

Section 2

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Introduction

The Australian Institute of Nuclear Science and Engineering (AINSE) was established in 1958 to provide a mechanism for access to the special facilities at Lucas Heights by universities and other tertiary institutions and to provide a focus for cooperation in the nuclear scientific and engineering fields. It has a specific mandate to arrange for the training of scientific research workers and the award of scientific research studentships in matters associated with nuclear science and engineering.

Today nuclear science at the Lucas Heights Science and Technology Centre is devoted to supporting activities and research in a wide range of disciplines. These have applications in advanced technology, manufacturing, mining, agriculture, medicine and environmental protection. All are of vital importance to Australia's future. Many of the techniques and much of the expertise at Lucas Heights cannot be found elsewhere in Australia.

AINSE plays an indispensable role in providing universities with access to major scientific facilities and encouraging a national cooperative research effort. It is a role that is conducted both efficiently and cost effectively. Universities are saved from duplicating expensive items of equipment and Commonwealth funding can be directed at one national facility instead of several with sub-critical funding.

Mission

AINSE will advance research, education and training in the field of nuclear science and engineering and related fields within Australasia by being, in particular, the key link between universities, ANSTO, other member organisations and major nuclear science and associated facilities.

Goals

To achieve this vision AINSE will implement strategies in the following key areas:

- access to major facilities
- scientific outcomes
- membership
- networking

We will know that we have achieved this vision when the following goals are attained:

- **Goal 1**
By the end of 2008 members will have access to the Australian major nuclear and related research facilities and some overseas, through AINSE.
- **Goal 2**
By the end of 2008 the research performance of our scientific outcomes will have increased substantially.
- **Goal 3**
By the end of 2008 all universities in Australasia, some sections of CSIRO, many major museums, many non teaching hospitals and a significant proportion of the scientific institutes in Australasia will be members of AINSE.
- **Goal 4**
By the end of 2008, we will have expanded AINSE's existing set of excellent scientific networks.

Contact AINSE

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Executive Secretary

Dr Dennis Mather

AINSE Council 2007

Member Organisations and Representation

2 Council Meetings were held in 2007

Organisation	Membership Commenced	Councillor	Meetings Attended
ANSTO CEO	1958	Dr Ian Smith	2
ANSTO, Chief of Research		Dr George Collins	2
ANSTO, Bragg Institute		Dr Robert Robinson	2
ANSTO, Institute for Environmental Research		Professor John Dodson	1
ANSTO, Institute for Materials Engineering		Professor Lyndon Edwards	2
ANSTO, Radiopharmaceutical Research Institute		Dr Ron Weiner	1
The University of Queensland	1958	Professor Anton Middelburg	2
The University of New England	1958	Dr Peter Flood	1
The University of Sydney	1958	A/Professor Brendan Kennedy	2
The University of New South Wales	1958	Professor Rob Burford	2
The Australian National University	1958	Professor John White	2
The University of Melbourne	1958	Professor Jim Camakaris	2
University of Tasmania	1958	Professor Allan Canty	1
The University of Adelaide	1958	A/Professor Gerald Laurence	2
The University of Western Australia	1958	Dr Jasmine Henry	2
Monash University	1962	Professor Rob Norris	2
The University of Newcastle	1965	A/Professor Bruce King	2
Flinders University of SA	1966	Dr Michael Brunger	2
La Trobe University	1967	Dr John Webb	1
Macquarie University	1967	Professor James Piper	1
James Cook University	1970	Professor Richard Keene	2
University of Wollongong	1975	Professor Allan Chivas	1
Griffith University	1975	Professor Greg Hope	2
Murdoch University	1985-1997 rejoined 1998	Professor James Reynoldson	0
University of Technology, Sydney	1988	Professor Greg Skilbeck	1
RMIT University	1988	Professor Peter Johnston	2
Curtin University of Technology	1989	E/Professor Brian O'Connor, President	1
Central Queensland University	1991	Dr David Druskovich	2
University of South Australia	1991	Dr Namita Choudhury	2
Swinburne University of Technology	1991	Dr Anthony Bartel	2
Queensland University of Technology	1992	A/Professor Ray Frost	0
University of Western Sydney	1993	Dr Robyn Crumbie	1
		Professor Andrew Cheetham	1
Victoria University	1994	Professor Michelle Towstoless	2
Southern Cross University	1994	A/Professor Bill Boyd	2
The University of Auckland	1995	Professor Jim Metson	2

Charles Sturt University	1995	Dr Paul Prenzler	1
Charles Darwin University	1995	A/Professor David Parry	1
Edith Cowan University	1996	Professor Patrick Garnett	0
University of Canberra	1996	Professor Bill Maher	2
The University of Southern Queensland	1996	Professor Graham Baker	0
Deakin University	1997	Professor David Stokes	0
University of Ballarat	1997	Mr Stafford McKnight	1
Australian Catholic University	2001	Dr Brian Bicknell	2
GNS Science	2004	Dr Frank Bruhn	2
University of Canterbury	2004	Dr Stephen Durbin	0
University of Otago	2007	Professor Glenn Summerhayes	0
Secretary to AINSE Council (non-voting)		Dr Dennis Mather, AINSE	2

Alternate Representatives and other attendees

Edith Cowan University	1996	Dr Stephen Hinckley	2
Macquarie University	1966	A/Professor Damian Gore	2
Murdoch University	1985-1997 rejoined 1998	Dr Igor Bray	1
Curtin University of Technology	1989	Dr Annemieke Mulders	1

Executive Committee

Four Executive Committee Meetings were held in 2007

Councillor	Office/Position	Organisation	Meetings Attended
E/Professor Brian O'Connor	President	Curtin University of Technology	3
Professor John White	Past -President	The Australian National University	4
Professor Allan Chivas	Vice - President	University of Wollongong	3
A/Professor Bruce King		University of Newcastle	3
Dr Ian Smith		ANSTO	3
Dr Robert Robinson		ANSTO	2
Dr George Collins		ANSTO	4
Professor Lyndon Edwards		ANSTO	2
Dr Dennis Mather		AINSE	4

AINSE Staff

Executive Secretary Dr Dennis Mather

Secretariat

Miss Rhiannon Still	
Ms Gillian Blackburn	from 2 April 2007
Mrs Sandy O'Connor (part-time)	
Mrs Nerissa Phillips (part-time)	
Mr John Studert (part - time)	
Ms Elisabeth Meijer (part - time)	Until 26 Feb 2007

Specialist Committees for 2007

The Executive Secretary, AINSE, is an ex-officio (non-voting) member of all Committees. Committees meet in May and in October.
(a) indicates 'alternate' (c) indicates councillor

		Meetings Attended
Archaeology and Geosciences Committee		
Professor Patrick De Deckker, Convenor	The Australian National University	2
Dr Peter White	University of Sydney	2
Dr David Garnett	Charles Darwin University	1
A/Professor James Schulmeister	University of Canterbury	2
Dr Peter Grave (c)	University of New England	1
Dr Quan Hua	ANSTO	2
Dr David Fink	ANSTO	1
Dr Henk Heijnis	ANSTO	1
Biomedical Science and Biotechnology Committee		
Professor James Camakaris, Convenor May (c)	University of Melbourne	1
A/Professor Michael Kassiou	University of Sydney	2
Dr Michael Hay Convenor October	University of Auckland	2
A/Professor Lawrence Gahan	University of Queensland	1
A/Professor Christopher Rowe	University of Melbourne	1
Dr Andrew Katsifis	ANSTO	2
Environmental Sciences Committee		
Professor Greg Skilbeck, Convenor (c)	University of Technology Sydney	2
Professor Eric Bestland	Flinders University	2
Dr Joachim Ribbe	University of Southern Queensland	1
Professor David Bowman	Charles Darwin University	1
Dr Andrew Smith	ANSTO	2
Dr Suzanne Hollins	ANSTO	2
Materials - Structures and Dynamics Committee		
Dr Chris Ling, Convenor	University of Sydney/ANSTO	2
Professor John White (c)	Australian National University	2
Professor Stewart Campbell	ADFA, University of New South Wales	2
Dr Michael James	ANSTO	2
Professor Jill Trehwella	University of Sydney/ANSTO	1
Professor Valerie Linton	University of Adelaide	1
Materials - Materials – Properties and Engineering Committee		
Dr Michael Brunger, Convenor	Flinders University	2
Dr Rachael Caruso	University of Melbourne	2
Professor Robert Gilbert	University of Sydney	1
Dr David Cohen	ANSTO	2
Professor Lyndon Edwards	ANSTO	2
Dr Kathryn Prince	ANSTO	1
Nuclear Power Technology Committee		
E/Professor Brian O'Connor, Convenor	Curtin University of Technology	
Prof Peter Johnston	RMIT	
Dr George Collins	Chief of Research, ANSTO	
Prof Lyndon Edwards	Head, IME, ANSTO	

Conference Planning Committees

15th AINSE Conference on Nuclear and Complementary Techniques of Analysis (NCTA)

21 - 23 November, The University of Melbourne

Dr Jeff McCallum	Conference Chair	University of Melbourne
Prof David Jamieson		University of Melbourne
A/Prof Bruce King		University of Newcastle
Dr Andreas Markwitz		GNS Science
Prof. Rob Elliman		ANU
Dr David Cohen		ANSTO
Prof. Peter Johnston		RMIT
Dr Chris Ryan		CSIRO
Dr Anthony Holland		RMIT
Dr Dennis Mather		AINSE
Ms Rhiannon Still		AINSE

ANSTO-AINSE Neutron School on Diffraction

29 November - 3 December 2007, Lucas Heights

Dr. Herma Büttner		Bragg Institute
Dr. Alison Edwards		Bragg Institute
Prof Gordon Kearley		Bragg Institute
Dr. Chris Ling		The University of Sydney
Dr. Andrew Studer		ANSTO
Ms Lauren Mackaway		ANSTO
Dr. Dennis Mather		AINSE
Ms Rhiannon Still		AINSE

6th AINSE/ANBUG Neutron Scattering Symposium (AANSS) Diffraction and Residual Stress

4 December - 6 December 2007, AINSE

Dr Chris Ling		University of Sydney
Prof Craig Buckley		Curtin University of Technology
Dr Daniel Riley		University of Melbourne
Dr Brendan Kennedy		University of Sydney
Dr Dennis Mather		AINSE
Ms Rhiannon Still		AINSE

Chemical Deuteration Workshop

27 September, AINSE, Lucas Heights

Dr Peter Holden		ANSTO
Dr Dennis Mather		AINSE
Ms Rhiannon Still		AINSE



**Australian Institute of Nuclear Science and Engineering Inc.
Independent Audit Report to the Members
For the Year 31 December 2007**

Report on the Financial Report

We have audited the accompanying financial report of the Institute which comprises the balance sheet as at 30 June 2007 and the income statement, statement of recognised income and expenditure and cash flow statement for the year ended on that date, a summary of significant accounting policies and other explanatory notes and the statement by members of the Executive Committee.

Executive Committee's Responsibility for the Financial Report

The committee of the Institute are responsible for the preparation and fair presentation of the financial report in accordance with Australian Accounting Standards (including the Australian Accounting Interpretations) and the Associations Incorporation Act, NSW. This responsibility includes establishing and maintaining internal controls relevant to the preparation and fair presentation of the financial report that is free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility

Our responsibility is to express an opinion on the financial report based on our audit. We conducted our audit in accordance with Australian Auditing Standards. These Auditing Standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance whether the financial report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the company's preparation and fair presentation of the financial report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the committee, as well as evaluating the overall presentation of the financial report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Independence

In conducting our audit, we have complied with the independence requirements of Australian professional ethical pronouncements.

Phillip R. Escott F.C.A.

David G. Aston C.A.

Liability limited by a scheme approved
under Professional Standards Legislation

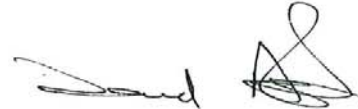
**Australian Institute of Nuclear Science and Engineering Inc.
Independent Audit Report to the Members
For the Year 31 December 2007**

Auditor's Opinion

In our opinion, the financial report of The Australian Institute of Nuclear Science and Engineering Inc. is in accordance with the Associations Incorporation Act, NSW, including:

- (a) giving a true and fair view of the Association's financial position as at 31 December 2007 and of their performance for the period ended on that date; and
- (b) complying with Australian Accounting Standards (including the Australian Accounting Interpretations) and the Associations Incorporation Act, NSW.

Escott Aston
Chartered Accountants
291 Belmore Road
Riverwood NSW 2210



David G Aston
Partner

Dated this 1st day of April 2008

Australian Institute of Nuclear Science and Engineering

Executive Committee's 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 2007.

Committee Members

Professor Allan Chivas, President
A/Professor Bruce King, Vice President
Professor Peter Johnston
Dr Ian Smith
Dr George Collins
Dr Robert Robinson
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 \$239,939.

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



Dr Dennis Mather
Public Officer & Executive Secretary
Dated this first day of April 2008

**Statement by Members of the Executive Committee
Australian Institute of Nuclear Science and Engineering**

Statement by members of the Executive Committee

For the year ended 31 December 2007

In the opinion of the Executive Committee the financial report as set out in the accompanying pages:

1. Presents a true and fair view of the financial position of the Australian Institute of Nuclear Science and Engineering Incorporated as at 31 December 2007 and its performance for that year ended on that date in accordance with Australian Accounting Standards, mandatory professional reporting requirements and other authoritative pronouncements of the Australian Accounting Standards Board.
2. At the date of this statement, there are reasonable grounds to believe that the Institute will be able to pay its debts as and when they fall due.

This statement is made in accordance with the resolution of the Executive Committee and is signed for and on behalf of the Executive Committee by:


.....
President


.....
Executive Secretary

Dated this first day of April 2008

Balance Sheet

as at 31 December 2007

	Notes	31-Dec-07 \$	31-Dec-06 \$
Current Assets			
Cash	2	101,945	57,742
Trade and Other Receivables	3	125,527	107,482
Investments	4	2,401,752	2,429,697
Other	5	<u>14,402</u>	<u>13,611</u>
Total Current Assets		2,643,626	2,608,532
Non-Current Assets			
Plant and Equipment	6	<u>17,667</u>	<u>30,129</u>
Total Non-Current Assets		17,667	30,129
Total Assets		2,661,293	2,638,661
Current Liabilities			
Trade and Other Payables	7	<u>555,408</u>	<u>779,737</u>
Total Current Liabilities		555,408	779,737
Non-Current Liabilities			
Provisions for Employee Entitlements	8	<u>26,201</u>	<u>19,179</u>
Total Non-Current Liabilities		26,201	19,179
Total Liabilities		581,609	798,916
NET ASSETS		<u>2,079,684</u>	<u>1,839,745</u>
Equity			
Awards Reserve	14	3,060,681	2,565,000
Long Term Projects Reserve	14	500,000	500,000
Accumulated results of operations		(1,480,997)	(1,225,255)
TOTAL EQUITY		<u>2,079,684</u>	<u>1,839,745</u>

The accompanying notes form an integral part of these accounts.

Income and Expenditure Statement

as at 31 December 2007

	Notes	31-Dec-07 \$	31-Dec-06 \$
COST OF SERVICES			
Operating Revenue			
Payments from members		2,664,807	2,483,275
External Grants	11	-	2,479,004
Interest Received		177,825	171,882
Profit on sale of assets		-	3,209
Other	13	151,754	135,039
Total Operating Revenue		<u>2,994,386</u>	<u>5,272,409</u>
Operating Expenses			
Wages & Salaries		233,196	194,955
Superannuation		26,695	24,005
AINSE Awards			
Students	9	324,487	462,229
Research Fellowship	9	360,441	-
Research Awards	9	1,387,034	1,757,163
Conference Subsidies		185,887	110,987
External Grants	11	-	3,368,252
Other Expenses	12	236,707	347,141
Total Operating Expenses		<u>2,754,447</u>	<u>6,264,732</u>
Surplus/(Deficit) for the year		239,939	(992,323)
Accumulated funds brought forward		(1,225,255)	(33,932)
Accumulated Surplus (Deficit)		<u>(985,316)</u>	<u>(1,026,255)</u>
Add (Less): transfer to Reserves			
Grants Reserve	14	(495,681)	(199,000)
Accumulated results of operations at end of financial year		<u>(1,480,997)</u>	<u>(1,225,255)</u>

The accompanying notes form an integral part of these accounts.

