronic structure of HeCH ⁺ and HeCH ²⁺	Chem Phys Lett 272(5,6) 313-318 1997
98/085P	Kisi E Gray E; Wu E	Modelling dislocation-induced anisotropic line broadening in rietveld refinements using a voigt function II. Application to neutron powder diffraction	J Applied Crystallography 31 363-368 1998
98/089P	von Nagy-Felsobuki E Wilson D; Sudarko; Hughes J	Ab initio potential energy surface and vibrational energies of the $^3\Sigma_g^-$ state of He ₂ O ²⁺	2nd Australian Conference on Physical Chemistry PO61 1998 Brisbane Australia
98/089P	von Nagy-Felsobuki E Wilson D; Sudarko; Hughes J	Infrared properties of the ${}^2\mathrm{A}_1$ ground electronic state of $\mathrm{He_2C^{3+}}$	2nd Australian Conference on Physical Chemistry PO56 1998 Brisbane Australia
98/089P	von Nagy-Felsobuki E Hughes J	Ab initio study of helium clusters	2nd Australian Conference on Physical Chemistry C14 1998 Brisbane Australia
98/089P	von Nagy-Felsobuki E Hughes J	Ab initio investigations of the electronic structure of HeNH $^{+}$ and HeNH $^{2+}$	Aust J Phys 51(1) 57-66 1998
99/062	von Nagy-Felsobuki E Hughes J	Ab initio structures and stabilities of helide cations: HeX^{n+} (X = B-Ne, Al-Ar and n = 1-3)	Eur Phys J D 6(2) 185-192 1999
99/062	von Nagy-Felsobuki E Wilson D; Hughes J	Rovibrational states and vibrational intensities of the χ $^2\mathrm{A}_1$ state of $\mathrm{He_2C^{3+}}$	Chem Chem Phys 1(12) 2907-2912 1999
99/062	von Nagy-Felsobuki E Hughes J	Ab initio investigation of the electronic structure and stabilities of triatomic helide ions: He_2X^{n+} clusters (where X = B-Ne, Al-Ar and n = 1-2)	J Mol Struct (THEOCHEM) 459(1-3) 67-84 1999
99/062	von Nagy-Felsobuki E Sudarko	Rovibrational spectroscopy of helide cations	3rd Postgraduate Student Conference 67 1999 Newcastle Australia
99/062	von Nagy-Felsobuki E Wilson D; Aldridge L	Polysulfide cations	3rd Postgraduate Conference 53 1999 Newcastle Australia
99/066	Colhoun E Pola J; Barton C; Heijnis H	Late Pleistocene vegetation and climate history of Lake Selina, Western Tasmania	Quaternary International 57-58 5-23 1999

99/066	Colhoun E	Vegetation change during the last interglacial - glacial cycle in western Tasmania	Palaeogeography, Palaeoclimatology and Palaeoecology 155 195-209 2000
99/066	Colhoun E Hopf F; Barton C	Late glacial and Holocene record of vegetation and climate from Cynthia Bay, Lake St. Clair, Tasmania	Quaternary Sciences 15 725-732 2000
00/122	Pearson S Lawson E	Age estimates and stick-nest rat middens	40th AINSE Conference 56 1998 Lucas Heights Australia 0-7313-9711-8
00/122	Pearson S Betancourt J	Unlocking the ecological past from American and Australian rodent middens	Ecological Society of Australia 98 1999 Fremantle Australia 0-909436-08-8
00/122	Pearson S	Late Holocene biological records from the middens of stick-nest rats in the Central Australian arid zone	J Quaternary International 59 39-46 1999
00/158P	von Nagy-Felsobuki E Hughes J; Sudarko; Wilson D	Ab Initio ro-vibrational spectra of the $^1\mathrm{A}_1$ states of $\mathrm{He_2C^{3^+}}$	18th Austin Symposium in Molecular Structure 29 2000 Texas USA
00/158P	von Nagy-Felsobuki E Hughes J; Sudarko	Ab Initio ro-vibrational spectra of $^1\mathrm{A}_1$ States of $\mathrm{He_2C^{2+}}$ and $\mathrm{He_2Si^{2+}}$	18th Austin Symposium in Molecular Structure 65 2000 Texas USA
00/158P	von Nagy-Felsobuki E Wang F; McCourt F	An Eckart-Watson Hamiltonian for linear molecules in the rectilinear displacement w-coordinates and an application to HCN	
00/158P	von Nagy-Felsobuki E Hughes J; Sudarko	Ro-vibrational transition energies and absorption intensities of the 1A_1 states of $\rm H_2O,$ $\rm He_2O^{2+}$ and $\rm He_2S^{2+}$	18th Austin Symposium in Molecular Structure 4 2000 Texas USA
PGRA	Kisi E	Problems in determining the structure of the gamma brass alloy $\text{Cu}_{64.8}\text{Al}_{28.3}\text{Zn}_{6.9}$ by powder and single crystal neutron diffraction	Materials Science Forum 27/28 89-94 1988
PGRA	Kisi E Finlayson T; Griffiths J	Phase proportions in PSZ creep specimens	Materials Science Forum 56-58 351-356 1990
PGRA	Kisi E Browne J	Ordering and structural vacancies in non-stoi- chiometric Cu-Al gamma brasses	Acta Cryst B47 835-843 1991
Universit	y of Queensland		
97/204R	Lourandos H	Greater Australia: colonisation, process and change	Conference on Entering New Landscapes 12 1999 Florida USA
97/204R	Lourandos H	Greater Australia: a long-term spatio-demographic model	Conference on Entering New Landscapes 10 2000 New Mexico USA
97/204R	Lourandos H	Continent of hunter-gatherers: new perspectives in Australian prehistory	Cambridge University Press 1997
97/204R	Lourandos H McNiven I; David B	Long-term aboriginal use of western Victoria: reconsidering the significance of recent Pleistocene dates for the Grampians-Gariwerd region	Archaeology in Oceania 34 83-87 1999
97/204R	Lourandos H David B	Comparing long-term archaeological and environmental trends: north Queensland, arid and semiarid Australia	The Artefact 21 105-114 1998
97/204R	Lourandos H David B; Walt H; Rowe M; Brayer J; Tuniz C	Ordering the cave paintings of the Mitchell-Palmer limestone zone (Australia) for AMS dating	The Artefact 20 57-72 1997