Statement of Cash Flows

as at 31 December 2007

	Notes	31-Dec-07 \$	31-Dec-06 \$
		Inflows/(Outflows)	Inflows/(Outflows)
CASH FLOWS PROVIDED BY (USED IN) OPERATING ACTIVITIES			
Receipts from members		2,798,516	1,506,503
Receipts from grants		-	1,465,251
Interest received		177,034	184,702
		<u>2,975,550</u>	<u>3,156,456</u>
Grant expenditures		(2,257,849)	(5,698,631)
Payments to suppliers and employees		(701,443)	(298,454)
		<u>(2,959,292)</u>	<u>(5,997,085)</u>
Net cash flows provided by (used in) operating activities	16	<u>16,258</u>	<u>(2,840,629)</u>
CASH FLOWS PROVIDED BY (USED IN) INVESTING ACTIVITIES			
Proceeds from sale of property, plant and equipment		-	2,982,797
Purchase of property, plant and equipment		-	(28,910)
Net cash flows provided by (used in) investing activities		<u>-</u>	<u>2,953,887</u>
Net increase (decrease) in cash held		16,258	113,258
Cash at beginning of reporting period		2,487,439	2,374,181
Cash at end of reporting period	2/4	<u>2,503,697</u>	<u>2,487,439</u>

Statement of Changes in Equity

as at 31 December 2007

	Retained Earnings \$	Long Term Projects \$	Awards Reserve \$	Total \$
Balance at 1 January 2006	(33,932)	500,000	2,366,000	2,832,068
Profit attributable to entity	(992,323)	-	-	(992,323)
Transfers to and from reserves				
Awards Reserve	(199,000)	-	199,000	-
Balance at 31 December 2006	<u>(1,225,255)</u>	<u>500,000</u>	<u>2,565,000</u>	<u>1,839,745</u>
Profit / (Loss) attributable to entity	239,939	-	-	239,939
Transfers to and from reserves	-	-	-	-
Awards Reserve	(495,681)	-	495,681	-
Balance at 31 December 2007	<u>(1,480,997)</u>	<u>500,000</u>	<u>3,060,681</u>	<u>2,079,684</u>

The accompanying notes form an integral part of these accounts.

Notes to the Financial Statements for the Year Ended 31 December 2007

at 31 December 2007

The financial report is a general purpose financial report that has been prepared in accordance with Accounting Standards, Australian Accounting Interpretations, other authoritative pronouncements of the Australian Accounting Standards Board and the *Associations Incorporation Act 1984 (NSW)*.

The financial report covers the economic entity of The Australian Institute of Nuclear Science and Engineering ("The Institute") as an individual entity. The Institute is an association incorporated in New South Wales under the *Associations Incorporation Act 1984 (NSW)*.

The Institute complies with all Australian equivalents to International Financial Reporting Standards (IFRS) in their entirety.

The following is a summary of the material accounting policies adopted in the preparation of the financial report. The accounting policies have been consistently applied, unless otherwise stated.

Basis of Preparation

Reporting Basis and Conventions

The financial report has been prepared on an accruals basis and is based on historical costs modified by the revaluation of selected non-current assets, and financial assets and financial liabilities for which the fair value basis of accounting has been applied.

1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES

Accounting Policies

a) Income Tax

The Institute is exempt from income tax.

b) Property, Plant and Equipment

Each class of property, plant and equipment is carried at cost or fair value, less where applicable, any accumulated depreciation and impairment losses.

Plant and Equipment

Plant and equipment are measured on the cost basis less depreciation and impairment losses.

The cost of fixed assets constructed within the economic entity includes the cost of materials, direct labour, borrowing costs and appropriate proportion of fixed and variable overheads.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the group and the cost of the item can be measured reliably. All other repairs and maintenance are charged to the income statement during the financial period in which they are incurred.

Depreciation

The depreciable amount of all fixed assets excluding plant and equipment currently under construction, is depreciation on a straight line basis over their useful lives to The Institute commencing from the time the asset is held ready for use. The depreciation rates used for each class of depreciable assets are:

Class of Fixed Asset	Depreciation Rate
Plant and Equipment	15 - 35%

The asset's residual values and useful lives are reviewed, and adjusted if appropriate, at each balance sheet date.

Gains and losses on disposals are determined by comparing proceeds with the carrying amount. These gains or losses are included in the income statement.

c) Financial Instruments

Recognition

Financial instruments are initially measured at cost on trade date, which includes transaction costs, when the related contractual or obligations exist. Subsequent to initial recognition these instruments are measured as set out below.

Financial assets at fair value through profit and loss

A financial asset is classified in this category if acquired principally for the purpose of selling in the short term or if so designated by

management and within the requirements of AASB 139: Recognition and Measurement of Financial Instruments. Realised and unrealised gains and losses arising from changes in the fair value of these assets are included in the income statement in the period in which they arise.

Fair Value

Fair value is determined based on current bid prices for all quoted investments. Valuation techniques are applied to determine the fair value for all unlisted securities, including recent arm's length transactions, reference to similar instruments and option pricing models.

Impairment of Assets

At each reporting date, the Institute assesses whether there is objective evidence that a financial instrument has been impaired.

d) Impairment of Assets

At each reporting date, the Institute reviews the carrying values of its tangible and intangible assets to determine whether there is any indication that those assets have been impaired. If such an indication exists, the recoverable amount of the asset, being the higher of the asset's fair value less costs to sell and value in use, is compared to the asset's carrying value. Any excess of the asset's carrying value over its recoverable amount is expensed to the income statement.

Impairment testing is performed annually for goodwill and intangible assets with indefinite lives.

Where it is not possible to estimate the recoverable amount of an individual asset, the Institute estimates the recoverable amount of the cash-generating unit to which the asset belongs.

e) Employee Benefits

Provision is made for the Institute's liability for employee benefits arising from services rendered by employees to balance date. Employee benefits that are expected to be settled within one year have been measured at the amounts expected to be paid when the liability is settled, plus related on-costs. Employee benefits payable later than one year have been measured at the present value of the estimated future cash outflows to be made for those benefits.

f) Provisions

Provisions are recognised when the Institute has a legal or constructive obligation, as a result of past events, for which it is probable that an outflow of economic benefits will result and that outflow can be reliably measured.

g) Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less, and bank overdrafts. Bank overdrafts are shown within short-term borrowings in current liabilities on the balance sheet.

h) Revenue

Revenue from the rendering of a service is recognised upon the delivery of the service to the customers.

Interest revenue is recognised on a proportional basis taking into account the interest rates applicable to the financial assets.

All revenue is stated net of the amount of Goods and Services Tax.

i) Goods and Services Tax (GST)

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Taxation Office. In these circumstances, the GST is recognised as part of the cost of acquisition of the asset or as part of an item of expense. Receivables and payables in the balance sheet are shown inclusive of GST.

Cash flows are presented in the cash flow statement on a gross basis, except for the GST component of investing and financing activities, which are disclosed as operating cash flows.

j) Comparative Figures

When required by Accounting Standards, comparative figures have been adjusted to conform to changes in presentation for the current financial year.

Notes to the Financial Statements

as at 31 December 2007

	31-Dec-07	31-Dec-06	
	\$	\$	
2. CASH			
Operating Account	101,445	57,242	
Petty Cash	500	500	
	<u>101,945</u>	<u>57,742</u>	
3. TRADE AND OTHER RECEIVABLES			
Current			
Trade Debtors	26,184	6,802	
Other Receivables	99,343	100,680	
	<u>125,527</u>	<u>107,482</u>	
4. INVESTMENTS			
Cash Deposit Account	2,401,752	2,429,697	
	<u>2,401,752</u>	<u>2,429,697</u>	
5. OTHER CURRENT ASSETS			
Current			
Interest Accrued	14,402	13,611	
	<u>14,402</u>	<u>13,611</u>	
6. PLANT AND EQUIPMENT			
Plant & Equipment			
At Cost	75,081	75,081	
Accumulated Depreciation	(75,081)	(72,256)	
Total Plant and Equipment	<u>-</u>	<u>2,825</u>	
Motor Vehicle			
At Cost	28,910	28,910	
Accumulated Depreciation	(11,243)	(1,606)	
Total Motor Vehicle	<u>17,667</u>	<u>27,304</u>	
Movements in Carrying Amounts	Plant & Equipment	Motor Vehicles	Total
Balance at Beginning of Year	2,825	27,304	30,129
Depreciation Expense	(2,825)	(9,637)	(12,462)
Carrying Amount at End of Year	<u>-</u>	<u>17,667</u>	<u>17,667</u>

Notes to the Financial Statements

as at 31 December 2007

	Notes	31-Dec-07 \$	31-Dec-06 \$
7. TRADE AND OTHER PAYABLES			
Unsecured Liabilities			
Trade Payables		35,112	722
Sundry Payables and Accrued Expenses		454,590	726,851
John Ferris Memorial Fund		5,362	-
Short-Term Employee Benefits	8	60,344	52,164
		<u>555,408</u>	<u>779,737</u>
8. PROVISION FOR EMPLOYEE ENTITLEMENTS			
Long-Term Employee Benefits		26,201	19,179
		<u>26,201</u>	<u>19,179</u>
9. AINSE AWARDS			
AINSE AWARDS - Post Graduate Awards			
Lucas Heights Costs		99,181	164,338
University Travel and Equipment		22,629	24,590
Stipends		184,014	231,815
		<u>305,824</u>	<u>420,743</u>
AINSE AWARDS - AINSE Winter School		18,663	15,619
		<u>18,663</u>	<u>15,619</u>
AINSE AWARDS - Research Fellowships		360,441	25,867
		<u>360,441</u>	<u>25,867</u>
AINSE AWARDS - Awards			
Lucas Heights Costs		1,307,619	1,643,426
Minor Equipment and Materials		1,700	7,155
Travel and Accommodation		77,684	103,326
Other Costs		31	3,256
		<u>1,387,034</u>	<u>1,757,163</u>
10. SEGMENT REPORTING			

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

Notes to the Financial Statements

as at 31 December 2007

	31-Dec-07	31-Dec-06
	\$	\$
11. EXTERNAL GRANTS		
ARC ISIS Grant		
Grant Revenue	-	240,000
Member Contributions	-	151,250
	<u>-</u>	<u>391,250</u>
Grant Expenditure		
External Payments	-	400,000
Total Expenditure	-	400,000
	<u>-</u>	<u>400,000</u>
ARC STAR Accelerator Grant		
Operating Revenue		
Grant Revenue	-	1,013,754
Member Contributions	-	1,073,000
	<u>-</u>	<u>2,086,754</u>
Operating Expenses		
STAR Accelerator	-	2,968,252
	<u>-</u>	<u>2,968,252</u>
Operating Deficit relating to STAR Accelerator	-	(881,498)
	<u>-</u>	<u>(881,498)</u>
Reconciliation		
Total External Grants Revenue	-	2,479,004
less transferred to Grants Received In Advance (Balance Sheet)	-	-
	<u>-</u>	<u>-</u>
External Grant Revenue (Income & Expenditure Statement)	-	2,479,004
	<u>-</u>	<u>2,479,004</u>
Represented by:		
Total Grant Expenditure (Income & Expenditure Statement)	-	3,368,252
Amount to be met by AINSE	-	(889,248)
	<u>-</u>	<u>(889,248)</u>
External Grants Expenditure	-	2,479,004
	<u>-</u>	<u>2,479,004</u>

Notes to the Financial Statements

as at 31 December 2007	31-Dec-07	31-Dec-06
	\$	\$
12. OTHER EXPENDITURE		
Conference Management	67,909	106,368
Publications and Promotions	10,383	53,966
Meetings and Committees	81,702	105,536
AINSE Secretariat		
Audit Fees	7,590	10,610
Bank Charges	2,071	1,751
Depreciation	12,462	14,046
Advertising and Printing	-	150
Office Supplies	1,161	1,256
Postage and Telephone	2,197	1,816
Insurance	8,082	11,149
Entertaining	47	515
Books and Software	-	734
Office Equipment and Repairs	4,532	2,993
Administration and Staff Training	904	1,061
Travel and Accommodation	15,315	15,590
Vehicle Expenses	9,555	12,685
Publications and Promotions	-	1,579
Staff Recruitment	8,864	-
FBT Expense & Payments	2,567	3,640
Miscellaneous	1,366	1,696
Total AINSE Secretariat	<u>76,713</u>	<u>81,271</u>
 Total Other Expenditure	 <u>236,707</u>	 <u>347,141</u>
13. OTHER INCOME		
Sponsorships:		
ITER Workshop	-	60,580
ICNS	81,389	20,000
Conference Registrations	65,115	50,069
Other	5,250	4,390
	<u>151,754</u>	<u>135,039</u>
14. MOVEMENT IN RESERVES		
Awards Reserve		
Opening Balance at 1 January	2,565,000	2,366,000
Transfer from Accumulated Funds	495,681	199,000
Balance as at 31 December	<u>3,060,681</u>	<u>2,565,000</u>
Long Term Projects Reserve		
Opening Balance at 1 January	500,000	500,000
Transfer from Accumulated Funds	-	-
Balance as at 31 December	<u>500,000</u>	<u>500,000</u>

The Long Term Projects Reserve has been established to ensure that a reasonable proportion of Institute surplus of each year is preserved for investment in new research infrastructure if need be.

Notes to the Financial Statements

as at 31 December 2007	31-Dec-07	31-Dec-06
	\$	\$
15. AUDITORS REMUNERATION		
Remuneration of the auditor of the entity for:		
Auditing or reviewing the financial report	7,590	7,350
Acquittal of Grants	-	450
Other Services	-	2,810
	<u>7,590</u>	<u>10,610</u>
16. RECONCILIATION OF OPERATING RESULT WITH CASH FLOWS FROM ORDINARY ACTIVITIES		
Profit from Ordinary Activities	239,939	(992,323)
Changes in Assets & Liabilities		
(Increase)/Decrease in Trade Debtors	(18,045)	(31,087)
Increase/(Decrease) Trade Payables	(224,329)	251,487
(Increase)/Decrease Accrued Interest	(791)	12,820
Increase/(Decrease) Employee Entitlements	7,022	2,114
Increase/(Decrease) Other Current Liabilities	-	(1,080,724)
Increase/(Decrease) Grants Received in Advance	-	(1,013,753)
	<u>(236,143)</u>	<u>(1,859,143)</u>
Non-Cash Items		
Depreciation	12,462	14,046
Gain on sale of asset	-	(3,209)
	<u>12,462</u>	<u>10,837</u>
Net cash provided by (used in) operating activities	<u>16,258</u>	<u>(2,840,629)</u>

17. FINANCIAL INSTRUMENTS

Financial Risk Management

The Institute's financial instruments consist mainly of deposits with banks, local money market instruments, short-term investments and accounts receivable & payable.

The main purpose of non-derivative financial instruments is to raise finance for the Institute's operations.

The Institute does not have any derivative instruments at 31 December 2007.

Financial Instruments are held under normal commercial policies, terms and conditions regularly adopted by businesses in Australia.

The main risks the Institute is exposed to through its financial instruments are liquidity risk, credit risk and interest rate risk.

a) Liquidity Risk

The Institute manages liquidity risk by monitoring forecast cash flows and ensuring that adequate utilised borrowing facilities are maintained.

b) Credit risk

The maximum exposure to credit risk, excluding the value of any collateral or other security at balance date to recognised financial assets is the carrying amount, net of any provisions for impairment of those assets, as disclosed in the balance sheet and notes to the financial statements.

The Institute does not have any material credit risk exposure to any single receivable or group of receivables under financial instruments entered into by the economic entity.

c) Interest Rate Risk

The Institute's exposure to interest rate risk, which is the risk that a financial instrument's value will fluctuate as a result of changes in market

interest rates and the effective weighted average interest rates on those financial assets and financial liabilities, is as follows:

Notes to the Financial Statements

17. FINANCIAL INSTRUMENTS (cont'd)

	Weighted Average Effective Interest Rate		Floating Interest Rate		Within 1 year		Fixed Interest Rate Maturing 1 to 5 years		Non-interest bearing		Total	
	2007 %	2006 %	2007 \$	2006 \$	2007 \$	2006 \$	2007 \$	2006 \$	2007 \$	2006 \$	2007 \$	2006 \$
Financial Assets												
Cash and cash equivalents	6.01%	5.25%	2,503,197	2,486,939	-	-	-	-	500	500	2,503,697	2,487,439
Receivables	-	-	-	-	-	-	-	-	125,527	107,482	125,527	107,482
Total Financial Assets			2,503,197	2,486,939	-	-	-	-	126,027	107,982	2,629,224	2,594,921

Net Fair Values

The net fair value of financial assets and liabilities approximates their carrying value because of their short term to maturity. No financial assets and financial liabilities are readily traded on organised markets in standardised form. Financial assets where the carrying amount exceeds net fair values have not been written down as the Institute intends to hold the assets to maturity.

The aggregate net fair values and carrying amounts of financial assets and financial liabilities are disclosed in the Statement of Financial Position and in the Notes to the Financial Statements.

Aggregate net fair values and carrying amounts of financial assets and financial liabilities at balance date:

	2007		2006	
	Carrying amount \$	Net Fair Value \$	Carrying amount \$	Net Fair Value \$
Financial assets				
Cash	2,503,697	2,503,697	2,487,439	2,487,439
Receivables	125,527	125,527	107,482	107,482
Investments	-	-	-	-
	<u>2,629,224</u>	<u>2,629,224</u>	<u>2,594,921</u>	<u>2,594,921</u>
Financial liabilities				
Trade and other payables	555,408	555,408	779,737	779,737
	<u>555,408</u>	<u>555,408</u>	<u>779,737</u>	<u>779,737</u>

Fair values are materially in line with carrying values.

Notes to the Financial Statements

as at 31 December 2007

		31-Dec-07	31-Dec-06
		\$	\$
18. COMMITMENTS			
ISIS		-	7,750
Awards, Fellowships and Studentships Awarded in 2007 for payment in 2008	Note A	3,060,680	2,565,000
		<u>3,060,680</u>	<u>2,572,750</u>

Note A

Invoices for membership fees are raised in January and payment is subsequently received over the first three quarters. Accordingly, funds received from membership fees in 2007 are used for grants and studentships during 2008. AINSE commits \$500,000 pa to studentships.

19. ASSOCIATION DETAILS

The principal place of business of the Institute is:

Australian Institute of Nuclear Science and Engineering Inc
New Illawarra Road,
Lucas Heights, NSW, AUSTRALIA

20. KEY MANAGEMENT PERSONNEL COMPENSATION

	Short-term Benefit	Post Employment Benefit	Total
	\$	\$	\$
2007			
Total compensation	<u>116,004</u>	<u>5,216</u>	<u>121,220</u>
2006			
Total compensation	<u>101,903</u>	<u>5,876</u>	<u>107,779</u>

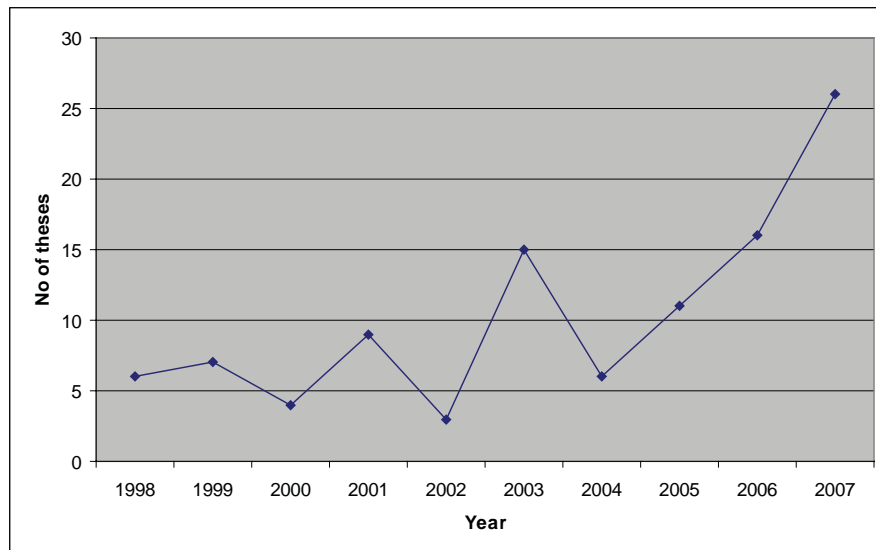
AINSE Postgraduate Research Awards

To be nominated 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 supplement for up to three years, the Award gives access to ANSTO's world-class facilities and expertise. A stipend of \$7,500 pa and \$5,500 pa are provided towards the costs involved in using facilities at Lucas Heights, and an allowance for travel and accommodation costs is also awarded to enable students to work at Lucas Heights.

Eleven new AINSE postgraduate research projects were supported by a Post-Graduate Research Award in 2007 bringing the total of current scholars to 55. Through its Post-Graduate Research Award scheme, AINSE has now helped train 232 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 Awards made to their supervisors. The Council believes that one of the most valuable roles fulfilled by AINSE is the provision of these AINSE Post-Graduate Research Awards.

During the year 26 theses were received from scholars who had completed their studies and another 8 had submitted their theses and were awaiting results at 31 December. During the year 2 scholars discontinued their studies.



Graph showing the number of PGRA scholars completing each year for the last decade.

On the following pages scholars marked with an asterix* are continuing without stipend.

Postgraduate scholars, and their projects, who were supported during 2006

Procedures for radiologically contaminated biological evidence: a counter terrorism initiative

Serena Abbondante Forensic Analysis, University of Canberra. Commenced 01/07/05

Corals as biomonitors of Darwin Harbour health

Yasmin Antwertinger Science and Primary Industries, Charles Darwin University. Commenced 01/07/03

Selenium assimilation and distribution in marine organisms

Clare Atkinson GeoQuest Research group, University of Wollongong. Commenced 01/07/06

A fine-resolution reconstruction of climatic fluctuations over the last 2000 years in south-eastern Australia

*Cameron Barr Geography & Environmental Studies, University of Adelaide. Commenced 01/07/04

Reaction mechanisms of lithium-based hydrogen storage materials

Edmund Burt Nanoscale Science and Technology Centre, Griffith University. Commenced 1/7/07

Modification of coal microstructure upon uptake of carbon dioxide in geological-storage-like conditions

Tara Busbridge Nanoscale Science and Technology Centre, Griffith University. Commenced 1/7/07

High temperature fatigue behaviour and life prediction of advanced engineering materials

Mark Callaghan Chemistry Materials and Forensic Science, University of Technology Sydney. Commenced 01/07/04

Measurement of nanomagnetic and nanostructural properties of ferrofluids by small angle neutron and x-ray scattering

Matthew Carroll Physics, The University of Western Australia. Commenced 01/07/06

Controlling precipitation processes in the production of value-added zirconia

Geoffrey Carter Applied Physics, Curtin University of Technology. Commenced 01/07/06

Plasma surface modification of polymers for biomedical applications

*Chanokporn Chaiwong Applied and Plasma Physics, The University of Sydney. Commenced 01/07/04

Calixarenes as potential ionophores for ion-selective electrodes

*Ryan Chester Applied Chemistry, Curtin University of Technology. Commenced 01/07/04

Electrochemically "switchable" silicon based organic surfaces: dynamic substrates to study the adhesion of mammalian cells

Simone Ciampi School of Chemistry, University of New South Wales. Commenced 1/7/07

Structure and properties of porous discrete supramolecular materials

Martin Duriska Chemistry, Monash University. Commenced 1/7/07

Radiocarbon dating of rice husk temper from Angkorean brick temples

Damian Evans Archaeology, University of Sydney. Commenced 01/07/05

Gold processing using thiosulfate lixiviants

Adam Fischmann Chemistry, Monash University. Commenced 01/07/03

Historical ecology and the record of human impact in the Galapagos Islands

Iona Flett Archaeology and Natural History, Australian National University. Commenced 01/07/03

Development of a composite conjugated polymer/dye sensitiser/carbon nanotube blend organic solar cell

Roland Goh Mechanical, Manufacturing and Medical Engineering, Queensland University of Technology. Commenced 01/07/04

Reversible addition-fragmentation chain-transfer (RAFT) polymerization using γ -radiation initiation of high-conversion glassy polymers and novel polymeric materials

Geoffrey Hall Chemical Engineering and Industrial Chemistry, The University of New South Wales. Commenced 01/07/04

Groundwater resources and salinity associated with granite hills in the Upper Wimmera Basin, western Victoria

Sarah Hagerty, Environmental Science, La Trobe University. Commenced 1/7/07

Macromolecular orientation induced by injection molding processes

John Healy Physics and Materials Engineering, Monash University. Commenced 01/07/03

Development of radiolabelled peripheral benzodiazepine receptor ligands for imaging and therapy of tumours and neurodegeneration

Taryn Homes Chemistry, University of Wollongong. Commenced 01/07/04

*Investigation of the structural basis for regulation of the phosphorelay governing sporulation in *Bacillus subtilis**

David Jacques Molecular and Microbial Biosciences, The University of Sydney. Commenced 1/7/07

Effect of sugars on bilayer to non-bilayer phase transitions in biological membranes during dehydration
Ben Kent Applied Physics, RMIT University. Commenced 01/07/06

X-ray and neutron scattering of multiferroic materials
Shane Lawrence Applied Physics, Curtin University of Technology. Commenced 1/7/07

Use of cosmogenic nuclides to constrain the glacial history of the Lambert-Amery Basin, East Antarctica
Katherine Lilly Research School of Earth Science, Australian National University. Commenced 01/07/04

Diamond-like carbon coating for biomedical applications
Wen Jie Ma Centre for Advanced Materials Technology, The University of Sydney. Commenced 01/07/06

A palaeoecological reconstruction of the lower Snowy River, East Gippsland: environmental response to climate change, land use and river regulation
*Angus MacGregor Geographical & Environmental Studies, University of Adelaide. Commenced 01/07/03

Analysing small-angle scattering data using the correlation function
Clinton Maitland Applied Physics, Curtin University of Technology. Commenced 01/07/04

Small-angle scattering analysis of structural rearrangements of Parkinson's disease-associated protein kinases
Ryan Mills Biochemistry and Molecular Biology, The University of Melbourne. Commenced 01/07/06

New proxies for the climate debate: AMS dates and stable carbon isotopes of peat deposits from NE Queensland
*Joanne Muller Earth Sciences, James Cook University. Commenced 01/07/03

Tailored nanoparticles for nanotoxicological studies
Anthony Musumeci Australian Institute of Bioengineering & Nanotechnology, The University of Queensland. Commenced 1/7/07

Benthic diatoms as biological indicators of acid mine drainage in tropical areas of the Northern Territory
*Louise Mutton Geographical & Environmental Studies, University of Adelaide. Commenced 01/07/04

Scales of variability: El Niño, human impact and Greater Flamingo populations in internationally significant Galapagos wetlands
Ashley Natt Geographical and Environmental Studies, University of Adelaide. Commenced 01/07/06

Structure-property relationships in thermoset nanocomposites
Betime Nuhiji Engineering and Technology, Deakin University. Commenced 01/07/06

Mathematical modelling of drying of colloidal nanoparticle sols
Glen Oberman Mathematical Sciences, Queensland University of Technology. Commenced 01/07/04

Evaluating residual stress measurements using neutron diffraction for welds in steel structures and pressure vessels and relating this to the design and fitness-for-purpose assessments
Anna Paradowska Mechanical Engineering, Monash University. Commenced 01/07/04

Impact of climate change on late Holocene penguin populations of the Vestfold Hills, Antarctica, using high resolution lake sediment cores
*Rachael Parkinson Institute of Antarctic & Southern Ocean Studies, University of Tasmania. Commenced 01/07/04

A nanostructural investigation of hydrogen storage in aluminium
Mark Paskevicius Applied Physics, Curtin University of Technology. Commenced 01/07/06

Residual stress measurement in highly constrained welds
Susan Pearce Mechanical Engineering, University of Adelaide. Commenced 01/07/04

¹⁰Be in Antarctic ice cores: quantifying climate effects for improved reconstructions of solar activity
Joel Pedro IASOS, University of Tasmania. Commenced 1/7/07

Protein behaviour at interfaces
Adam Perriman Chemistry, Australian National University. Commenced 01/07/03

Tracing the origin of salinity and quantifying its future changes in the eastern Hopkins Catchment, western Victoria
Mattias Raiber Environmental Sciences, La Trobe University. Commenced 01/07/05

The reconstruction of an ~850 proxy rainfall record from a Christmas Island (Indian Ocean) stalagmite
Dale Redwood Geology, The University of Newcastle. Commenced 1/7/07

Immobilising sol gel technology for biomineralisation and biocatalysis
*Lisa Rodgers Biotechnology & Biomolecular Sciences, The University of New South Wales. Commenced 01/07/02

Nanoscale multilayer materials

Luke Ryves Applied and Plasma Physics, University of Sydney. Commenced 01/07/05

Structural studies of ionic conductive defect perovskites

Paul Saines Chemistry University of Sydney Commenced 01/07/05

Effects of urban eutrophication in southeast Australian coastal lagoon ecosystems: three case studies

Krystyna Saunders Institute of Antarctic & Southern Ocean Studies, University of Tasmania. Commenced 01/07/04

Geometrically frustrated magnetism in bismuth platinum-group oxides

Neeraj Sharma Chemistry, The University of Sydney. Commenced 01/07/06

Processing of TiO₂ based semiconducting ceramics

***Leigh Sheppard** Materials Science & Engineering, The University of New South Wales. Commenced 01/07/03

Hydrogen adsorption in intercalated graphite: comparison between experiment and simulation

Drew Sheppard Applied Physics, Curtin University of Technology. Commenced 01/07/03

Characterisation of arsenic doped mercury cadmium telluride grown by molecular beam epitaxy for infrared detector applications

Gordon Tsen Electrical, Electronic & Computer Engineering, University of Western Australia. Commenced 01/07/05

Structural characterization of bismuth oxide-based, highly conductive solid electrolytes

Nathan Webster Chemistry, The University of Western Australia. 01/07/06

Microdosimetry and nanodosimetry in proton therapy

Andrew Wroe Engineering Physics, University of Wollongong. Commenced 01/07/04

Disposal of unfolded proteins by members of the LDL receptor superfamily

Amy Wyatt Biological Sciences, University of Wollongong. Commenced 01/07/05

Silicon microdosimetry for measuring the radiobiological effectiveness of a radiation field

Amy Ziebell Centre for Medical Radiation Physics, University of Wollongong. Commenced 1/7/07

Summary of AINSE Awards

The primary purpose of AINSE Awards is to facilitate access by university researchers and research students to the nuclear science and technology facilities at Lucas Heights and other AINSE supported facilities, 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 Awards 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 2007 included the following disciplines

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, 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, zoology.

Awards for 2007 are shown on the following pages in order of university, department and surname 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 pages 24-27. Awards marked with an asterisk (*) have industry linkages. The total amount of the awards 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 are published on our home page, <http://www.ainse.edu.au>

During 2007 155 projects were awarded. They had a total value of \$1,644,639 involving thirty-three of the thirty-nine university members. The table on the following page shows the distribution of awards by university and by specialist areas.

Specialist Areas

UNI	A	B	E	M	N	Total
ADE	2		3			5
AKL	1		1		1	3
ANU	8		3			11
CAN	1			1		2
CBR	1		1			2
CUR				2	2	4
DEA			1			1
ECU				1		1
FLI		3		4		7
GRI				1		1
IGN				1		1
JAM	1		1		1	3
LAT	3		2			5
MAC	1		1	1		3
MEL	2	2	2	4	3	13
MON	1		1	2	2	6
MUR				2		2
NCT			1	2		3
NSW	3		2	5	2	12
OTA	2					2
QLD	4	2	1	1		8
QUT			1	2		3
RMI		1		6		7
SCU			5	1		6
SYD	4	2	2	4	2	14
TAS	3		4			7
UNE	2					2
USA					1	1
USQ	1		1			2
UTS			2	1	1	4
UWA			1	2		3
WOL		3	5	2	1	11
Total	40	13	41	45	16	155

Legend

A	Archaeology and Geosciences
B	Biomedical Science and Biotechnology
E	Environmental Science
M	Materials - Properties and Engineering
N	Materials – Structures and Dynamics

University of Adelaide

Geography and Environmental Studies

07/056P	Dr Peter Gell Environmental change in the coastal wetlands near Adelaide, South Australia, as inferred via diatom analysis of mangrove sediments	\$16,606
07/049	Dr Jennie Fluin Analysis of biological fossils in Lake Alexandrina to assess changes in water quality and flow regimes	\$12,976
07/048	Dr Jennie Fluin Reconstruction of floodplain palaeoenvironments by analysing carbon and nitrogen in sediments	\$4,552

Humanities & Social Sciences

07/160	Professor Martin Williams Depositional chronology of late Pleistocene valley-fills in the Flinders Ranges of South Australia	\$13,274
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Sciences

07/124	Professor John Prescott Low level uranium, thorium and trace element determinations for luminescence dating	\$4,340
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University of Adelaide Total		\$51,748
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The University of Auckland

Arts

07/001	Dr Melinda Allen Developing a radiocarbon chronology for the northern Marquesas Islands, East Polynesia, Phase II	\$4,866
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Chemistry

07/073	A/Professor Hicham Idriss Study of hydrogen production catalysts from bio-ethanol	\$13,922
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Geology

07/130	Dr Phil Shane Resolving the timing of tephra addition to Auckland maar craters	\$21,718
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University of Auckland Total		\$40,506
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Australian National University

Archaeology and Anthropology

07/008	Dr Peter Bellwood AMS C14 dating of a 2000 year old jade workshop in the northern Philippines	\$4,866
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Earth & Marine Sciences

07/117	Dr Bradley Opdyke Carbon-14 dating to improve the resolution of Paleoceanography in the Timor Sea	\$10,520
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07/036	Dr Patrick De Deckker The dating of deep-sea core tops from the Indian Ocean	\$13,480
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07/037	Dr Patrick De Deckker Holocene dating of Blue Lake, Mt Gambier, South Australia	\$4,866
07/044	Professor David Ellis A Pb- and Sr- isotopic study of anthropogenic pollutants in NSW estuarine systems	\$5,410
Research School of Earth Sciences		
07/042	Dr Jim Dunlap Calibration of OPAL for use in ⁴⁰ Ar/ ³⁹ Ar age determination, and application to K-rich minerals for geological studies	\$19,915
Research School of Pacific and Asian Studies		
07/007	Dr Stuart Bedford The obsidian sources and distribution systems emanating from Gaua and Vanua Lava in the Banks Islands of Vanuatu	\$7,200
07/064	Dr Simon Haberle Holocene interaction between fire and monsoon in Northern Australia	\$8,594
07/063	Dr Simon Haberle ¹³ C and ¹⁵ N stable isotope analysis of two tropical sediment records covering the last 20ka	\$1,225
07/138	Dr Janelle Stevenson Early human occupation and landscape change in Island Southeast Asia: new research at Ille Cave, Palawan, the Philippines	\$4,718
The Fenner School of Environment & Society		
07/062	Dr Richard Greene Chemistry and origins of salts in aeolian transported dust across Australia	\$12,850
Australian National University Total		\$93,644

University of Canterbury

Chemistry

07/127	A/Professor Greg Russell Cyclodextrins: probing an important new frontier in emulsion polymerization	\$6,070
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Gateway Antarctica