97/204R	Lourandos H	Greater Australia: colonisation from an archaeological perspective	Conference on Entering New Landscapes; the colonisation of empty continents - Australia, the Americans and the Pacific 12 1998 California USA
97/204R	Lourandos H David B	37,000 years and more in tropical Australia: investigating long-term archaeological trends in Cape York Peninsula	Prehistoric Society 63 1-23 1997
97/204R	Lourandos H	Change in Australian prehistory: scale, trends and framework of interpretation	Australian Archaeological Association Annual Conference 1-7 1996
97/204R	Lourandos H	Change in Australian prehistory	Australian Archaeological Association Conference 10 1995 Queensland Australia
99/083	Hill D Li T	Simultaneous FT-NIR and ESR analysis to study the kinetics of photo induced polymerization of vinyl radical polymers	Radiation Conference 26-28 November 22 2000 Lucas Heights Australia 0-9577217-3-0
99/083	Hill D Cardona F	Characterization and properties of the copolymers obtained by the radiation-induced grafting of polystyrene (PSTY) onto poly (tetrafluoroethylene perfluoroproplyinylether) (PFA) substrates	Radiation Conference 26-28 November 21 2000 Lucas Heights Australia 0-9577217-3-0
99/083	Hill D Gamage N	Novel radiation technique for evaluation of coatings durability influence of photomechanical stresses	Radiation Conference 26-28 November 55 2000 Lucas Heights Australia 0-9577217-3-0
99/083	Hill D	Aspects of the radiation chemistry of some fluorinated polymers	Radiation Conference 26-28 November 53 2000 Lucas Heights Australia 0-9577217-3-0
99/083	Hill D Dargaville T	Radiation induced vapour phase grafting of styrene onto fluorinated substrates	Radiation Conference 26-28 November 50 2000 Lucas Heights Australia 0-9577217-3-0
99/083	Hill D Devasahayam S	Identifying the crosslink structures formed in gamma-irradiated ultem using NMR	Radiation Conference 26-28 November 49 2000 Lucas Heights Australia 0-9577217-3-0
99/083	Hill D Faragalla M	Copolymerization of HEMA and VP	Radiation Conference 26-28 November 20 2000 Lucas Heights Australia 0-9577217-3-0
99/083	Hill D Devasahayam S	The power of thermal annealing of gamma- irradiated ultem in disclosing its radiation chemistry using ESR	Radiation Conference 26-28 November 19 2000 Lucas Heights Australia 0-9577217-3-0
99/083	Hill D Perera M	Radiation chemical yields: G values	Polymer Handbook 481-497 1999 0-471-16628-6
99/083	Hill D Forsythe J; Logothetis A; Pomery P Whittaker A	The use of crosslinking promoters on the γ -radiolysis of poly(tetrafluoroethylene-coperfluoromethylvinylether): part II	Journal Applied Polymer Science 75 1447-1452 2000
99/083	Hill D Forsythe J	Radiation chemistry of fluoropolymers	Prog Polym Sci 25 101-136 2000
99/083	Hill D Mohajerani S; Pomery P; Whittaker A	An ESR study of the radiation chemistry of poly(tetrafluoroethylene-co-hexafluoropropylene) at 77 and 300 K	Radiation Phys Chem 59 295-302 2000
99/083	Hill D Preston C; Whittaker A; Hunt S	The radiation chemistry of poly(dimethyl siloxane)	Macromol Symposium Macromolecule-Metal Complexes, Tsuchida, M. (Ed), 156 95-102 2000

99/083	Hill D Forsythe J; Mohajerani S; Whittaker A	Solid state $^{19}\mathrm{F}$ NMR determination of new structure formation in FEP following radiolysis at 300 K and 363 K	Radiation Phys Chem 25 101-136 2000
00/007	Bernhardt P Macpherson B; Martinez M	Discrete dinuclear cyano-bridged complexes	Inorganic Chemistry 39 5203 2000
PGRA	Aberdeen K Lawrie G; Barnes G; Gentle I	The structural characterisation of self-assembled films of dimyristoyl phosphatidylcholine: a neutron reflectivity and Brewster angle microscopy study	Colloids and Surfaces A: Physicochemical and Engineering Aspects 168 13-25 2000
Universi	ty of Sydney		
94/025	Gilbert R Scheren P; Russell G; Sangster D; German A	Chain-length-dependent termination rate processes in free-radical polymerizations. 3. Styrene polymerizations with and without added inert diluent as an experimental test of	Macromolecules 28 3637-3649 1995 Macromolecules 28 6042-6054
		model	1995
94/026	Napper D Hidi P; Sangster D	Reversible swelling of poly(vinyl acetate) particles in sodium dodecyl sulphate solution	Quaternary Science Reviews 14 395-408 1995
95/R138	Haworth R Gale S; Pisanu P	The ²¹⁰ Pb chronology of late Holocene deposition in an eastern Australian lake basin	AINSE/ANSTO Neutron Scattering Workshop 17-18 October 1996
96/018	Fenton R Moussa S; Hunter B; Kennedy B	The polymorphs of bis(glycinato)copper(II)	Lucas Heights Australia The Royal Australian Chemical
96/018	Fenton R Moussa S; Hunter B; Kennedy B	The geometric isomers of bis(glycinato)copper(II) monohydrate	Institute, Inorganic Division National Conference, IC'96 P104/B 1996 Townsville Australia
97/018	Barbetti M Hua Q; Zoppi U; Lawson E	Regional reduction of atmospheric ¹⁴ C by upwelling in the tropical Indian Ocean	17th International Radiocarbon Conference 18-23 June 161 2000 Judean Hills Israel
97/018R	Barbetti M Hua Q; Jacobsen G; Zoppi U; Lawson E	Bomb radiocarbon in annual tree rings from Thailand and Australia	Nuclear Instruments and Methods in Physics Research B 172 359-365 2000
98/101	Fenton R Moussa S; Hunter B; Kennedy B; Piltz R	Structural refinement of cis-bis(L-alaninato)copper(II)	AINSEs 40th Anniversary Conference 2-3 December 37 1998 Lucas Heights Australia 0-7313-9711-8
98/106	Gilbert R Maeder S	Measurement of transfer constant for butyl acrylate free-radical polymerization	Macromolecules 31 4410-8 1998
98/153R	Gale S Haworth R; Short S; Heijnis H	Land use and lake sedimentation on the New England tablelands of New South Wales, Australia	Australian Geographer 30 51-73 1999
98/153R	Gale S Franklin N; Heijnis H	Land use and lake sedimentation during the late Holocene at Redhead Lagoon, east-central New South Wales, Australia	Quaternary Studies Meeting. Regional Analysis of Australian Quaternary Studies: Strengths, Gaps and Future Directions. Department of Geology, The Australian National University 2000 Canberra Australia
98/153R	Gale S Franklin N; Heijnis H	The reconstruction of late Holocene environmental change at Redhead Lagoon, NSW, using a multiple method approach	2nd AINSE Quaternary Dating Workshop 52 1999 Lucas Heights Australia 0-9577217-0-6
99/096	Gilbert R Vorwerg L	Electrosteric stabilization with poly(acrylic) acid in emulsion polymerization: mechanistic understanding through gamma radiolysis	Radiation Conference 26-28 November 17 2000 Lucas Heights Australia 0-9577217-3-0