07/140	Professor Bryan Storey Dynamics and change of the Darwin-Hatherton glacial system	\$12,648
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University of Canterbury Total		\$18,718
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University of Canberra

Environmental Chemistry

07/100	Professor Bill Maher Establishing food webs in two coastal seagrass ecosystems using carbon, nitrogen and sulfur isotopes	\$3,500
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Resource, Environmental and Heritage Sciences

07/047	Dr Nancy FitzSimmons A comparative study of food web dynamics in freshwater rivers of the Kimberley using stable isotopes	\$2,625
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University of Canberra Total		\$6,125
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Curtin University of Technology

Applied Chemistry

07/038P	Professor Roland De Marco A SIMS study of the role of water uptake in novel all-solid-state polymeric ion sensors	\$14,850
07/173	Professor Roland De Marco Ion selective atomic force microscopy: a powerful new imaging technique for materials science	\$7,055

Applied Physics

07/179	A/Professor Craig Buckley Nanostructure and texture in Acacia tension wood	\$2,220
07/096P	A/Professor It-Meng Low Novel synthesis and properties of ternary carbide and composites	\$4,983
Curtin University Total		\$29,108

Deakin University

Ecology and Environment Science

07/155	Dr Mark Warne Environmental history of the Moyne River Estuary, Port Fairy, western Victoria	\$5,640
Deakin University Total		\$5,640

Edith Cowan University

Natural Science

07/152	Dr Magdalena Wajrak Investigation of conditioning methods on the gold electrode surface employed in electroanalyses of arsenic	\$13,625
Edith Cowan University Total		\$13,625

Flinders University

Chemistry, Physics and Earth Sciences

07/095	Dr Dusan Losic Bio-inspired engineering of nanoporous membranes for molecular separation	\$13,740
07/090	Dr Mahaveer Kurkuri Investigation of novel polymer coatings on silicon and glass substrates for cell-based assays	\$9,226
07/020	Dr Martin Johnston Investigating next generation ⁶⁴ Cu Positron Emission Tomography (PET) imaging agents	\$41,980
07/126P	Dr Jamie Quinton Hydrogen content determination of RF-plasma modified carbon surfaces for nanotechnological sensors	\$34,840
07/131	Dr Joseph Shapter Membrane interactions with drugs and proteins	\$2,840
07/151P	Dr Nicholas Voelcker Surface analysis of a patterned platform for the advanced spatial and temporal control of biomolecules	\$7,268

Flinders Medical Centre

07/144	Dr Pamela Sykes The measurement of genetic damage (DNA inversions) in response to radiation	\$41,380
Flinders University Total		\$151,274

Griffith University

Engineering

07/065	Dr Jisheng Han SIMS analysis on Interface between epitaxy SiC layer and Si	\$7,160
Griffith University Total		\$7,160

GNS Science

07/084	Dr John Kennedy Cross section transmission electron microscopy studies of ion beam sputtered ZnO thin films	\$10,471
GNS Science Total		\$10,471

James Cook University

Earth and Environmental Sciences

07/161	Dr Raphael Wust Determining the age of multiple paleosoil horizons in fluvial overbank deposits near Townsville, Queensland	\$6,700
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Mathematical and Physical Sciences

07/158	A/Professor Ian Whittingham Investigations of bio-inorganic interfaces	\$10,530
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TESAG

07/098	Dr Jon Luly Reconstructing centennial scale monsoonal activity from the tree rings of the rare desert tree <i>Acacia peuce</i>	\$4,866
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James Cook University Total		\$22,096
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La Trobe University

Archaeology

07/034	Dr Richard Cosgrove Antiquity of toxic plant use in the wet tropics of far north Queensland	\$4,866
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07/050	Dr David Frankel The chronology of Chalcolithic Cyprus	\$9,732
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07/120	Dr Christina Pavlides At the crossroads: 6500 years of obsidian consumption on the Lamogai Plateau, West New Britain, PNG	\$13,070
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Botany

07/113	Dr John Morgan A lead looking glass into the past: changes in peat soils since European use of the Alps	\$7,200
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Environmental Management and Ecology

07/052	Mr Martin Fussell Groundwater and surface water interaction in the Murrumbidgee Valley	\$3,318
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La Trobe University Total		\$38,186
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Macquarie University

Ancient History

07/136P	Dr Karin Sowada Will the real mummy please step forward: dating ancient Egyptian human remains in museum collections	\$6,488
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CISAB

07/146	Dr Phillip Taylor Improved protocols for irradiation of Queensland fruit flies (Q-flies) used in the Sterile Insect Technique (SIT)	\$7,320
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Electronics

07/149P	Associate Professor Graham Town Fabrication of thin films of polymer nanocomposite materials	\$7,182
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Macquarie University Total		\$20,990
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The University of Melbourne

Anthropology, Geography & Environmental Studies

07/148	Dr Ian Thomas A regional analysis of Holocene vegetation and climate history from the giant sand islands of South East Queensland	\$13,084
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Botany

07/004	Professor Alan Baker Use of PIXE for spatial distribution and localisation of copper in Cu-indicating plants <i>Haumaniastrum robertii</i> and <i>Elsholtzia splendens</i>	\$16,790
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Chemical and Biomolecular Engineering

07/125P	Dr John Provis Effect of immobilised species on geopolymer reactions and structure	\$9,800
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Chemistry

07/025P	Dr Rachel Caruso Organic functionalised hierarchical metal oxide materials for radionuclide sequestration	\$7,898
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07/026	Dr Rachel Caruso The incorporation of gold nanoparticles in porous titanium dioxide materials for photocatalytic applications	\$16,546
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07/027	Dr Rachel Caruso Mesoporous electrode materials for high powered energy storage devices	\$13,418
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07/031	Dr Dehong Chen Metal doped titanium dioxide materials for dye-sensitized solar cell applications	\$7,123
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07/164	Dr Meifang Zhou Evolution of TiO ₂ mesoporous structures in highly concentrated surfactant systems	\$11,690
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Earth Sciences

07/059	Professor Andrew Gleadow The application of fission track analysis to fundamental problems in the Earth Sciences	\$10,600
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07/089P	Dr Barry Kohn Atomic force microscopy nanoscale study of implanted heavy ions as a proxy for spontaneous ²³⁸ U fission fragments	\$10,780
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Genetics

07/024	Professor James Camakaris Application of copper-64 to studies on Alzheimer's disease and characterisation of novel genes and proteins involved in copper homeostasis	\$14,000
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Mechanical and Manufacturing Engineering

07/168	Dr Daniel Riley Novel synthesis of nanolaminate materials using integrating compounds	\$12,802
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Peter Macallum Cancer Research Centre

07/106	A/Professor Roger Martin Pulse radiolysis studies with DNA-binding radioprotectors	\$11,725
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The University of Melbourne Total		\$156,256
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Monash University

Geography and Environmental Science

07/085	Professor Peter Kershaw The value of plant macrofossils for environmental reconstruction and conservation in western Victoria	\$4,718
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Engineering

07/133	Dr Raman Singh Characterization of thin surface films developed on engineering alloys exposed to corrosive environments	\$6,940
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Science

07/016	Dr Ben Boyd Using phase transitions to trigger drug release from nanostructured liquid crystalline drug delivery systems	\$13,870
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07/018	Dr Ben Boyd The use of PALS and 2DDoppler for the characterization of thin films of nanostructured self-assembling amphiphile systems	\$5,010
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07/174	Dr Ian Cartwright Sustainability of groundwater in freshwater lenses, River Murray, Australia	\$15,002
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07/028	A/Professor John Cashion Preparation, properties and potential uses of ferromagnetic gold nanoparticles	\$6,000
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Monash University Total		\$51,540
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Murdoch University

Chemistry

07/134P	Dr Pritam Singh Investigating the electrochemical behaviour of lithium manganese phosphate (LiMnPO ₄) as a cathode material in aqueous solutions	\$8,430
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Extractive Metallurgy

07/111	Dr Manickam Minakshi Investigation of manganese dioxide cathode in the presence of TiS ₂ as additive in an aqueous lithium secondary cell	\$7,501
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Murdoch University Total		\$33,970
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University of Newcastle

Environmental and Life Sciences

07/099P	Dr Geoff MacFarlane Distribution of metals in the hair of a native insectivore; <i>Antechinus stuartii</i> (Marsupialia, Dasyuridae)	\$6,698
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Mathematical & Physical Sciences

07/087	A/Professor Bruce King Capillary effects in friction between alumina, titania and zirconia layers formed by atomic layer deposition	\$4,282
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Mechanical Engineering

07/170	Professor Erich Kisi Grazing incidence x-ray diffraction study of the Pt-Al ₂ O ₃ interface	\$3,700
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University of Newcastle Total		\$14,680
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The University of New England

Human and Environment Studies

07/067	Dr Robert Haworth Determination of sedimentation rates in the upper Namoi River floodplains (Liverpool Plains) from AMS dating of alluvial overburden	\$4,866
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07/178	Dr Robert Haworth Fixed biological indicators and Holocene sea level change at Cape Edgecumbe, North Queensland	\$11,132
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The University of New England Total		\$15,998
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The University of New South Wales

Anatomy

07/068	Dr Andrew Herries Dating of tufa formation, climatic pulsing and human occupation near Ulco, Ghaap Escarpment, South Africa	\$15,086
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Biological Earth & Environmental Sciences

07/171	Dr Brenton Ladd Towards a physical description of habitat: on the relationship between functional traits and the abiotic environment in Eucalyptus	\$840
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07/061	Dr Ian Graham PIXE trace element analysis of corundums and zircons from different geological settings: a key to understanding their genesis	\$9,600
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07/060	Dr Ian Graham Geochemical characterisation of selected sites from the Riversleigh World Heritage Area as indicators of palaeoenvironmental formation conditions	\$8,240
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Centre for Water and Waste Technology

07/032	Dr Richard Collins Measurement of isotopically exchangeable Al in acid sulfate soils using ²⁶ Al and AMS	\$2,211
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Chemical Sciences and Engineering

07/006P	Dr Leonie Barner Radiolabelling of functional polymeric microspheres	\$13,000
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Materials Science & Engineering

07/069	A/Professor Mark Hoffman Effect of the hydrogen annealing on the elemental distribution in lead zirconate titanate (PZT) ceramic investigated by analytical TEM	\$7,491
07/029	Dr Sammy Chan Manufacturing of titanium matrix composites with nanometric reinforcements using hot isostatic press	\$7,475
07/046	A/Professor Michael Ferry Thermomechanical behaviour of multi-functional titanium alloys	\$4,575
07/092	Dr Sean Li Investigation of atomic disorder effects on photonic properties of ZnO	\$12,400

Physical, Environmental and Mathematical Sciences ADFA

07/139	Dr Glen Stewart The crystal field at the rare earth site in thulium manganese silicide	\$2,578
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Aerospace Civil and Mechanical Engineering ADFA

07/167	Dr Krishnakumar Shankar Production of nanometric reinforced aluminium matrix composites by powder metallurgy (P/M) using hot isostatic press(HIP)	\$11,700
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University of New South Wales Total		\$95,196
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Otago University

Anthropology

07/153	A/Professor Richard Walter Evolution of the rural based Maori cultural landscape in the far north of New Zealand in the late prehistoric and early proto-historic period	\$5,772
07/143	Professor Glenn Summerhayes Identifying prehistoric trade and exchange between New Guinea and Manus: the sourcing of obsidian from the Schouten Islands, East Sepik, PNG	\$5,745

University of Otago Total		\$11,517
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University of Queensland

Aboriginal and Torres Strait Islander Studies

07/150	Dr Sean Ulm Marine carbon reservoir variability along the NSW Coast	\$8,950
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Australian Institute for Bioengineering and Nanotechnology

07/104	Dr Darren Martin Radiolabelling of industrially-relevant nanoparticles for use in nanotoxicology investigations	\$22,290
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Centre for Marine Studies

07/175	Dr Catherine Lovelock Understanding mangrove colonisation of recent marine sediments	\$16,695
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Geography, Planning & Architecture

07/115	Dr Patrick Moss Late Quaternary environments of North Stradbroke Island, Southeast Queensland	\$9,070
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Physics

07/181P	Dr Ujjual Divakar Metal mixing by ion implantation for soft devices	\$8,154
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Psychiatry

07/108	Professor John McGrath Is adult neurogenesis in schizophrenia altered? A pilot study using ¹⁴ C dating of post-mortem neuronal DNA	\$30,025
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Social Sciences

07/079	Dr Jennifer Kahn ¹⁴ C dating of monumental public architecture (Marae) in the Society Islands, French Polynesia	\$5,826
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07/156	Dr Marshall Weisler Calibration of the late Holocene C-14 marine reservoir ages in Hawaii using U-series dated corals	\$7,299
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University of Queensland Total		\$108,309
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Queensland University of Technology

Mechanical Engineering

07/147	Dr Tuquabo Tesfamichael Characterization of ion implanted femtosecond diamond-like carbon films (fs-DLC)	\$12,921
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Physical and Chemical Sciences

07/003	Dr Godwin Ayoko Chemical composition and source identification of fine aerosols in South East Queensland	\$14,860
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07/051P	Professor Ray Frost Synthesis and characterisation of titania nanotubes	\$17,939
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Queensland University of Technology Total		\$45,720
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RMIT University

Applied Chemistry

07/101P	Professor David Mainwaring Irradiation induced electrical conductivity in polymeric thin films	\$14,100
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Applied Physics

07/021	Dr Gary Bryant Characterization of different conformational forms of malarial antigen MSP2	\$5,950
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07/074	Professor Peter Johnston Heavy ion beam nanolithography	\$17,415
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07/107P	A/Professor Dougal McCulloch Design and synthesis of advanced broadband optical coatings using atomic layer deposition	\$4,180
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Civil and Chemical Engineering

07/154P	Dr Liam Ward Ion implantation of austenitic, ferritic and martensitic stainless steels for improved corrosion and wear resistance	\$20,098
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Electrical & Computer Engineering

07/070P	Dr Anthony Holland Deposition and characterisation of piezoelectric thin films	\$13,544
07/071P	Dr Anthony Holland Composition analysis and electrical properties of silicide-semiconductor interfaces	\$12,932
RMIT University Total		\$88,219

Southern Cross University

Environmental Science and Management

07/022	Dr Edward Burton Transmission electron microscopic examination of sedimentary iron-monosulfide mineralogy and nano-structure in acidified estuarine waterways	\$6,581
07/023	Dr Richard Bush Delta ³⁴ S enrichment of authigenic sulfides: unravelling this geochemical anomaly of coastal lowland acid sulfate soils	\$24,800
07/045	Associate Professor Brad Eyre Sources of organic matter that fuel fisheries production in NSW estuaries	\$3,600
07/119	Dr Jeffrey Parr Characterisation of zeolites	\$4,300
07/141	A/Professor Leigh Sullivan Reverting acid sulfate soils to more natural wetting and drying cycles: biogeochemical processes and environmental benefits	\$10,895
07/145	Dr Kathryn Taffs An investigation into the history of eutrophication in Eastern Australian estuaries	\$11,230
Southern Cross University Total		\$61,406

University of South Australia

Ian Wark Research Institute

07/102	Professor Peter Majewski Synthesis of mesoporous functionalized zirconium titanate for actinide removal from water	\$13,667
University of South Australia Total		\$13,667

The University of Sydney

Archaeology

07/157	Dr Peter White Pleistocene and Holocene use and exchange of obsidian artefacts in West New Britain, Papua New Guinea	\$16,800
07/002	Dr Mark Allon The dating of an ancient birch bark Buddhist scroll recently acquired by the Library of Congress	\$811

Chemical Engineering

07/066P	Dr Andrew Harris The development of microporous silicon carbide for high temperature applications	\$17,032
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EPR Group

07/035	Professor Michael Davies Do superoxide radicals act synergistically with hypochlorite and hypobromite to induce biological damage?	\$5,705
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Geosciences

07/013	Professor Gavin Birch Construct a chronologic contaminant framework for central NSW estuaries using dated sediment cores and contaminant analyses	\$11,073
07/055	Dr Stephen Gale European impact on the natural environment of Kangaroo Island	\$4,800
07/053	Dr Stephen Gale European impact on vegetation in arid Australia	\$8,904
07/121P	Dr Dan Penny Dating the foundation myth of Angkor: a ¹⁴ C chronology for settlement and earliest urbanism at the World Heritage site of Angkor, Cambodia	\$6,488

Key Centre for Polymer Colloids

07/058P	Dr Brian Hawke Polymerisation of polymer colloids	\$900
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Medical Radiation Sciences

07/083	Mr Peter Kench Assessing millimetric signal variations within small organs through the use of SPECT multi-pinhole technology	\$44,815
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Molecular and Microbial Biosciences

07/180	Professor Philip Kuchel The structural determination of <i>Staphylococcus aureus</i> alpha haemolysin heptamer in a model membrane	\$11,100
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Physics

07/012P	Professor Marcela Bilek Composition of ternary alloys: TCO and MAX phase thin films	\$12,396
07/011	Professor Marcela Bilek Structural characterisation of ternary alloys: TCO and MAX phase thin films	\$16,317
07/094	Dr Sunnie Lim Consolidation of elementally specific deposition cathodes for TCO applications	\$6,300