99/096	Gilbert R Coen E; Leube H; Peach S; Morrison B	Modelling particle formation and growth in emulsion polymerizations	23rd Australasian Polymer Symposium Poster 2/45 1999 Geelong Australia
99/096	Gilbert R Christie D; Congalidis J; Richards J	Spontaneous (thermal) initiation in emulsion polymerization	Polym Mater Sci Eng 80 541-542 1999
99/096	Gilbert R Christie D; Congalidis J; Richards J	Some important aspects of the emulsion polymerization of chloroprene	4th Intl Symposium on Polymers in Dispersed Media P 1-10 1999
99/097P	Kennedy B Moussa S; Fenton R; Piltz R	Hydrogen bonding in <i>cis</i> -bis(L-alaninato)copper(II). A single crystal neutron diffraction study	Inorg Chim Acta 288 29-34 1999
99/097P	Kennedy B Ismunandar	The effect of temperature on cation disorder in $Abi_2Nb_2O_9$ $A=Sr,Ba$	J Materials Chemistry 9 541-544 1999
99/097P	Kennedy B Ikeda T; Sakata M; Takata M; Cookson D; Howard C	Electron and nuclear densities of a pyrochlore $Y_2Sn_2O_7$ studied by the maximum entropy method	Japanese Journal of Applied Physics 38 93-96 1999
99/097P	Kennedy B Vogt T; Woodward P; Hunter B; Prodjosantoso A	Sr ₃ MO ₄ F (M=Al,Ga) - a new family of ordered oxyfluorides	J Solid State Chemistry 144 228-231 1999
99/098	Napper D Hidi P; Sangster D	Production of nanoparticles in dispersed systems	23rd Australian Polymer Symposium 28 November - 2 December E 1-3 1999 Geelong
99/100	James B Falconer I; Kim H; Zhang B; Ibrahim M; Wouter M; Roupillard G	LIF diagnostics for low and high temperature plasmas	5th Australia-Japan Workshop on Plasma Diagnostics 15-17 December 107-112 1999 Naka Japan JAERI-Conf-2000-007
99/104	Fenton R Kim J; Kennedy B; Hunter B	Structural studies of synthetic Pb and Ca apatites	XVIIIth IUCr Congress and General Assembly 4–13 August 1999 Glasgow Scotland
99/106	White P Torrence R; Bird R; Bailey G; Johnson P	Description of the procedures for PIXE/PIGE analysis at ANSTO	International Association for Obsidian Studies Bulletin 23 22 1999
00/045	Fenton R Kim J; Kennedy B; Hunter B	Structural studies of synthetic calcium and lead apatites	Crystal XXI - The Twenty First Meeting of the Society of Crystallographers in Australia 1-4 February 2000 Thredbo Alpine Village Australia
94/025	Gilbert R	Emulsion polymerization: a mechanistic approach	Academic Press, London 1995
00/053	Gilbert R	Polymer science and technology in the past and the future: heroism, exploration and enlightenment	Chinese J Polym Sci 18 189-193 2000
00/053	Gilbert R Subramaniam N; Monteiro M; Taylor J; Simpson-Gomes A	Novel graft copolymers from mechanistically-designed seeded emulsion polymerization	Macromol Symp 152 43-53 2000
00/053	Gilbert R de Bruyn H; Hawkett B	Retardation by oxygen in emulsion polymerization	Polymer 41 8633-8639 2000
00/053	Gilbert R Ganachaud F; Monteiro M; Dourges M; Thang S; Rizzardo E	Living free-radical polymerization and molecular weight characterization of poly(N-iso-propyl acrylamide)	Macromolecules 33 6738-6745 2000
99/096	Gilbert R Vorwerg L	Electrosteric stabilization with poly(acrylic) acid in emulsion polymerization: effect on kinetics and secondary particle formation	Macromolecules 33 6693-6703 2000

00/078P	Kennedy B Kim J; Fenton R; Hunter B	Powder diffraction studies of synthetic calcium and lead apatites	J Chemistry 53 679-686 2000
00/116	Napper D Hidi P; Sangster D	Making PMMA, PMA, PVAc and PSt nano particles using radiation	Radiation Conference 51 2000 Lucas Heights Australia 0-9577217-3-0
PGRA	Franklin N Gale S; Heijnis H	The reconstruction of late Holocene environmental change at Redhead Lagoon, NSW, using a multiple-method approach	2nd Quaternary Dating Workshop 8-9 April 52 1999 Lucas Heights Australia 0-9577217-06
PGRA	Franklin N Gale S; Heijnis H	Land use and lake sedimentation during the late Holocene at Redhead Lagoon, east-central New South Wales	Quaternary Studies Meeting, held at the Australian National University 7-9 February 35-36 2000 Canberra Australia
Universi	ty of Tasmania		
93/047	van Moort J Hotchkis M; Pwa A	EPR and lithogeochemistry of jasperoids in Carlin, Nevada: distinction between auriferous and barren rocks	J Geochem Explor 55 283-299 1995
94/062	van Moort J Pwa A	Electron paramagnetic resonance (EPR) spectroscopy in the search for gold and massive sulphide deposits	30th International Geological Congress 3 63 1996 Beijing
94/062	van Moort J Russell D; Bailey G; Pwa A; Nand A	The use of chemical analysis of bulk samples in exploration lithogeochemistry by simultaneous PIXE/PIGE spectroscopy	IBMM 95 Application of Ion Beam Analysis Workshop 4 1995 Lucas Heights
99/110	van Moort J Russell D	The chemical characterisation of auriferous vein quartz Beaconsfiled gold mine, Tasmania	J Geochem Explor 67 191-200 1999
99/110	van Moort J Pwa A; McQueen K; Scott K	Regolith geochemical exploration using acid insoluble residues as a sample medium for gold and base metal deposits in Cobar region, NSW, Australia	J Geochem Explor 67 15-31 1999
00/104	McMinn A Hallegraeff G; Smith J; Lovell A; Jenkinson A; Heijnis H	Recent appearance of <i>Gymnodinium catenatum</i> at Port Lincoln, South Australia	9th International Conference on Harmful Algal Blooms 38 2000 Hobart Australia no number
Universi	ty of Technology Sydney	/	
99/123	Ray A Peterson V	Effects of zeolite on diffusivity through cement pastes cured at different temperatures	Honours Thesis 1999
99/123	Ray A Peterson V; Siegele R; Bertram W; Adridge L	Strontium binding to cement pastes cured at different temperatures	11th AINSE Conference on Nuclear Techniques of Analysis and 6th Vacuum Society of Australia Congress 262-265 1999 Lucas Heights Australia 1325-1694
99/123	Ray A Peterson V; Prince K; Bertram W; Aldridge L	Caesium diffusion through cement paste cured at different temperatures	11th AINSE Conference on Nuclear Techniques of Analysis and 6th Vacuum Society of Australia Congress 258-261 1999 Lucas Heights Australia 1325-1694
00/086	Lim R Gale S	Copper biokinetics and allozyme genotypes of copper tolerant black-banded rainbowfish, <i>Melanotaenia nigrans</i>	BSc Honours Thesis 2000

Univers	ity of Western Australia		
93/051	Bradshaw D Nagy A	Energetics, osmoregulation and food consumption by free-living desert lizards, Ctenophorus (= Amphibolurus) nuchalis	Amphib-Reptilia 16 25-35 1995
93/051	Bradshaw D Nagy A; Meienberger C; Wooller D	Field metabolic rate of the smallest marsupial mammal, the honey possum (<i>Tarsipes rostratus</i>)	J Mammal 76 862-866 1995
93/051	Bradshaw D Withers C	Water and energy balance of the thorny devil, <i>Moloch horridus</i> (Reptilia: Agamidae): is the devil a sloth?	Amphib-Reptilia 16 47-54 1995
94/076	Bradshaw D Thompson G; Withers C	Energy and water turnover rates of a free-living and captive goanna, <i>Varanus caudolineatus</i> (Lacertilia: Varanidae)	Comp Biochem Physiol 116A 105-111 1997
94/076	Bradshaw D Ambrose J; Withers C; Murphy P	Water and energy balance of captive and free-ranging spinifexbirds (<i>Eremiornis carteri</i>) North (Aves:Sylviidae) on Barrow Island, Western Australia	Aust J Zool 44 107-117 1996
94/076	Bradshaw D Williams J; Schmidt L	Field metabolism and water requirements of spinifex pigeons (<i>Geophaps plumifera</i>) in Western Australia	Aust J Zool 43 1-15 1995
94/076	Bradshaw D Bradshaw F	Reproduction chez les marsupiaux: la vie privée d'un nectarivore strict, le possum à miel <i>Tarsipes rostratus</i>	Energetics of Reproduction in Birds, Mammals and Reptiles: Exploring New Technologies International Workshop 8-11 October 7-8 1996 France
97/087	Bradshaw D Bradshaw F	Measurement of nectar and pollen intake of free-ranging marsupial honey possums (<i>Tarsipes rostratus</i>)	15th Annual Meeting of the ANZ Society for Comparative Physiology & Biochemistry (ANZSCPB) 7 1998 Perth Australia
97/087	Bradshaw D	Ecophysiological studies on desert mammals: insights from stress physiology	Aust Mamm Soc Meeting 8 1998 Perth Australia
97/087	Bradshaw D Goldstein L	Regulation of water and sodium balance in the field by Australian honeyeaters (Aves: Meliphagidae)	Physiol Zool 71 214-225 1998
97/087	Bradshaw D Moro D; Morris D	Integrating ecophysiology with wildlife conservation – an example in rodent research	Aust Mamm Soc Meeting 10 1998 Perth Australia
97/087	Bradshaw D Bradshaw F	Measurement of nectar and pollen intake in free-ranging honey possums (<i>Tarsipes rostratus</i>) in south-western WA	Aust Mamm Soc Meeting 12 1998 Perth Australia
97/087	Bradshaw D Goldstein L	Renal function in red wattlebirds in response to varying fluid intake	J Comp Physiol B 168 265-272 1998
97/087	Bradshaw D King J	Stress physiology of island populations of endangered marsupials	Endoc Soc Aust Annual Sci Meeting 83 1998 Perth Australia
99/127	Bradshaw D Bradshaw F; Everett L	On the rearing of honey possums	WA Nat 22 281-288 2000
99/127	Bradshaw D King J	Stress physiology of island populations of endangered marsupials	14th Congr Europ Soc Comp Endocrinol Faro 89 2000 Portugal
99/127	Bradshaw D Nagy A	Scaling of energy and water fluxes in free-living arid-zone Australian marsupials	J Mammal 81 191-199 2000
99/127	Bradshaw D	Field studies of the nutrition of Australian native animals	Nutrit Soc Aust 24 155-164 2000