The University of Sydney Total		\$163,441
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University of Southern Queensland

Biological and Physical Sciences

07/103P	Dr Martine Maron A high-resolution chronology of rainfall in the upper Murray-Darling River system	\$9,624
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Humanities and Social Sciences

07/005	Dr Bryce Barker Post 600BP on the central Queensland coast and dynamic cultural transformations in northern coastal Australia, Torres Strait and Melanesia	\$7,299
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The University of Southern Queensland Total		\$16,923
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University of Tasmania

Antarctic, Climate and Ecosystems CRC

07/072P	Dr William Howard Holocene chronology for calibration of South Tasman Rise palaeoceanographic proxies	\$9,708
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Centre of Excellence in Ore Deposits

07/162	Dr Khin Zaw PIXE/PIGE analysis of trace element composition in hydrothermal magnetite: implications for ore formation	\$7,778
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Geography & Environmental Studies

07/086	Dr Kevin Kiernan Dating deglaciation and karst evolution in southeastern Alaska	\$11,870
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Institute of Antarctic & Southern Ocean Studies

07/109	Professor Andrew McMinn Impact of climate change on late Holocene penguin populations of the Vestfold Hills, East Antarctica, using high resolution lake sediment cores	\$8,213
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Marine Research Laboratories

07/166	Dr John Gibson Effects of pre and post settlement on the health and stability of Little Swanport Estuary	\$5,000
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07/057	Dr John Gibson Determination of a temporal framework for mid-late Holocene tephra deposition in the Antarctic Peninsula region	\$8,110
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Plant Science

07/014	Professor David Bowman Using radiocarbon bomb pulse to perfect the dating tree rings in <i>Callitris</i> in outback Australia	\$17,282
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University of Tasmania Total		\$67,961
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University of Technology Sydney

Chemistry, Materials and Forensic Science

07/009P	Dr Besim Ben-Nissan Characterisation and analysis of sol-gel derived hydroxyapatite and zirconia nano-coating interfaces with anodised titanium substrates	\$10,924
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Environmental Sciences

07/043P	Professor Derek Eamus Relationships amongst water-use efficiency (carbon isotope discrimination) climate and hydraulic architecture of Australian trees	\$3,500
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07/135	Professor Greg Skilbeck Compositional variation of organic detritus in Botany Bay during the Holocene	\$11,610
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Physics and Advanced Materials

07/041	Dr Annette Dowd Microstructural study of VO ₂ phase transition	\$9,730
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University of Technology Sydney Total		\$35,764
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The University of Western Australia

Electrical and Electronic Engineering

07/129P Dr Richard Sewell
SIMS analysis of dopant incorporation and transient effects during MBE growth of HgCdTe \$7,205

07/088P Dr Martin Kocan
Ion implantation of epitaxial GaN material \$12,476

Zoology

07/019 Professor Don Bradshaw
Measurement of protein turnover in free-ranging honey possums \$1,705

The University of Western Australia Total \$21,386

University of Wollongong

Chemistry

07/039 Dr Carolyn Dillon
The role of S-containing arsenic complexes in arsenic-mediated anti-cancer action \$33,879

07/169 Dr Paul Keller
The testing of CRH antagonists as potential new therapeutics for the prevention of premature birth \$14,700

07/081 Dr Paul Keller
The development of sigma-1 and sigma-2 receptor ligands as diagnostic probes for cancer and neurodegeneration \$32,300

Earth and Environmental Sciences

07/076 A/Professor Brian Jones
Sedimentation patterns in an urbanised embayment: Oatley Bay, Sydney \$6,604

07/077 A/Professor Brian Jones
Sedimentation rates in the Tamar estuary \$4,866

07/114P Professor John Morrison
Eutrophication of Lake Illawarra, NSW, as observed through sediment diatom frustule assemblage changes over time \$3,840

Engineering

07/116 Dr Long Nghiem
Removal of heavy metals and radionuclides from mining impacted water \$8,326

GeoQuest Research group

07/075 Dr Dianne Jolley
The use of radioactive ⁷⁵Se to unravel the intracellular fate of selenium in the tissues of marine organisms \$21,272

ISEM

07/163P Dr Yue Zhao
Study of content and profile of impurities in MgB₂ thin films by RBS and ERDA, and their influence on the structure and physical properties for applications in superconducting electronic devices \$9,297

Materials Engineering

07/030 Dr Zhixin Chen
Energy-filtered TEM imaging of nano-precipitates in low Mn steels \$3,794

Physics

07/091 Dr Michael Lerch
IBIC studies of detectors for synchrotron x-ray dosimetry \$12,556

University of Wollongong Total \$151,434

Summary of experiments at ISIS

AINSE coordinates funding for Australia's membership of ISIS. This facility, situated in Oxfordshire in the United Kingdom, is the most powerful pulsed neutron source in the world. Normally the membership fee is paid with the assistance of the Australian Research Council's Linkage Infrastructure Equipment and Facilities Fund, and supplemented with contributions from universities, ANSTO and AINSE. As our application to the ARC was unsuccessful we were unable to pay the \$400,000 membership fee to ISIS. The Director of the facility very kindly offered to accept applications from Australian researchers for 2007 and as a result of this 32 days were awarded to 12 proposals from 7 groups.

Aldridge Dr L P ANSTO Interlayer and interparticle water in clays	5
Forrester Dr J University of Newcastle Structure of PZN-PT single crystals	3
Gray Dr E M Griffith University Powder diffraction studies under high deuterium pressure	6
He Dr L University of Queensland Interaction between Rubisco and SDOBS at an air-water interface	2
Kisi Dr E H University of Newcastle In-situ electric field study of PZN-PT crystals	2
Muransky Dr O ANSTO Combined in-situ neutron diffraction and acoustic emission investigation of the deformation processes in AZ series magnesium alloys	3
White Professor J W Australian National University The effect of solution pH on the interaction between poly(silicic) acid and DMPC at the air-water interface	2
White Professor J W Australian National University Mechanisms of shear stability in emulsions	2
White Professor J W Australian National University Co-surfactancy of oil-soluble and water-soluble surfactants in emulsion stabilisation	2
White Professor J W Australian National University The role of reverse micelles in emulsion stabilisation	2
Zhang Dr Z ANSTO Understanding of the pseudo-symmetry in lanthanide tantalates	3
Other proposals from European researchers with Australian Collaborators	
Finlayson Dr T R University of Melbourne Development of internal strains during compression of Al-Si alloy Al-7Si-0.4Mg	3
Howard Dr C J ANSTO Strain analysis of high pressure phase transitions in perovskites	2

Publications relating to research at ISIS

Paradowska A M; Price J W H; Ibrahim R; Finlayson T

Neutron diffraction evaluation of residual for several weld arrangements and comparison with fitness-for-purpose assessments

Transactions of the ASME - Journal of Pressure Vessel Technology 130(1) 1-7 2008

Price J W H; Ziara-Paradowska A M; Joshi S; Finlayson T; Semetay C; Nied H

Comparison of experimental and theoretical residual stresses in welds: The issue of gauge volume

International Journal of Mechanical Sciences, 509(3) 513-521 2008

Griffiths J R; Finlayson T R; Fitzpatrick M E; Oliver E C; Wang Q G

The partition of stresses in Al-Si metal matrix composites

6th AINSE/ANBUG Neutron Scattering Symposium 23 2007

Finlayson T R; Griffiths J R; Viano D M; Fitzpatrick M E; Oliver E C; Wang Q G

Stresses in the eutectic silicon particles of strontium-modified A356 castings loaded in tension

Shape Casting: The Second International Symposium, eds. P N Crepeau, M Tiryakioglu and J Campbell, (TMS (The Minerals, Metals and Materials Society)) 127-134 2007

Finlayson T R; Griffiths J R; Viano D M; Fitzpatrick M E; Oliver E C; Wang Q G

The partition of stresses in Al-Si-based metal matrix composites

Proceedings of the 31st Annual A&NZIP Condensed Matter and Materials Meeting', eds. A Barnhoorn, J D FitzGerald, I Jackson and T J Senden (Australian Institute of Physics Paper 7 3pp 2007 (http://www.aip.org.au/wagga2007/2007_7.pdf) ISBN 978-0-9598064-9-6)

Forrester J S; Kisi E H

Monoclinic $PbZn_{1/3}Nb_{2/3}O_3 - 8\%PbTiO_3$ at 4 K

Acta Crystallogr C 63(12) i115-i118 2007

Kisi E H; Forrester J S; Howard C J; Ibberson R M

Search for the x-phase in poled PZN-PT using very high resolution single crystal neutron diffraction

J Phys: Condens Matter 19 232201 2007

Gray E MacA; Smith R I; Pitt M P

Time-of-flight neutron powder diffraction with a thick-walled sample cell

J Appl Cryst 40 399-408 2007

Middelberg A P J; He L; Dexter A F; Shen H-H; Holt S A; Thomas R K

The interfacial structure and Young's modulus of peptide films having switchable mechanical properties

J R Soc Interface 5 47-54 2008

Middelberg A P J; He L; Dexter A F

Young's modulus of a switchable peptide film

34th American Chemical Society National Meeting Boston 19-23 August 40 2007

Muránsky O; Carr D G; Šittner P; Oliver E C; Dobroň P

In-situ neutron diffraction studies of the pseudoelastic-like behaviour of hydrostatically extruded Mg-Al-Zn alloy

Materials Science Forum 571-572 2008 107-112

Henderson M J; Rennie A R; Hawley A M; White J W

Swelling of a mesostructured zirconium oxide film

Physica B 385-386(1) 713-715 2006

<http://dx.doi.org/10.1016/j.physb.2006.05.305>

Perriman A W; Henderson M J; Holt S A; White J W

Effect of the air-water interface on the stability of beta-lactoglobulin

J Phys Chem B 111(48) 13527-37 2007

Zank J; Reynolds P A; Jackson A J; Baranyai K J; Perriman A W; Barker J G; Kim M-H; White J W

Aggregation in a high internal phase emulsion observed by SANS and USANS

Physica B 385-286(1) 776-779 2006

<http://dx.doi.org/10.1016/j.physb.2006.06.081>

Zhang Z; Howard C J; Kennedy B J; Knight K S; Zhou Q

Crystal structure of $Ln_{1/3}NbO_3$ ($Ln = Nd, Pr$) and phase transition in $Nd_{1/3}NbO_3$

J Solid State Chem 180 1846-1851 2007

Zhang Z; Lumpkin G R; Howard C J; Knight K S; Whittle K R; Osaka K

Structures and phase diagram for the system $CaTiO_3 - La_{2/3}TiO_3$

J Solid State Chem 180 1083-1092 2007

Publications

Notification of the following papers incorporating results from AINSE supported projects was received by AINSE in 2007. This list may not be a comprehensive list of all publications arising from AINSE supported work nor does it necessarily relate to Awards held in 2007.

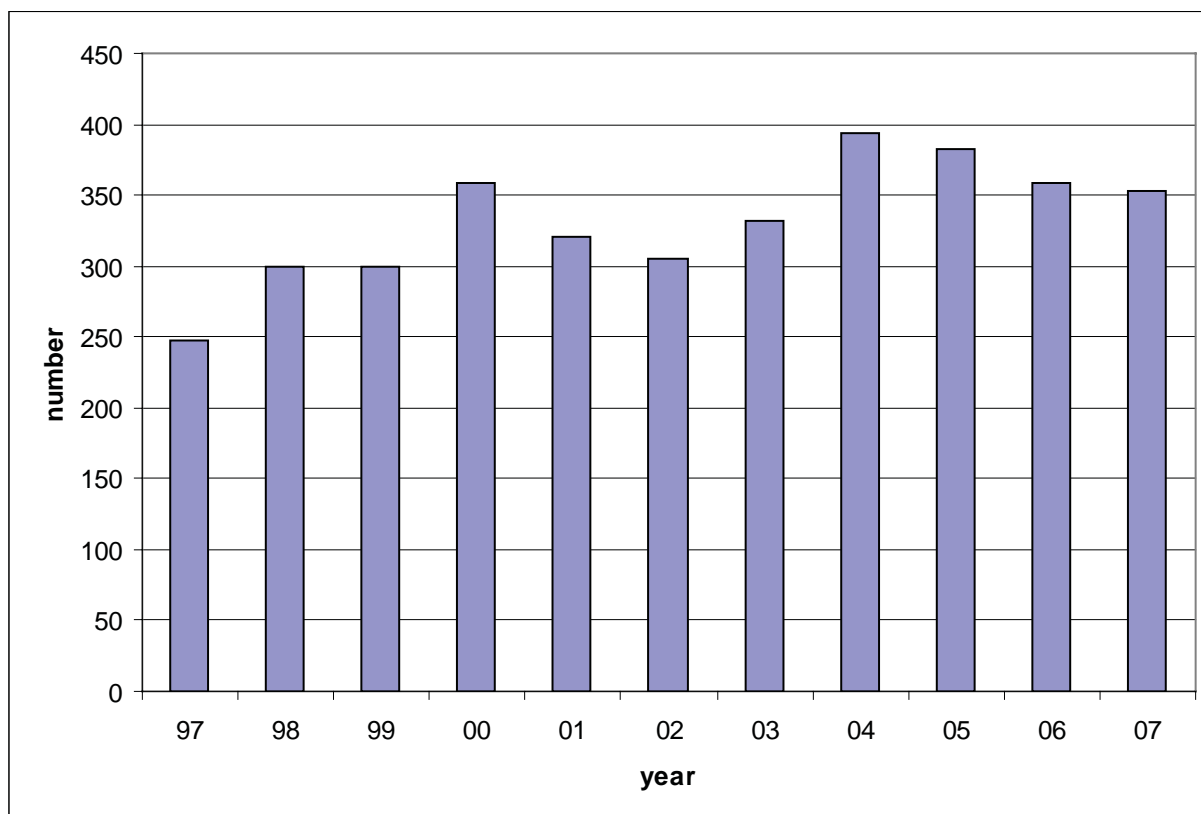
The publications are listed in university order under the name of the chief investigator, in bold. Where the chief investigator is not an author the name is in brackets. Publications arising from AINSE Postgraduate Research Awards (PGRA) are also listed.

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

The format of the journal references is as follows: abbreviated name of journal, volume, page number, year of publication ISSN.

The format of Conference papers is generally: conference name, page, poster or abstract number, month year, ISSN.

The graph below shows the total number of publications by year of publication



Project Number	Chief Investigator Coauthors	Title of Publication	Reference
University of Adelaide			
07/048	Siddiqui H; Fluin J; Gell P; Hancock G	Late Holocene water quality and organic enrichment in Mundic Creek wetland, lower River Murray floodplain, South Australia	Quatern Int 167-168 Supplement 383 2007
07/049	Skinner R; Fluin J; Cann J; Harrison J	A multiproxy palaeoecology reconstruction of the mid-Holocene to present salinity, marine incursions and flow regime of Lake Alexandrina and the Goolwa channel, South Australia	Quatern Int 167-168 Supplement 390 2007 ISSN 1040-6182
07/049; 07/056P	Nicholson E D; Krull E S; Smernik R J; Zawadzki A; Gell P A; <i>et al</i> (Fluin J)	Environmental change in the coastal wetlands near Adelaide, Australia	Quatern Int 167-168 Supplement 306 2007 ISSN 1040-6182
PGRA	Natt A C; Haberle S; Jacobsen G	Preliminary paleolimnological data from a Santiago Island coastal lagoon, Galapagos Archipelago, Ecuador	Quatern Int 167-168 Supplement 302 2007 ISSN 1040-6182
PGRA	Pearce S V; Linton V M	Residual stresses in high strength, thick section steel welds	MECA SENS IV Conference on Stress Evaluation 249 September 2007
07/124	Prescott J R; Creighton D F	Thermoluminescence spectra of quartz from single crystals	5th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 268 November 2007 0 9758434 2 7
95/066; 95/067; 05/136	Prescott J R; Williams F M; Hunt C D	Comparison of TL multiple aliquot, single grain GLSL, SAR and C-14 ages for the Puritjarra, Australia, rock shelter	Quatern Geochron 2 344-349 2007
03/115	Tibby J; Lane M B; Gell P A	Local knowledge and environmental management: a cautionary tale from Lake Ainsworth, New South Wales, Australia.	Environmental Conservation 34(4) 334-341 2007
03/115	Tibby J	Reconstructing natural and human-induced water quality variability and change in coastal lakes using sedimentary diatoms	Australian Marine Sciences Association conference abstracts 113 July 2007 Melbourne
06/175P	Tibby J; Barr C; Dick J; Fluin J; Gell P A; Haberle S; Haynes D; Kershaw A P; <i>et al</i>	European impact on the Australian environment: some new palaeoecological perspectives on defining reference conditions	5th International Southern Connections Conference 70 January 2007 Adelaide
06/175P	Tibby J; Leavitt P; Sayer C; Harrison J	Detecting impacts in variable coastal lakes using the sediment record	International Coastal Symposium abstracts 64 April 2007 Gold Coast
06/175P	Tibby J; Fluin J; Sims A; MacGregor A; Gell P	The limnological history of selected Eastern Australian coastal lakes: the relative importance of estuarine evolution, sea level and hydrology	Quatern Int 167-168 Supplement 155 2007 ISSN 1040-6182
06/175P	Harrison J; Saunders K M; Flett I; Tibby J	Refining recent sediment dating using multiple radionuclides	Quatern Int 167-168 Supplement 420 2007 ISSN 1040-6182
06/196	Sylvestre F; Gasse F; Williams M; Chalié F; Vincens A; Williamson D	Late Quaternary climates in Africa, South America and Australia	Quatern Int 167-168 Supplement 409 2007
00/165	Williams M; Talbot M; Aharon P; Abdl Salaam Y; Williams F; Brendeland K I	Abrupt return of the summer monsoon 15,000 years ago: new supporting evidence from the lower White Nile valley and Lake Albert	Quatern Sci Rev 25 2651-2665 2006
00/165	Woodward J C; Macklin M G; Krom M D; Williams M A J	The Nile: evolution, Quaternary river environments and material fluxes	In: A. Gupta (ed) <i>Large Rivers: Geomorphology and Management</i> 261-292 2007 Chichester 978-0-470-84987-3