00/015	Bradshaw D Bradshaw F	Field energetics and the estimation of pollen and nectar intake in the marsupial honey possum, <i>Tarsipes rostratus</i> , in heathland habitats of south-western Australia	J Comp Physiol B 169 569-580 1999
00/039	Dodson J Intoh M	Prehistory and palaeoecology of Yap, Federated Sates of Miconesia	Quaternary International 59 17-26 1998
00/039	Dodson J Pearson S; Lawson E; Head L; McCarthy L	The spatial and temporal patterns of sticknest rat middens in Australia	Radiocarbon 41 295-308 1999
00/039	Dodson J Field J	Late Pleistocene megafauna and archaeology from Cuddie Springs, south-eastern Australia	Royal Prehistoric Society 65 275-301 1999
00/039	Dodson J Lu J	A late Holocene vegetation and environment record from Byenup Lagoon, south-western Australia	Australian Geographer 31 41-54 2000
Universit	ty of Western Sydney		
95/126	Ng L Garnett J	Radiation activities in the Pacific Rim	Rad Tech Asia 111 1995 Bangkok
96/159	Ng L Garnett J; Bett S; Viengkhou V	Radiation curing in Australia: the world's first UV cured polymer banknote	RadTech '96 Nashville Tenn North America 713 - 721 1996
96/159	Ng L Garnett J; Viengkhou V	Role of additives on UV curing of epoxy resin on wood	J Appli Polym Sci 61 2361 – 2365 1996
97/153	Ng L Garnett J; Viengkhou V	Photoinitiator free UV grafting and its significance in UV banknote technology	RadTech Europe '97 25-32 1997 Paris
97/153	Ng L Garnett J; Viengkhou V	The effect of additives on the enhancement of methyl methacrylate grafting to cellulose in the presence of UV and ionising radiation	Radiat Phys Chem 49 595 – 602 1997
97/153	Ng L Garnett J; Viengkhou V	Radiation curing technologies in Australia	RadTech Asia '97 765-768 1997 Japan
99/132	Osman F Castillo R	Self-focusing of laser beams at fast ignitor inertial fusion with volume ignition	22nd AINSE Plasma Science and Technology Conference 33-34 1999 Canberra Australia 1324-6313
99/132	Osman F Castillo R	Focusing and defocussing of the nonlinear paraxial equation at laser plasma interaction	22nd AINSE Plasma Science and Technology Conference 109-111 1999 Canberra Australia 1324-6313
99/132	Osman F Castillo R; Hora H; Kelly J; McMillian P; Rowlands T; Stening R; Boreham B; Newman S	Inertial confinement fusion and related results	AINSE's 40th Anniversary Conference 51 1998 Lucas Heights Australia 0-7313-9711-8
99/132	Osman F Collins M	Physics of laser-plasma interaction for fundamentals research and application for fusion energy	Environmental Engineering Research Event 285-290 1998 Avoca Beach 0-7334-0519-3
99/132	Osman F Castillo R; Hora H	Relativistic self-focusing of laser beams in plasma	40th Annual Meeting of the Division of Plasma Physics 43(8) 1797-1798 1998 New Oreleans USA 0003-0503
99/133P	Ng L	Effect of solvents on grafting and curing reactions with charge transfer complexes	Radiation Conference 26-28 November 25 2000 Lucas Heights Australia 0-9577217-3-0

99/133P	Ng L Garnett J	Overview of UV and EB curing	Radiation Conference 23 26-28 November 2000 Lucas Heights Australia 0-9577217-3-0
99/133P	Ng L Garnett J; Viengkhou V; Zilic E	Photoinitiator free UV grafting and curing using CT complexes on polypropylene - comparison with cellulose and wool as substrates	RadTech2000 North America 804 2000 Baltomore USA
99/133P	Ng L Garnett J; Viengkhou V; Hennessy I; Zilic E	Charge-transfer complexes in grafting and curing processes initiated by ionising radiation and UV	American Chemical Society Meeting 40(2) 134 1999 New Orleans USA
99/133P	Ng L Garnett J; Viengkhou V; Hennessy I; Zilic E	Significance of grafting in curing processes initiated by UV, excimer and ionising radiation sources	J Radiat Phys and Chem 57 355-359 2000
99/133P	Ng L Garnett J; Viengkhou V; Hennessy I; Shah N; Zilic E	Solvent effects in photografting MMA and CT complexes to cellulose, wool and polypropylene. Significance of studies in radiation curing	RadTech '99 Europe 677 1999 Berlin Germany
99/133P	Ng L Garnett J; Viengkhou V	Grafting of methyl methacrylate to cellulose and polypropylene with UV and ionising radi- ation in the presence of additives including CT complexes	J Radiat Phys and Chem 56 387-403 1999
99/133P	Ng L	Role of additives in wood-polymer composites	Radiation Phys and Chem 55 633-637 1999
99/133P	Ng L Garnett J; Viengkhou V	Novel additives including CT complexes grafting of MMA to polypropylene, cellulose and wool initiated by ionising radiation and UV. Significance of these studies in analogous curing processes	1026 1999 0959-8103
99/133P	Ng L Garnett J; Mohajerani S	Role of additives in wood-polymer composites prepared by radiation and catalytic methods. Relationship to analogous grafting and curing processes	Radiat Phys and Chem 55 633-637 1999
Universit	ty of Wollongong		
94/120	Rozenfeld A Kaplan G; Allen B; Coderre J	Fission converter and MOSFET study of thermal neutron flux distribution in an epithermal neutron therapy beam	Med Phys 26(9) 1989-1999 1999
95/092	Rozenfeld A Kaplan G; Carolan M; Allen B; Kota C; Yudelev M; Maughan R; Coderre J	Macro and micro dosimetry for boron neutron capture therapy with a MOSFET	Advances in Neutron Capture Therapy 1 198-204 1997 0-444 82781-1
97/118	Kane-Maguire L Siu A; David D; Pyne S; Lambrecht R	Kinetics of nucleophilic attack on coordinated organic moieties. Part 32 synthetic and mechanistic studies of the reaction of iodide ion with [(h5-dienyl) Fe(CO) ₃] ⁺ cations (dienyl=C ₆ H ₇ , 2-MeOC ₆ H ₆ , C ₇ H ₉)	J Coord Chem 46 125-143 1998
97/118	Kane-Maguire L Siu A; Lambrecht R; Shani J; Pyne S; Label J	Synthesis, attempted kinetic resolution and evaluation of [123I]-MK-447 analogues as inflammation radiopharmaceuticals	Compd Radiopharm 39 711-729 1997
97/123	Rozenfeld A Bradley P; Bailey M; Reinhard M; Kee K; Saint A; Jamieson D; Lemeilleur F; Satoh S	Charge collection and radiation hardness of a SOI microdosimeter for space and medical applications	IEEE Transactions on Nuclear Science N6 45 2700-2710 1998
97/122	Rozenfeld A Kaplan G; Zealey B; Kron T; Dilmanian A	Si-SiO ₂ interface for characterization of x-ray synchrotron microbeam	Material 98 Conference 401-406 1998 0598812861

97/123	Rozenfeld A Reinhard M; Marinara D	Radiation hardness of high purity detector grade silicon	Material 98 Conference 711-716 1998 0598812861
97/122	Rozenfeld A Kron T; Dugan L; Smith T; Butson M; Kaplan G; Howlet S; Hyodo K	Dose response of various radiation detectors to synchrotron radiation	Phys Med Biology 43 3235-3259 1998
97/122	Rozenfeld A Bradley P; Allen B; Coderre J; Capela J	Performance of silicon microdosimetry detectors in boron neutron capture therapy	Radiation Research 151 235-243 1999
97/123	Rozenfeld A Reinhard M; Alexiev D	Radiation hardness study of high purity detector grade silicon	IEEE Proceedings 97 479-482 1997 0-7803-3374-8
97/122	Rozenfeld A Bradley P	Tissue equivalent correction for silicon microdosimetry detectors in boron neutron capture therapy	Med Phys 25(11) 2220-2225 1998
97/122	Rozenfeld A Carolan M; Mathur J; Allen B	Characterisation and use of MOSFET gamma dosimeters and silicon PIN diode neutron dosimeters for epithermal neutron beam dosimetry	Advances in Neutron Capture Therapy 1 192-197 1997 0 444 82781 1
98/123	Woodroffe C Mulrennan M	Holocene development of the lower Mary River plains, Northern Territory, Australia	The Holocene 8 565-579 1998
99/136	Ionescu M	Critical current density in ion implanted Bi- 2212 crystals	IWCC99 Conference 7-10 July 136 1999 Madison USA
99/136	Ionescu M Gong S; Boldeman J; Dou S	Phase formation in melt-textured Bi-2212 in the presence of uranium oxide	Advances in Cryogenic Engineering 46A 481 2000 0-306- 46398-9
99/137	Horvat J Dou S; Guo Y; Marinaro D; Boldeman J; Weinstein R; Sawh R; Ren Y; Tonies S; et al	Effect of U-doping level on flux pinning and radioactivity in silver-clad Bi2223 tapes using thermal neutron irradiation	Advances in Cryogenic Engineering (Materials) 6 761-767 1999 0-306-46398-9
99/142	Rozenfeld A	Development of semiconduction micro- dosimetry for modern radiation oncology modalities and radiation protection	Radiation Conference 26-28 November 58 2000 Lucas Heights Australia 0-9577217-3-0
99/143	Rozenfeld A Reinhard M; Marinaro D; Alexiev D et al	A system for radiation damage monitoring	IEEE Transactions on Nuclear Science 46 6 1999
99/143	Rozenfeld A Alexiev D; Reinhard M; Mo L	A transient conductance technique for characterisation of deep-level defects in highly irradiated detector-grade silicon	Nuclear Instruments and Methods in Physics Research Section A A 434 103-113 1999
99/143	Rozenfeld A Bradley P	Semiconductor microdosimetry in mixed radiation fields: present and future	Rad Prot Dos N1-4 84 385-388 1999
99/143	Rozenfeld A Kaplan G; Allen B; Carolan M et al	Application of P-I-N diodes and MOSFETs for dosimetry in gamma and neutron fields	Rad Prot Dos N1-4 84 349-352 1999
99/142	Rozenfeld A Kaplan G; Allen B; Dilmanian A; Kron T; Holmes-Siedle A	MOSFET dosimetry of x-ray microbeams	IEEE Trans on Nucl Sci NS-46 1774-1780 1999
00/132P	Rozenfeld A Orion I; Dilmanian F; Telang F; Ren B; Namito Y	Monte Carlo simulations of dose distribution form a synchrotron-produced micro-planar beam array using the EGS4 code system	Med Phys Biol 45 2497-2508 2000
00/132P	Rozenfeld A Kim Q; Morales J; Butson M; Metcalfe P	Measurement of radiotherapy x-ray skin dose on a chest wall phantom	Med Phys 27(7) 1676-1680 2000

00/132P	Rozenfeld A Kaplan G; Allen B; Kron T; Holmes-Siedle A	Improved spatial resolution by MOSFET dosimetry of an x-ray microbeam	Med Phys 27(1) 239-244 2000
00/166	Woodroffe C Kennedy D	Holocene lagoonal sedimentation at the latitudinal limits of reef growth, Lord Howe Island, Tasman Sea	
00/166	Woodroffe C Buman M; Kawase K; Umitsu M	Estuarine infill and formation of deltaic plains, Shoalhaven River	Wetlands 18 72-84 2000
PGRA	Atkinson A	Northeast Queensland: beautiful one daybut then we went to do fieldwork	Quaternary Australasia 17 10-11 1999
PGRA	Cornelius I Rosenfeld A; Bradley P; Kaplan G; Allen B; Flanz J; Goiten M; et al	A new silicon detector for microdosimetry applications in proton therapy	IEEE Transactions on Nuclear Science 47 4 2000
PGRA	Cornelius I Rosenfeld A; Bradley P; Maughan R	A computational technique for simulating ionisation energy deposition by energetic ions in complex targets	
PGRA	Marinaro D	Improvements in the critical currents of high temperature superconductors through an ura- nium doping and thermal neutron irradiation method	
Victoria (University of Technolog	у	
95/127	Cussen L	Recent developments in neutron collimation	AINSE Neutron Scattering Workshop 17-18 October 6 1996 Lucas Heights Australia
94/156	Cussen L Etheridge G; Kennedy S	Characterisation of the spin density wave structures of Mn rich gamma MnNi	Physica B 213 351-353 1995

Performance Indicators for AINSE

1. Objective (1): to provide a mechanism for users in member organisations of AINSE to have access to major nuclear science and engineering and associated facilities at ANSTO and other agreed sites for research purposes

(for example, meet an acceptable level of the Universities' demand for access to such facilities.)