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
04/172	Williams M; Nitschke N	Influence of wind-blown dust on landscape evolution in the Flinders Ranges, South Australia	South Australian Geographical Journal 104 25-36 2005
04/172	Mee A C; McKirdy D M; Krull E S; Williams M A J	Holocene environmental change recorded in shallow coastal lakes of the Coorong region, southeastern Australia	Australian Earth Sciences Convention 2006 CD-ROM July 2006
04/172	Mee A C; McKirdy D M; Krull E S; Williams M A J	Sapropels in shallow Holocene coastal lakes in southeastern Australia: an elemental and isotopic perspective	22nd International Meeting of Organic Geochemistry 2 817-818 September 2005 Seville, Spain
04/172	Mee A J; McKirdy D M; Williams M A; Krull E S	New radiocarbon dates from sapropels in three Holocene lakes of the Coorong coastal plain, southeastern Australia	Australian Journal of Earth Sciences 54 (6) 825-835 2007
04/172	Mee A; McKirdy D M; Krull E S; Williams M	Geochemical analysis of organic-rich lacustrine sediments as a tool for reconstructing Holocene environmental conditions along the Coorong coastal plain, southeastern Australia	Cooperative Research Centre for Landscape, Environment and Mineral Exploration (CRC LEME) Regional Regolith Symposia 2004 247-251 November 2004 Canberra 0 9756895 0 9
06/196; 07/124	Duller G A T; Williams F M; Williams M A J	Analysis of sediments from the White Nile using single grain optically stimulated luminescence	UK Luminescence and ESR Meeting 2006 24 September 2006 Liverpool, UK
07/160	Haberlah D; Williams M A J; Hill S M; Halverson G; Glasby P	A terminal last glacial maximum (LGM) loess-derived palaeoflood record from South Australia?	Quatern Int 167-168 Supplement 150 July 2007 ISSN 1040-6182
07/160	Glasby P; Williams M A J; McKirdy D; Symonds R; Chivas A R	Late Pleistocene environments in the Flinders Ranges, Australia: preliminary evidence from microfossils and stable isotopes	Quatern Aust 24 (2) 19-28 2007
99/001	Williams M; Nitschke N; Chor C	Complex geomorphic response to late Pleistocene climatic changes in the arid Flinders Ranges of South Australia	Géomorphologie: Relief, Processus, Environnement 4 249-258 2006

The University of Auckland

06/002	Allen M S; Wallace R	New evidence from the East Polynesian gateway: substantive and methodological results from Aitutaki, southern Cook Islands	Radiocarbon 49 (3) 1163-1179 2007 1061-592X
03/004	Gehrels M J; Newnham R W; Lowe D J; Hall V A; Augustinus P C	Cryptotephrostratigraphic records from northern New Zealand spanning the last two millennia	Quatern Int 167-168 Supplement 134 July 2007
05/004	Augustinus P C	NZ-maars: extracting high resolution paleoclimate records from maar crater lakes, Auckland, New Zealand	Past Global Changes 15 18-20 2007
05/004	Augustinus P C; D'Costa D; Shane P; Deng Y-B; Cochran U	Biological and geochemical multi-proxy evidence for rapid environmental change from Auckland maar crater lakes	Quatern Int 167-168 Supplement 18-19 2007
05/004	Kattel G; Augustinus P	Climatic history of an Auckland maar lake, inferred from Cladocera	Quatern Int 167-168 Supplement 201 2007
05/004	Makou M; Augustinus P; Sikes P	Biomarker records of vegetation changes and aridity from Onepoto Crater, Auckland, New Zealand	Quatern Int 167-168 Supplement 264-265 2007
05/004	Alloway B V; Lowe D J; Barrell D J A; Newnham R M; Augustinus P C; <i>et al</i>	Towards a climate event stratigraphy for New Zealand over the past 30,000 years (NZ-INTIMATE project)	Journal of Quaternary Science 22 9-35 2007
06/006	Aw K C; Salim N T; Gao W; Li Z W; Prince K	Comparative study of copper diffusion in plasma treated low-K dielectric thin film using XPS and SIMS	Advanced Materials Research 29-30 347-350 2007

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
03/011; 06/210	Bowmaker G A; Harris R K; Hanna J V	Solid-state copper and silver NMR spectroscopy of copper(I) and silver (I) coordination compounds	Conference of the Inorganic Chemistry Division, RACI 92 2007
04/075	Hay M P; Lee H H; Yang S; Hicks K O; Siim B G; Pruijn F B <i>et al</i>	The development of an efficient, scalable synthesis of the hypoxia-selective cytotoxin SN 30000	Proceedings of the American Association for Cancer Research, 48 934 April 2007 Los Angeles, USA
04/075	Hay M P; Pchalek K; Pruijn F B; Hicks K O; Sim B G; Anderson R F <i>et al</i>	Hypoxia-selective 3-alkyl 1,2,4-benzotriazine 1,4-dioxides with antitumor activity: the influence of hydrogen bond donors on extravascular transport	Med Chem 50 6654–6664 2007
05/077	Morrison S J; Sheng P Y; Yee A; Bowmaker G A; Idriss H	Hydrogen production from ethanol over bimetallic Rh-M/CeO ₂ (M = Pd or Pt) catalysts	Am Chem Soc 51 (1) 26-27 2006
05/077	Idriss H; Sheng P; Bowmker G A	Hydrogen production from ethanol over bimetallic catalysts	American Chemical Society 231 Mar 2006 Atlanta
07/073	Sheng P Y; Chiu W W; Yee A; Morrison S J; Idriss H	Hydrogen production from ethanol over bimetallic Rh-M/CeO ₂ (M = Pd or Pt)	Catal. Today 129 313–321 2007
PGRA	Lee J; Metson J; Evans P J; Kinsey R; Bhattacharyya D	Implanted ZnO thin films : microstructure, electrical and electronical properties	Applied Surface Sci 253 (9) 4317-4321 2007
06/127P	Nguyen C L; Zhang W; Metson J B	Surface segregation of LM6 investigated by XPS and SIMS	ASST 2006, ATB Metallurgie 45(1-4) 189-193 2006

Australian National University

07/008	Hung H; Iizuka Y; Bellwood P; Nguyen K D; Bellina B; Silapanth P; Dizon E; <i>et al</i>	Ancient jades map 3000 years of prehistoric exchange in Southeast Asia	Proceedings of the National Academy of Sciences (USA) 104 19745-19750 2007
06/026	Bellwood P; Cameron J; Nguyen V V; Bui V L	Ancient boats, boat timbers, and locked mortise-and-tenon joints from Bronze/Iron-Age northern Vietnam	International Journal of Nautical Archaeology 36(1) 2–20 2007
03/028	(De Deckker P) Young M	The distribution of organic- and calcareous-walled dinoflagellate cysts from the eastern Indian Ocean: a proxy for late Quaternary palaeo-oceanographic reconstructions	PhD Thesis 2006
05/036	Gingele F; De Deckker P; Norman M	Late Pleistocene and holocene climate of SE Australia reconstructed from dust and river loads deposited offshore the River Murray mouth	Earth and Planetary Science Letters 255 257-272 2007
97/057R; 07/037	Murgese D S; De Deckker P	The late Quaternary evolution of water masses in the eastern Indian Ocean between Australia and Indonesia, based on benthic foraminifera faunal and carbon isotopes	Palaeogeogr Palaeoclimat Palaeoecol 247 382-401 2007 0031-0182
06/056	Mazur S; Dunlap W J; Turniak K; Overc-Driedzic T	⁴⁰ Ar/ ³⁹ Ar age constraints for the thermal evolution and erosional history of the central European Variscan belt: new data from the sediments and basement of the Carboniferous foreland basin in western Poland	Geological Society, London 163(6) 1011-1024 2006
06/056	Fossen H; Dunlap W J	Age constraints on the late Caledonian (Scandian) deformation in the Major Bergen Arc, SW Norway	Norwegian Journal of Geology 86 59-70 2006
06/056	(Dunlap W J) Beltrando M	Dating and deformation history of the Penninic units of the Western Alps	PhD Thesis 2007
06/056	Mortimer N; Hoernle K; Hauff F; Palin J M; Dunlap W J; Werner R; Faure K	New constraints on the age and evolution of the Wishbone Ridge, southwest Pacific Cretaceous microplates, and Zealandia–West Antarctica breakup	Geology 34 185-188 2006

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
05/052	Krull E; Bray S; Harms B; Baxter N; Bol R; Farquhar G	Development of a stable isotope index to assess decadal-scale vegetation change and application to woodlands of the Burdekin catchment, Australia	Global Change Biology 13 1-14 2007
PGRA	Flett I; Haberle S; Heijnis H; Natt A; Herries A	New palaeolimnological records from the Galapagos Islands, Ecuador	International Palaeolimnology Conference December 2005 Duluth, USA
PGRA	Flett I; Haberle S	Four thousand years of environmental change from a Galapagos peat archive	Quatern Int 167-168 Supplement 122 July 2007 1040-6182
PGRA	Haberle S; Flett I; Lamb H	High resolution geochemical analysis of laminated coastal lagoon sediments from the Galapagos Islands, Ecuador	Quatern Int 167-168 Supplement 151 July 2007 1040-6182
FEL	Thomas L H; Welberry T R; Goossens D J; Heerdegen A P; <i>et al</i>	Disorder in pentachloronitrobenzene, C ₆ Cl ₅ NO ₂ : a diffuse scattering study	Acta Crystallographica B 63 663-376 2007
00/060	Tibby J; Haberle S G	A late glacial to present diatom record from Lake Euramoo, wet tropics of Queensland, Australia	Palaeogeogr Palaeoclimat Palaeoecol 251 46-56 2007
00/060	Black M P; Mooney S D; Haberle S G	The fire, human and climate nexus in the Sydney Basin, eastern Australia	The Holocene 17 465-478 2007
00/060	Haberle S	Fire histories from the wet Tropics: global vs local perspectives	Quatern Int 167-168 Supplement 150 July 2007 1040-6182
01/067	Porch N; Prebble M; Haberle S	Invasion palaeoecology: using the fossil record to reconstruct the history and impact of human-moderated biological invasions	Quatern Int 167-168 Supplement 327 July 2007 1040-6182
02/051	Davies S; Turney C; Hall V; Kershaw P; Haberle S; Denham T; Alloway B	The characterisation of local and distal tephras in the northern sector of Greater Australia including some preliminary high-precision correlations between significant archaeological sites in Papua New Guinea (PNG)	Quatern Int 167-168 Supplement 91 July 2007 1040-6182
02/051	Haberle S	Was the early Holocene characterised by "El Niño-like" or "La Niña-like" conditions? Evidence from terrestrial archives in the Western Pacific Warm Pool region	Quatern Int 167-168 Supplement 150 July 2007 1040-6182
06/250	Nguyen H B; Norén L; Liu Y; Withers R L; Wei X; Elcombe M M	The disordered structures and low temperature dielectric relaxation properties of two misplaced-displacive cubic pyrochlores found in the Bi ₂ O ₃ MIIIONb ₂ O ₅ (M=Mg, Ni) systems	Journal of Solid State Chemistry 180 (9) 2558-2565 2007
06/140	(O'Connor S) Marwick B	Archaeology and palaeoecology in Northwest Thailand during the late Pleistocene and early Holocene	Quatern Int 167-168 Supplement 272 July 2007 1040-6182
PGRA	Perriman A W; White J W	Kinetics of adsorption of lysozyme at the air-water interface and the role of protein charge	Physica B 385-386 716 2006
PGRA	Perriman A W	The effect of the air-water interface on protein structure	PhD Thesis 2006
PGRA	Perriman A W; Henderson M J; Holt S A; White J W.	Effect of the air-water interface on the stability of beta-lactoglobulin	Journal of Physical Chemistry B 111(48) 13527-37
05/140	Ionescu M; Richards B; McIntosh K; Siegele R; Stelcer E; Hawas O; <i>et al</i>	Hydrogen measurements in SiN _x :H/Si thin films by ERDA	Materials Science Forum 539-543 3551-3556 2007
03/095P	(Ridgway M); Khalil A S	Heavy-ion-irradiation-induced disorder in indium phosphide and selected compounds	PhD Thesis 2007

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
05/156	Stevenson J	Mid-Holocene environmental change in the northern Philippines	Quatern Int 167-168 Supplement 397 July 2007 ISSN 1040-6182

University of Ballarat

06/051	(Dowling K); Pearce D	Toenails: they know where you've been!	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 21 November 2007 0 9758434 2 7
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University of Canberra

PGRA	Abbondante S	Radiologically contaminated evidence: extraction procedures and the effect of radioactive materials on forensic DNA profiling	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 58 November 2007 0 9758434 2 7
06/038	Creagh D C; Kubik M E; Sterns M	On the feasibility of establishing the provenance of Australian Aboriginal artefacts using synchrotron radiation x-ray diffraction and proton induced x-ray emission	Nucl. Instrum. Methods A 580 721-724 2007

Central Queensland University

06/126	Connor J N; Short K T; Metcalfe R D; Druskovich D	Atomic force microscopy study of fly ash adhesion: addressing industry problems	Australian Colloid and Interface Symposium February 2007 SF-2 Coogee Beach, Sydney
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Charles Darwin University

05/015	Bowman D M J S; Boggs G S; Prior L.D; Krull E S	Dynamics of Acacia aneura-Triodia boundaries using carbon (^{14}C and $\delta^{13}\text{C}$) and nitrogen ($\delta^{15}\text{N}$) signatures in soil organic matter in central Australia	Holocene 17 311-318 2007
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Charles Sturt University

05/184	Clark A C; Prenzler P D; Scollary G R	Impact of the condition of storage of tartaric acid solutions on the production and stability of glyoxylic acid	Food Chemistry 102 905-916 2007
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Curtin University of Technology

PGRA	Carroll M R J	Design considerations in the development of magnetic nanoparticles for MRI contrast enhancement	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 152 November 2007 0 9758434 2 7
PGRA	Carter G; Buckley C E; Ogden M	Solid oxide fuel cells: A SAXS study of the effects of solution concentration on particle size	17th AIP National Congress, Brisbane Convention and Exhibition Centre 120 December 2006 Queensland
PGRA	Kirby N M; Chen-Tan N W; Buckley C E	Copper-doped BaZrO ₃ crucibles for YBCO single crystal growth	J Europ Ceram Soc 27 2039 - 2044 2007
02/075; 06/247	Pang W K; Low I M	Depth-profiling of thermal dissociation of Ti ₃ SiC ₂ in vacuum	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 263 November 2007 0 9758434 2 7

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
05/106P	Low I M; Skala R D; Manurung P	Microstructural design and properties of layered-graded alumina matrix composites	Ceramic matrix composites: microstructure – property relationship Low I M (Ed) Woodhead Publishing Ltd. (UK) 131-153 2007 1 85573 942 9
05/106P	Low I M; Wren E; Oo E Z; Prince K E; Atanacio A; Barsoum M W	Characterisation of phase relations and properties in air-oxidised Ti ₃ SiC ₂	Mater Sci Eng A 466 140-147 2007
06/111	Low I M; Oo Z; Prince K E	Effect of vacuum annealing on the phase stability of Ti ₃ SiC ₂	J Am Ceram Soc 90 2610 2007
06/111	Low I M; Oo Z	<i>In-situ</i> study of the self-recovery property in aluminium titanate	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 233 November 2007 0 9758434 2 7
06/111	Oo Z; Low I M; Palmquist J P; Pang W K; Avdeev M	Mapping of composition, phase transitions and properties in oxidized Ti ₃ SiC ₂	5th China International Conference on High-Performance Ceramics 127 May 2007 Changsha
06/112	Pang W K; Tezuka N; Low I M; Mehrtens E G; Latella B A	Physical and mechanical properties of mullite-whisker reinforced alumina composites	Key Eng Mater 334-335 325-328 2007
PGRA	Lowe J L	Investigation of crystallisation of scale in the Bayer process	PhD Thesis 2007
02/189; PGRA	Rowles M R; Hanna J; Pike K J; Smith M E; O'Connor B H	²⁹ Si, ²⁷ Al, ¹ H and ²³ Na MAS NMR study of the bonding character in aluminosilicate inorganic polymers	Appl Magn Reson 32 663-689 2007
PGRA	Paskevicius M; Dhal B; Buckley C E	Mechanochemical synthesis of aluminium nanoparticles	6th AINSE/ANBUG Neutron Scattering Symposium 45 December 2007 Sydney, NSW