Key Performance Indicator KPI(1)

Percentage of the demand for access to facilities and services required by the Universities which is met through the award of AINSE Grants.

where:

"demand" is determined by the number of eligible projects applying for AINSE Grants.

[The number of eligible projects is determined by the number of applications for AINSE Grants after ineligible projects (as specified in the guidelines for preparing applications) have been taken out by the Secretariat.]

"facilities and services required by the Universities" is the list recommended by the AINSE Specialist Committees and approved by Council (the list is published each year in the Guidelines for preparing AINSE Grant applications).

"Universities" is taken to include all higher education institutions which are members of AINSE.

KPI(1) = (Number of projects awarded AINSE Grants for use of LHSTC facilities and services) divided by (number of eligible projects requesting use of LHSTC facilities and services) expressed as a percentage.

Year	1995	1996	1997	1998	1999	2000	
No. of applications	228	248	247	172	175	233	
Grants awarded	201	207	201	147	159	201	
KPI(1)	88%	83%	81%	80%	91%	86%	
KPI(1) (excl. RIEF)	69%	64%	66%	86%	91%	86%	

Note: KPI(1) reflects to a large extent AINSE's policy of providing some support for every worthy project without disadvantaging the best projects by under-funding them. It assumes that the AINSE Grants awarded are sufficient to achieve meaningful outcomes for facility access in all cases. The AINSE Specialist Committees, in particular, have the responsibility of ensuring that all projects recommended for support are "worthy". That is, they satisfy AINSE as to their high scientific merit, their scientific and technical feasibility, and the adequacy of plans, personnel and resources for their execution (ref: Guide-lines for the preparation of applications for AINSE Grants, Section 5). The Council has the ultimate responsibility for ensuring all Specialist Committees maintain these standards. The inclusion of projects funded under the RIEF Program should possibly be excluded since RIEF Grants are for developing research infrastructure. These Grants are included in the KPI for Objective 4.

Other Performance Indicators for Objective 1:

Number of applications and Grants awarded as a percentage of the number of member universities (including RIEF funded grants)

Year	1995	1996	1997	1998	1999	2000	
No. of universities	31	34	36	35	36	36	
Applications/uni	7.4	7.3	6.9	6.9	4.9	6.4	
Grants/uni	6.5	6.1	5.6	5.0	4.4	5.5	

2 Objective (2) to facilitate graduate and undergraduate education and training experience utilising major nuclear science and technology facilities at ANSTO and other agreed sites

(for example, make a significant contribution to postgraduate training in nuclear science and technology.)

Key Performance Indicator KPI(2)

The number of University students awarded AINSE Postgraduate Research Awards as a percentage of those applying.

where:

Number of postgraduate students is determined by the number of eligible applications for AINSE PGRAs. KPI(2) = (Number of University students awarded AINSE APRAs) divided by (Number of University students applying for AINSE APRAs) expressed as a percentage.

Note: Many other postgraduate and Honours Year students gain training experience through AINSE Grants awarded to their supervisors but the degree of training is varied (significant supervision and training from qualified staff at the facilities is not guaranteed when students use the facilities and services) and the outcomes unknown. Expenditure on the undergraduate AINSE Winter School at ANSTO program is small in comparison with the AINSE PGRA scheme. The prime objective of the program is to encourage more students to undertake postgraduate education - which should be reflected in the number of future applications for AINSE PGRAs. The AINSE Postgraduate Research Award provides about the only measure of performance and outcome (ie: a PhD having a significant content of nuclear science and technology).

Year	1995	1996	1997	1998	1999	2000	
No. of PGRA applications	14	13	13	23	23	39	
No. of PGRAs awarded	4 + 2*	6 + 3*	6 + 2*	6 + 2*	8 + 1*	17	
KPI(2)	43%	69%	62%	35%	39%	44%	

(Note*: Special graduate student awards without stipend)

Other Performance Indicators

The number of University students awarded AINSE Postgraduate Research Awards per member university of AINSE.

Year	1995	1996	1997	1998	1999	2000	
No. of universities	31	34	36	35	36	36	
Applications/uni	0.45	0.38	0.36	0.66	0.64	0.61	
PGRAs/uni	0.19	0.26	0.22	0.23	0.25	0.33	

The total number of students completing PhD theses who have used facilities and services made available through AINSE.

Information on the number of students completing PhD theses who used facilities through AINSE Grants awarded to their supervisors is now being sought in the annual progress reports. The numbers could possibly be expressed as a percentage of the total number of PhDs completed in the physical and biological sciences.

3 Objective (3) to encourage collaboration and cooperation between member organisations of AINSE in areas primarily related to nuclear science and engineering and their applications, for example, the number of meaningful collaborations arising from AINSE-supported projects.

Note: Meaningful collaborations can be measured by the number of joint publications, however, unless AINSE has been provided with a copy of the publication it is not always possible to identify the affiliations of the authors. It is intended to seek this information in the future by means of the annual Progress Reports. In the interim, since the main purpose of Objective (3) is to encourage collaborations between University researchers and ANSTO staff, a measure of collaboration (of a sort) can be obtained from the number of collaborative projects identified from application forms for AINSE Grants.

Key Performance Indicator KPI(3)

Interim KPI(3) = (Number of collaborative projects each year) divided by (Total number of AINSE supported projects) expressed as a percentage.