Deakin University

PGRA	Nuhiji B L; Fox M; Forrest D; Mitchell	Structure and morphology of nanocomposites	29th Australasian Polymer Symposium 117 2007
06/186	Warne M T	History of natural environmental events in a pristine estuary: ostracod proxies and ²¹⁰ Pb chronology from Wingan Inlet, Victoria	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 344 November 2007 0 9758434 2 7

Flinders University

99/036	Losic D; Gooding J J; Shapter J G	Influence of surface topography on alkanethiols SAMs assembled from solution and by microcontact printing	Langmuir 17 3307-3316 2001
07/095	Gooding J J; Chou A; Liu J; Losic D; Shapter J G; Hibbert D B	The effects of the lengths and orientations of single-walled carbon nanotubes on the electrochemistry of nanotube-modified electrodes	Electrochemistry Communications 9 1677-1683 2007
07/095	Velleman L; Shapter J G; Losic D	Fabrication of functionalised nanopore membranes for use in molecular separations	ARNAM 2007 Annual Workshop 110 July 2007 Australian National University, Kioloa
07/095	Cole M A; Thissen H; Losic D; Voelcker N H	A new approach to the reduction of non-specific protein adsorption on conductive substrates	Surface Science 601 1716-1725 2007

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
07/095	Losic D; Pilar R J; Dilger T; Mitchell J; Voelcker N H	Atomic force microscopy (AFM) characterisation of the porous silica nanostructures of two centric diatoms	J Porous Materials 14 61-69 2007
07/095	Velleman L; Shapter J G; Losic D	Template fabricated gold nanotube membranes: a nucleation and growth study	15th AINSE Conference on Nuclear and Complementary Techniques of Analysis 326-329 November 2007 Melbourne 0 9758434 2 7
07/095; 04/158	Losic D; Short K; Lal R; Mitchell J; Voelcker N H	AFM nanoindentations of diatom biosilica surface	Langmuir 23 (9) 5014-5021 2007
05/138	Keough S J; Hanley T L; Wedding A B; Quinton J S	Grazing incidence x-ray studies of ultra-thin Lumogen films	Surface Science 601(24) 5744-5749 2007
00/137; 01/127	Mazurkiewich J; Mearns F; Losic D; Rogers G; Gooding J J; Shapter J G	Cryogenic cleavage used in gold substrate production	J Vac Sci Technol B 20 2256-2264 2002
04/146	(Storer R) McMillan B F	Global wavemodes of dissipative fluid models in strongly three dimensional plasmas: calculation and interpretation	PhD Thesis 2006
06/169	Hooker A M; Zeng G; Domel R; Burch W; Sykes P J	Comparison of low dose x- and gamma-radiation exposure on chromosomal inversions in the pKZ1 assay	Radiation 2006 9 2006 Lucas Heights

GNS Science

07/084	Kennedy J V; Mitchell D R G; Markwitz A	Transmission electron microscopy studies of polycrystalline zinc oxide thin films grown by ion beam sputtering	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 220-223 November 2007 0 9758434 2 7
06/117P	Markwitz A	Low energy lead implantation into Si for novel group IV nanomaterials	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 46 November 2007 0 9758434 2 7
06/117P	Markwitz A; Kennedy J	Protocol for operating the GNS ion beam sputtering system	GNS Science report 28 2006

Griffith University

05/070	Wang L; Dimitrijevic S; Han J; Zou J	Deep void formation mechanism in Si(100) during its carbonization reaction with C ₂ H ₂	Thin Solid Films 515 6824-6826 2007
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James Cook University

03/017; 04/024P	Carter R M	The role of intermediate-depth currents in continental shelf-slope accretion: Canterbury Drifts, Southwest Pacific Ocean	In: Viana A R & Rebesco M (eds) <i>Economic and Palaeoceanographic Significance of Contourite Deposits</i> . Geological Society, London, Special Publications 276 129-154 2007
00/038; 01/042P	Moss P T; Dunbar G; Dickens G; Jacobsen G	Comparative ages of pollen and foraminifera in the ODP 820 marine core	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 241 November 2007 0 9758434 2 7
05/098, 06/100	Kosnik M A; Hua Q; Jacobsen G E; Kaufman D S; Wust R A J	Sediment mixing and stratigraphic disorder revealed by the age-structure of Tellina shells in Great Barrier Reef sediment	Geology 35(9) 811-814 2007

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
PGRA	Lewis S	Environmental trends in the GBR lagoon and Burdekin River catchment during the mid-Holocene and since European settlement using <i>Porites</i> coral records, Magnetic Island, QLD	PhD Thesis 2005
PGRA	Lewis S; Wüst R; Webster J; Shields G	A revised sea-level curve for eastern Australia	Terra Nova 20 (1) 74-81 2007
PGRA	Muller J	Reconstructing climate change of the last 55 kyr: the Lynch's Crater peat mire record, NE-QLD, Australia	PhD Thesis 2007
PGRA	Muller J; Kylander M; Wüst R A J; Weiss D; Martinez-Cortizas A; <i>et al</i>	Possible evidence for wet Heinrich phases in tropical NE Australia: the Lynch's Crater deposit	Quaternary Science Reviews 27 468-475
PGRA	Muller J; Kylander M; Martinez-Cortizas A; Wüst R A J; Weiss D; <i>et al</i>	The use of principle component analyses in characterising trace and major elemental distribution in a 55 kyr peat deposit in tropical Australia: implications to paleoclimate	Geochimica et Cosmochimica Acta 72 449-463 2007
06/200	Kylander M E; Muller J; Wüst R A J; Gallagher K; Garcia-Sanchez R; <i>et al</i>	Rare earth element and Pb isotope variations in a 52 kyr peat core from Lynch's Crater (NE Queensland, Australia): proxy development and application to paleoclimate in the Southern Hemisphere	Geochimica et Cosmochimica Acta 71 942-960 2007
06/200	Wüst R A J	Tropical peatlands of Southeast Asia: onset age and development	Peatlands International 2 30-31 2007
06/200	Wüst R A J; Rieley J; Page S; Kaars S v d; Wei-Ming W; Jacobsen G; Smith A	Peatland evolution of SE-Asia through the last 35,000 cal years: implications for evaluating their carbon storage potential	Proceedings of the International Symposium and Workshop on Tropical Peatland. <i>Carbon -climate-human interaction on tropical peatland</i> . Rieley J O; <i>et al</i> (eds) 19 August 2007 Yogyakarta

La Trobe University

05/049	Edwards P C; House E	The third season of investigations at the Pre-Pottery Neolithic A site of Zahrat adh-Dhra' 2 on the Dead Sea Plain, Jordan	Bulletin of the American Schools of Oriental Research 347 1-19 2007
PGRA	Grover S	Carbon and water dynamics of peat soils in the Australian Alps	PhD Thesis 2007
PGRA	Hagerty S K	Delineating groundwater flowpaths using ¹⁴ C dating in the Upper Loddon catchment, central Victoria	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 195 November 2007 0 9758434 2 7
02/080	Marshall A T; Clode P L; Prince K; Stern R	Electron and ion microprobe analysis of calcium distribution and transport in coral tissues	J Experimental Biology 210 2453 - 2463 2007
PGRA	Raiber M; Webb J A	Application of environmental isotopes to study aquifer interactions and their impact on groundwater salinisation in western Victoria	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 282 November 2007 0 9758434 2 7
PGRA	Raiber M; Webb J A	Application of environmental isotopes to understand recharge mechanisms to a sub-basaltic deep lead system in western Victoria, Australia	Geochim Cosmochim Acta 70(18) Supp 1 A515 2007
PGRA	Raiber M; Webb J A; Jacobsen G E; Chisari R; Neklapilova B	Aquifer interactions and their impact on groundwater resources in the Basalt Plains of western Victoria, Australia	12th International Symposium on Water-Rock Interaction Kunming, China – Bullen & Wang eds 985-988 2007

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
PGRA	Raiber M; Webb J A	Lake water mass-balance modelling as a predictive tool for water quality management	21st Victorian Universities Earth and Environmental Sciences Conference Hagerty, S. (ed) September 2007 88 September 2007
PGRA	Raiber M; Webb J A	Application of environmental isotopes to trace aquifer interactions in a multi-aquifer system in Western Victoria, Australia	9th Australasian Environmental Isotope Conference 137 2007 Adelaide
PGRA	Raiber M; Webb J A	Geology and hydrogeology of a tertiary deep lead system near Streatham, Western Victoria, Australia	Geological Society of Australia Corvino, A.F. and Ely, K.S. (eds) 19th Victorian Universities Earth and Environmental Sciences Conference 80 49 September 2005 Adelaide
05/167P	Usher B F; Warminski T; Dieing T; Prince K	High temperature growth of the dilute nitride GaAsN using a nitrogen ECR plasma source	ICONN 340-343 July 2006 Brisbane IEEE Catalog Number 06EX1411C (2006)
05/167P	Usher B F; Warminski T; Dieing T; Prince K	High quality GaAsN grown at 600°C by MBE using an ECR nitrogen plasma source	IOP Conference 79 2006 Exeter, UK

Macquarie University

04/219	Mackintosh A; White D; Fink D; Gore D; Pickard J; Fanning P	Exposure ages from mountain dipsticks in Mac. Robertson Land, East Antarctica, indicate little change in ice sheet thickness since the Last Glacial Maximum	Geology 35(6) 551-554 2007
04/219	(Gore D) White D	Cenozoic Glacial History and Landscape Evolution of Mac. Robertson Land and the Lambert Glacier-Amery Ice Shelf System, East Antarctica	PhD Thesis 2007

The University of Melbourne

06/008P; 07/004	Siegele R; Kachenko A G; Wang Y D; Ionescu M; Bhatia N P; Cohen D D; (Baker A M J)	Localisation of trace metals in hyperaccumulating plants using μ -PIXE	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 292 November 2007 0 9758434 2 7
06/025	Hardman B; Michalczyk A; Greenough M; Camakaris J; Mercer J F; Ackland M L	Hormonal regulation of the Menkes and Wilson copper transporting ATPases in human placental Jeg-3 cells	Biochem J 402 241-250 2007
06/025	Norgate M; Southon A; Zou S; Zhan M; Sun Y; Batterham P; Camakaris J	Copper homeostasis gene discovery in <i>Drosophila melanogaster</i>	Biomaterials 20 683-697 2007
06/025	Hung Y H; Layton M J; Voskoboinik I; Mercer J F; Camakaris J	Purification and membrane reconstitution of catalytically active Menkes copper-transporting P-type ATPase (MNK; ATP7A)	Biochem J 15: 401(2) 569-579 2007
06/027P	Wang X D; Egan C E; Zhou M F; Prince K; Mitchell D R G; Caruso R A	Effective gel for gold nanoparticle formation, support and metal oxide templating	Chem Commun 29 3060-3062 2007
07/026	Caruso R A	Porous titanium dioxide materials fabricated by using templating techniques	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 97 November 2007 0 9758434 2 7
06/027P	Wang X; Mitchell D R G; Prince K; Caruso R A	Synthesis, characterization and photocatalytic application of porous Au/TiO ₂ nano-hybrids	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 338 November 2007 0 9758434 2 7

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07/025P	Drisko G L; Luca V O; Caruso R A	Metal oxides produced from sol-gel templating of agarose gel applied to vanadium adsorption	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 168 November 2007 0 9758434 2 7
PGRA	Connor S E; Sagona A	Environment and society in the late prehistory of Southern Georgia, Caucasus	In: Les cultures du Caucase (VI-III me mill naires avant notre re). Edited by B. Lyonnet. Pal orient 21-35 Paris, CNRS Editions 2007
PGRA	Connor S	A promethean legacy: late quaternary vegetation history of Southern Georgia, Caucasus	PhD Thesis 2007
PGRA	Connor S E; Thomas I; Kvavadze E V	A 5600-year history of changing vegetation, sea-levels and human impacts from the Black Sea coast of Georgia	Holocene 17 25-36 2007
PGRA	Arabuli G J; Connor S E; Kvavadze E V	<i>Calluna vulgaris</i> and <i>Spiranthes amoena</i> in the Colchis mire flora: weeds or relicts?	Acta Palaeobotanica 47 469-478 2007
06/220	Starck P; Mosse W K J; Nicholas N J; Spinello M; (Ducker W); <i>et al</i>	Surface chemistry and rheology of polysulfobetaine-coated silica	Langmuir 23 (14) 7587-7593 July 2007
07/059	Spiegel C; Kohn B P; Raza A; Rainer T; Gleadow A J W	The effect of long-term low temperature exposure on apatite fission track stability: a natural annealing experiment in the deep ocean	Geochimica et Cosmochimica Acta 71 4512-4537 2007 Tarrytown, New York 0016-7037
07/059	Spiegel C; Kohn B P; Belton, D X; Gleadow A J W	Morphotectonic evolution of the southern Kenya rift flanks: implications for Late Cenozoic environmental change in East Africa	Geology 35 427-430 2007 Boulder, Colorado 0091-7613
07/059	Feinstein S; Kohn B P; Osadetz K G; Price R; (Gleadow A J W)	Thermochronometric reconstruction of the pre-thrust paleogeothermal gradient and initial thickness of the Lewis Thrust Sheet, southeastern Canadian Cordillera foreland belt	Geological Society of America Special Paper 433 167-182 December 2007 Boulder, Colorado 978-0-8137-2433-1
07/059	Seiler C; Gleadow A J W; Kohn B P; Fletcher J M; Mendoza-Borunda R	Thermal imprint of an incipient passive margin – an example from Baja California (Mexico)	Geological Society of Australia Abstracts 21st Victorian Universities Earth and Environmental Sciences Conference 88 26 September 2007 La Trobe University 07 29 011X”
07/059	Gleadow A J W; Gleadow S J; Kohn B P; Krochmal M S	Automated fission track dating of apatite and monazite by image analysis and ICP-MS	Geochimica et Cosmochimica Acta 71 (1) Supplement A 328 August 2007 0016-7037
07/059	Kohlmann F; Kohn B P; Gleadow A J W; Osadetz K G	Low temperature thermochronology of Phanerozoic kimberlites and Archaean basement, Slave Province, Canada	Geochimica et Cosmochimica Acta 71 (1) Supplement A 505 August 2007 0016-7037
07/059	Osadetz K G; Kohn B P; Feinstein S; (Gleadow A J W)	Thermal history and epicratonic basin-forming mechanisms: Williston Basin	3rd Workshop of the International Lithosphere Program – Task Force on Sedimentary Basins, 1st Moroccan Association of Petroleum Geologists International Conference and Exhibition 15 October 2007 Rabat, Morocco
07/059	Seiler C; Fletcher J M; Quigley M C; Gleadow A J W; Kohn B P	Detachment faulting and hanging-wall segmentation in the Gulf Extensional Province, Baja California	Eos Trans AGU 88(52) T22A-02 December 2007
07/059	Phillips D; Kohn B P; Gleadow A J W; Harris J W	⁴ He implantation in natural diamond: implications for apatite (U-Th)/He thermochronometry	Eos Trans. AGU 88(52) V23B-1428 December 2007
07/059	Lovera O M; Grove M; Kohn B; Fletcher J; Gleadow A J W; <i>et al</i>	Coupled basement-detrital thermochronology from the southern Gulf of California	Eos Trans. AGU 88(52) T23C-1542 December 2007