Where:

"collaborative projects" refers to AINSE Grants involving ANSTO and university staff as joint investigators (obtainable from Grant application forms).

Year	1995	1996	1997	1998	1999	2000	
Collaborative projects	115	124	135	137	122	136	
Total no. of projects	201	207	201	174	159	201	
KPI(3)	57%	60%	67%	79%	77%	68%	

(Note: This indicator can be "forced" by giving preference to AINSE Grants that are collaborative - which is a condition in the case of RIEF grants for AMS projects and for use of the SIMS.)

Future performance indicator for objective 3

Number of papers naming ANSTO and university staff as joint authors published in refereed journals and conferences with ISBN numbers, etc. expressed as a percentage of Grants and PGRAs awarded.

4 Objective (4): to sustain and support the development of major nuclear science and technology facilities at ANSTO and other agreed sites for shared use by member organisations of AINSE (for example, funds raised for the development of facilities).

Key Performance Indicator KPI(4)

Funds raised for constructing and developing major nuclear science and technology facilities in Australia accessible to member organisations through AINSE expressed as a percentage of AINSE membership subscriptions.

Where:

"Funds" in this context means grants from external sources (such as RIEFP Grants) paid into the AINSE bank account. It excludes the value of in-kind contributions and funds administered through member organisations. It also excludes joint ANSTO/University Large Grants (for research equipment at ANSTO) originating from AINSE/ANSTO collaborations, etc. In the future, it will include contributions from the Long Term Projects Reserve.

KPI(4) = Total value of external grants for constructing and developing major facilities divided by annual membership subscriptions from ANSTO and the universities (expressed as a percentage).

Year	1995	1996	1997	1998	1999	2000
External grants	\$ 445,000	\$ 795,000	\$610,000	\$600,000	\$496,864	\$1,276,770
Subscriptions	\$1,430,700	\$1,470,600	\$1,638,300	\$1,719,300	\$1,795,700	\$1,876,077
KPI(4)	31 %	54 %	37%	35%	28%	68%

Other Performance Indicators

New major nuclear science and technology facilities in Australia for shared use by member organisations of AINSE developed with the support of AINSE (such as the \$8.7 million National Plasma Fusion Research Facility) but not paid into the AINSE bank account.

5 Overall Performance Indicator

The tangible benefits (expressed in financial terms) received by member universities of AINSE in return for membership subscriptions paid.

The indicator that has been used for many years by AINSE is the benefit/subscription ratio for determining subscriptions each year. This indicator incorporates the expenditure by AINSE in support of all activities undertaken by the universities under Objectives 1) to 4). It includes some measure of efficiency on a year to year basis in as much as AINSE does not generally pay ANSTO or the service provider until the access to facilities (or the results of sample analyses, etc.) have been provided. Since it does not reflect actual time on facilities or actual samples measured etc., it relies on the Specialist Committees, the Executive Committee and ultimately, Council, to ensure that the costs for use of facilities etc. are acceptable to the universities. It also incorporates decisions on how AINSE income is spent. For example, money spent on developing facilities at ANSTO is considered as a benefit shared equally between all universities.

AINSE KPI = Sum of [(Actual expenditure on AINSE Grants) + (Expenditure on Fellowships and PGRAs) +(expenditure on conference subsidies) + (expenditure on development of facilities)] divided by (Total Subscriptions paid by Universities).

Excluded from the KPI is expenditure on all administrative functions such as Secretariat operations (including salaries and superannuation), Council and committee meetings, conference management, publications and promotions, funds transferred to reserves, etc.

[Note: Many of the activities excluded from the KPI, such as Council meetings and publications, provide useful outcomes including networking and dissemination of knowledge. However, these outcomes are not easy to quantify and do not provide Councillors with tangible evidence that membership subscriptions are justified. They are therefore excluded. There is a strong incentive to keep administrative costs down. A balance has to made between maintaining financial reserves earning enough interest to meet Secretariat salaries, etc, and drawing on those reserves to meet AINSE objectives defined by the KPI target.

The latest figures for this index are reproduced below.

Year	1994	1995	1996	1997	1998	1999	2000
AINSE KPI	2.67	2.75	3.86	3.32	3.53	3.05	3.23
KPI (without RIEF)	2.08	2.17	2.29	1.81	1.99	2.10	2.23
5 year average	2.96	2.91	3.15	3.14	3.24	3.32	3.41

(Note: The 5 year average for each university is used for determining its membership subscription and relates to the preceding 5 years.)

An acceptable benefit subscription ratio is 3.00:1.

The benefit subscription ratio should not be less than 2.00:1.

University Codes

Code	University	Code	University
ADE	University of Adelaide	NCT	University of Newcastle
AKL	University of Auckland	NSW	University of New South Wales
ANSTO	Australian Nuclear Science & Technology Organisation	NTU	Northern Territory University
ANU	Australian National University	QLD	University of Queensland
BAL	University of Ballarat	QUT	Queensland University of Technology
CBR	University of Canberra	RMI	RMIT University
CQU	Central Queensland University	SCU	Southern Cross University
CSU	Charles Sturt University	USQ	University of Southern Queensland
CUR	Curtin University of Technology	SWI	Swinburne University of Technology
DEA	Deakin University	SYD	University of Sydney
ECU	Edith Cowan University	TAS	University of Tasmania
FLI	Flinders University	UNE	University of New England
GRI	Griffith University	USA	University of South Australia
JAM	James Cook University	UTS	University of Technology Sydney
LAT	La Trobe University	UWA	University of Western Australia
MAC	Macquarie University	UWS	University of Western Sydney
MEL	University of Melbourne	VIC	Victoria University
MON	Monash University	WOL	University of Wollongong
MUR	Murdoch University		

Specialist Committee Codes

ACC	Accelerator Science
AMS	Accelerator Mass Spectrometry
BIO	Radiopharmaceuticals & Neutron Irradiation
ENG	Engineering, Materials & Nuclear Technology
ENV	Environmental Science & Becquerel Laboratory
NS	Neutron Scattering
PLA	Plasma Fusion
RAD	Radiation Science including ARPANSA & University of Auckland