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06/069	Carter T J; Kohn B P; Foster D A; Gleadow A J W; Woodhead J D	Late-stage evolution of the Chemehuevi and Sacramento detachment faults from apatite (U-Th)/He thermochronometry – evidence for mid-Miocene accelerated slip	Geological Society of America Bulletin 118 689-709 2006
06/069	Spikings R A; Foster D A; Kohn B P; (Gleadow A J W)	Low temperature (<110°C) thermal history of the Mt. Isa and Murphy Imliers, northeast Australia: evidence from apatite fission track thermochronology	Australian Journal of Earth Sciences 53 151-165 2006
06/069	Belton D X; Gleadow A J W; Kohn B P;	A universal annealing model: the chlorine-compensated solution	European Conference on Thermochronology 11-12 2007 July Bremen 3-932537-46-7
06/069	Feinstein S; Kohn B; Osadetz K; Everitt R; O'Sullivan P; (Gleadow A J W)	Evidence for linked geodynamic evolution of the Phanerozoic Canadian Shield and an intracratonic basin from thermochronological analysis.	Geophysical Research Abstracts 8 7210 European Geophysical Union, April 2007 Vienna
06/069	Gleadow A J W; Gleadow S; Belton D; Kohn B P; <i>et al</i>	Fully-automated counting for fission track dating and thermochronology.	Geochimica et Cosmochimica Acta 70 (18) Supplement 1 A205 2007 0016-7037
06/069	Gleadow A J W; Kohn B P; Brown R W; Gallagher K L	Thermochronology and landscape evolution in the basin hinterland - understanding sediment supply into deep-basin environments	American Association of Petroleum Geologists Conference 44 November 2007 Perth
06/069	Gray D R; Kohn B P; Gregory R T; Raza A; (Gleadow A J W)	Cenozoic exhumation history of the Oman margin of Arabia based on low-T thermochronology.	Geochimica et Cosmochimica Acta 70 (18) Supplement 1 213 2007 0016-7037
04/086	Garnett D; Jackson H; Waldron H; Clayton E	Chemical analysis of the figurine clays of Jebel Khali, using PIXE/PIGME and neutron activation analysis	In: Jebel Khalid on the Euphrates vol. 2. The Terracotta Figurines 245-255 2007 978-0-958-265-2-9
PGRA	Mills R D; Ng J; Wang Q; Cheng H C; Mulhern T D; Culvenor J G	Expression, purification and sequence analysis of Parkinson's disease associated protein kinases	International Brain Research Organization World Congress of Neuroscience POS-MON-003 July 2007 Melbourne
PGRA	Culvenor J G; Sim C H; Mills R D; Wang Q; Mok S S; Lio S S; George S; <i>et al</i>	Parkinson's disease mitochondrial kinase PINK1: endogenous tissue expression and <i>in vitro</i> kinase enzyme activity	IBRO satellite meeting, New frontiers in basic and clinical research in Parkinson's disease and other synucleinopathies July 2007 Sydney
05/124	(Mulhern T); Chan N C	The role of Tom70 in mediating protein import into mitochondria	PhD Thesis 2007
RF	Riley D P; Kisi E H; Hansen T C; Henry P F	Use of ultra-fast diffraction in the design of novel materials	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 27-32 November 2007 0 9758434 2 7
RF	Kisi E H; Wu E D; Zobec J S; Forrester J S; Riley D P	Inter-conversion of $M_{(n+1)}AX_{(n)}$ phases in the Ti-Al-C system	J Am Ceram Soc 90 (6) 1912-1916 2007
RF	Riley D P, Kisi E H	The design of crystalline precursors for the synthesis of $M_{(n-1)}AX_{(n)}$ phases and their application to Ti_3AlC_2	J Am Ceram Soc 90 (7) 2231-2235 2007
06/173P	(Thomas I); Fletcher M S	Holocene vegetation and climate change near Lake Pedder, southwest Tasmania, Australia	J Biogeography 34:4 665-677 2007
06/205; 07/164	Zhou J; Zhou M; Caruso R A	Agarose template for the fabrication of macroporous metal oxide structures	Langmuir 22 3332-3336 2006
06/205; 07/164	Zhou M; Huang F; Wang X; du Plessis J; Murphy A B; Caruso R A	Porous vanadium/titanium oxides - synthesis, characterization, and photocatalytic activity	Aust. J. Chem 60 1-8 2007
06/205; 07/164	Huang F; Zhou M; Cheng Y-B; Caruso R A	Al-containing porous titanium dioxide networks: sol-gel synthesis within agarose gel template and photocatalytic activity	Chemistry of Materials 18(25) 5835-5839 2006

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04/025	(Cartwright I) Kijek K	Constraining recharge rates at Sheep Pen Creek, northern Victoria	Honours Thesis 2007
03/018; 04/025	Cartwright I; Weaver T R; Stone D; Reid M	Constraining modern and historical recharge from bore hydrographs, 3H, 14C, and chloride concentrations: applications to understanding processes in dryland salinity areas, Murray Basin, Australia	J Hydrology 332 69-92 2007
05/218	Cadogan J M; Ryan D H; Cashion J D	¹⁵⁵ Gd Mössbauer study of GdFe ₆ Ge ₆	J Phys Condens Matter 19 216204 2007
PGRA	Daniels J	Diffraction studies of ferroelectric materials during the application of electric fields	PhD Thesis 2007
PGRA	Jones J L; Hoffman M; Daniels J E; Studer A	Direct measurement of the domain switching contribution to the dynamic piezoelectric response in ferroelectric ceramics	Applied Physics Letters 89 092901-1-092901-3 2006
PGRA	Daniels J E; Jones J L ; Finlayson T R	Characterisation of domain structures from diffraction profiles in tetragonal ferroelastic ceramics	J Phys D Appl Phys 39 5294-5299 2006
PGRA	Daniels J E; Finlayson T R; Studer A; Hoffman M; Jones J	Time-resolved diffraction measurements of electric-field-induced strain in tetragonal lead zirconate titanate	J Appl Phys 101 094104-1-094104-6 2007
PGRA	Daniels J E; Finlayson T R; Jones J L; Studer A J	Microstructural response of ceramic lead zirconate titanate to electric fields	6th AINSE/ANBUG Neutron Scattering Symposium (AANSS) 12 2007
05/035	David B; Orr M	Archaeological excavations at Bulbul, site Mua	In: B David (ed.), <i>Memoirs of the Queensland Museum, Cultural Heritage Series</i> 116 2007
PGRA	Fischmann A	Thiosulfate and thiosulfonate complexes of copper(II): implications for gold leaching	PhD Thesis 2007
02/161	Reid M A; Sayer C D; Kershaw A P; Heijnis H	Palaeolimnological evidence for submerged plant loss in a floodplain lake associated with accelerated catchment soil erosion (Murray River, Australia)	Journal of Paleolimnology 38 191-208 2007
06/096P	Kershaw P; White C; Roach A; Hartney L; <i>et al</i>	Development of the Budj Bim landscape	AAA Conference 2006 31-32 2006 Beechworth
98/034	Kershaw A P; McKenzie G M; Porch N; Roberts R G; Brown J; Heijnis H; Orr L M; <i>et al</i>	A high resolution record of vegetation and climate through the last glacial cycle from Caledonia Fen, south-eastern highlands of Australia	Journal of Quaternary Science 22 (5) 481-500 2007
04/094; 05/093; 06/096	Builth H; Kershaw A P; Lewis T; White C; Roach A; Hartney L; McKenzie M; <i>et al</i>	An environmental and cultural nexus on the Mt Eccles Lava Flow, SW Victoria, Australia	Quatern Int 167-168 Supplement 53 July 2007 ISSN 1040-6182
04/005; 05/094	(Kershaw A P); McLeod A J	Palaeoenvironmental change in the Central Highlands of Victoria interpreted from the analysis of macroscopic soil charcoal	PhD Thesis 2007
PGRA	Paradowska A M; Price J W H; Ibrahim R; Finlayson T R	The effect of heat input on residual stress distribution of steel welds measured by neutron diffraction	Achievements in Materials and Manufacturing Engineering 17(1-2) 385-388 July -Aug 2006 Santa Fe, New Mexico USA
PGRA	Paradowska A M; Price J W H; Finlayson T R; Lienert U; Ibrahim R	Residual stress measurements of welded components using synchrotron and neutron diffraction	Welding in the World 51 475-484 2007 London 0043-2288

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PGRA	Paradowska A; Price J W H; Finlayson, T; Ibrahim, R	Neutron and synchrotron measurements of residual stress for repair welds	ASME-PVP 2007/CREEP 8. Published in CD format by ASME 1-10 July 22 - 26 2007 San Antonio, Texas 0-7918-3804-8
PGRA	Paradowska A; Price J W H; Finlayson T R; Rogge R B; Blevins R; <i>et al</i>	Investigation of residual stress distributions in various thick weld repairs measured by neutron diffraction	6th AINSE/ANBUG Neutron Scattering Symposium (AANSS) 44 2007
PGRA	Paradowska A M	Investigation of residual stress in steel welds using neutron and synchrotron diffraction	PhD Thesis 2007
PGRA	Paradowska A M; Price J W H; Finlayson T; Ibrahim R	Neutron measurements of residual stress distribution for welds and implications for design and pressure vessel applications	Int Conference on Structural Integrity and Failure-SIF2006 1-6 September 2006 Sydney

Murdoch University

06/248; 06/267; 07/111	Minakshi M; Prince K	Examining manganese dioxide as a cathode in aqueous LiOH battery	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 234 November 2007 0 9758434 2 7
06/248; 07/111	Minakshi M; Singh P; Mitchell D R G	Manganese dioxide cathode in the presence of TiS ₂ as additive on an aqueous lithium secondary cell	J Electrochemical Society 154(2) A109-A113 2007 NewYork, USA 0013-4651
06/248; 07/111	Minakshi M; Singh P; Mitchell D R G	TEM characterization of MnO ₂ as a cathode in aqueous lithium secondary battery	Electrochimica Acta 52 (9) 3294–3298 2007 Kidlington, Oxford (England) 0013-4686
07/111	Minakshi M; Singh P; Carter M	Behavior of γ-MnO ₂ containing TiB ₂ as a cathode in aqueous lithium hydroxide electrolyte battery	Key Eng Mater 350 159-162 2007 Switzerland 1013-9826
07/111	Minakshi M; Singh P; Mitchell D R G	Behavior of MnO ₂ containing TiS ₂ as a cathode in aqueous lithium hydroxide electrolyte battery	The Minerals, Metals & Materials SocTMS 2007 Symposium Proceedings 52 (24) 159-162 2007 Orlando, Florida 978-0-87339-693-6
07/111; 07/134P	Minakshi M; Singh P; Mitchell D R G; Issa T B; Prince K	A study of lithium insertion into MnO ₂ containing TiS ₂ additive a battery material in aqueous LiOH solution	Electrochim Acta 52 (24) 7007-7013 2007 0013-4686

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06/054	McDonald J; Drysdale R; Hellstrom J; Hodge E; McKinsey L; Greig A	Drought histories from active stalagmites, Wombeyan Caves, SE Australia.	Abstracts European Geosciences Union General Assembly SSP16/CL45 <i>Climate events recorded in speleothems Geophysical Research</i> 9 01698 2007
06/054	Hodge E; McDonald J; Treble; Levchenko V; Drysdale R; Waring C; Hua Q; Fischer M	Radiocarbon bomb pulse chronologies for young speleothems and implications for rainfall records in southeast Australia	Quatern Int 167-168 Supplement 170 July 2007 ISSN 1040-6182
06/054	Hodge E; Levchenko V; Fischer M; McDonald J; Drysdale R; <i>et al</i>	Radiocarbon bomb pulse chronologies for young speleothems in southeast Australia	Geophysical Research Abstracts 9 05978 2007
06/054	Sim A K; Erskine W D; Drysdale R; Goodwin I D	Influence of decadal-scale climatic variation on floodplain sedimentation within the Hawkesbury-Nepean river catchment, Eastern Australia	Quatern Int 167-168 Supplement 385 July 2007 ISSN 1040-6182
06/114	(MacFarlane G R); Gifford S	Environmental considerations associated with the development of an Akoya pearl aquaculture industry in NSW Australia	PhD Thesis 2006

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06/114	MacFarlane G R; Markich S J; Linz K; <i>et al</i>	The Akoya pearl oyster shell as an archival indicator of lead exposure	Environmental Pollution 143 166-173 2006
PGRA	McDonald J; Drysdale R; Hill D; Chisari R; Wong H	Hydrology of cave drip waters at varying bedrock depths from a karst system in southeastern Australia	Hydrological Processes 21 1737-1748 March 2007
PGRA	Drysdale R; Hill D; Cartwright I; Gagan M; McDonald J	The hydrochemical response of cave drip waters to subannual and interannual climate variability, Wombeyan Caves, SE Australia	Chemical Geology 244 605-623 2007
PGRA	McDonald J; Drysdale R; Hill D; Chisari R; Wong H	The influence of bedrock depth on the hydrochemistry of cave drip waters from a karst system in southeastern Australia	In: Onac, B. <i>et al</i> (eds) Archives of Climate Change in Karst, Karst Waters Institute Special Publication 10 16-19 2007

The University of New England

06/075	Haworth R J; Tolagson B	The geomorphic and sedimentary history of Lake Innes	In: Connah G (ed) Chapter 12, <i>The Same Under a Different Sky? A country estate in nineteenth-century New South Wales</i> . BAR International Series, John and Erica Hedges Ltd British Archaeological Reports 245-250 2007 Oxford
00/063P	Haworth R J	Blending lead-210 and AMS age profiles from estuarine sediment cores to reconstruct Holocene climate change in the Sydney Region	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 43 November 2007 0 9758434 2 7
00/063P	(Haworth R J); James R E	Environmental boundaries in the central Sydney Basin during the mid-to-late Holocene	PhD Thesis February 2007

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06/003	Amos K J; Croke J; Hughes A; Timmers H	Floodplain evolution in a large semi-arid river catchment: an investigation using caesium-137 and optically stimulated luminescence techniques	Quatern Int 167-168 Supplement 9 July 2007 ISSN 1040-6182
07/006P	Joso R; Huang S; Smith S V; Barner L	Surface characterization of microspheres via a radiolabelling technique	International Symposium on Ionic Polymerization 181-182 September 2007 Kloster Banz – Germany
07/006P	Joso R; Huang S; Bulmus V; Barner- Kowolik C; Stenzel H M; Davis T P; Smith V S; Barner L	Functional hydrophilic microspheres for biotechnology application	29th Australasian Polymer Symposium 421-422 February 2007 Hobart Tasmania 978-0-646-46866-2
03/178	Hallal T; Box G P; Radhi M; Box M A; Cohen D D; Stelcer E	Size-resolved properties of atmospheric aerosols in Sydney and regional NSW	14th IUAPPA Conference (CD of proceedings) 56 September 2007 Brisbane 978-0-9757571-6-1
03/178	Hallal T; Box G P	Size-resolved properties of atmospheric aerosols in Sydney and regional NSW	14th National AMOS Conference 44 February 2007 Adelaide
98/073; 99/080	Taha G; Cohen D; Stelcer E; (Box G P)	Black carbon measurement using laser integrating plate method	Aeros Sci and Tech 41 266-276 March 2007 Philadelphia PA DOI: 10.1080/02786820601156224
05/025	Wang J L; Studer A J; Campbell S J; Hofmann M; Cadogan J M	Magnetic properties of PrMn _{1.2} Fe _{0.8} Ge ₂	Physica B 385-386 326-329 2006 The Netherlands (Amsterdam) 0921-4526

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06/017P	Radhi M; Box M A; Mitchell R M; Keywood M; Box G P; Campbell S; Cohen D; Stelcer E	Physical, chemical and optical properties of Australian desert dust aerosols	14th IUAPPA World Congress (CD of proceedings) 53 September 2007 Brisbane 978-0-9757571-6-1
05/187	Wang J L; Campbell S J; Avdeev M; Studer A J; Hofmann M; Hoelzel M	Magnetic structures of Pr _{1-x} Y _x Mn ₂ Ge ₂ compounds	31st Condensed Matter and Materials Meeting TP28 February 2007 Wagga Wagga
05/025	Wang J L; Dou S K; Campbell S J; Zeng R; Studer A J	Magnetic phase transitions in PrMn _{2-x} Fe _x Ge ₂	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 342 November 2007 0 9758434 2 7
PGRA	Chaiwong C	Plasma immersion ion implantation and deposition of titanium nitride onto polymers	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 153 November 2007 0 9758434 2 7
00/055P	Gooding J J; Erokhin P; Losic D; Yang W R: <i>et al</i>	Parameters important in fabricating enzyme electrodes using self-assembled monolayers of alkanethiols	Anal Sci 17 3-9 2001
07/060	Price E; Graham I; Archer M	Freshwater limestone deposits of the Riversleigh World Heritage Area, NW Queensland, Australia	4th International Limnogeology Congress (ILIC2007) 54 - 55 August 2007 Barcelona, Spain
07/068	Herries A I R; Curnoe D; Henderson Z; Brink J; Morris D; van Reyneveld K; Hodge E	Landscape evolution, palaeoclimate and Later Stone Age occupation of the Ghaap Plateau escarpment, Northern Cape Province, South Africa	Antiquity 81 313 September 2007
06/078P	Hoffman M	Investigate domain switchability of lead zirconate titanate (PZT) under electrical fatigue by <i>in situ</i> stroboscopic neutron diffraction technique	Materials Science and Technology 37 October 2006 Cincinnati, Ohio
06/083	Hutchison W D; Goossens D J; Saensunon B; Stewart G A; <i>et al</i>	Magnetic order studies of RNiAl ₄	5th AINSE/ANBUG Symposium on Neutron Scattering 19 December 2006
06/083	Hutchison W D; Goossens D J; Saensunon B; Stewart G A; Ardeev M; <i>et al</i>	Magnetic order studies of ErNiAl ₄	31st Annual ANZIP Condensed Matter and Materials Meeting 42-44 February 2007 Wagga Wagga
05/083	Jones J L; Hoffman M; Daniels J E; Studer A J	Ferroelastic contribution to the piezoelectric response in lead zirconate titanate by <i>in situ</i> stroboscopic neutron diffraction	Physica B 385-386, Part 1 100-102 November 2006
06/243; 06/245	Photongkam P; Ionescu M; Zeng R; Yu D; Li S	Development of advanced diluted magnetic semiconductors with rare earth doping technology	6th International Symposium on Metallic Multilayers, IEEE MML07 62 October 2007 Perth
98/069R	Robbie A; Martin H A	The history of the vegetation from the last glacial maximum at Mountain Lagoon, Blue Mountains, New South Wales	Linnean Society of New South Wales 128 57-80 2007
05/122	Mooney S D; Attenbrow V; Black M P	The fire, humans and climate nexus in south-eastern Australia	Quatern Int 167-168 Supplement 288 July 2007 ISSN 1040-6182
05/122	Mooney S D; Attenbrow V J; Black M P; Webb M C	Case studies of Holocene fire activity in the Sydney Basin: natural, anthropogenic or something much more complicated?	Australasian Archaeology Association Conference 28 December 2006 La Trobe University, Beechworth
05/122	Mooney S D	The fire, humans and climate nexus in south-eastern Australia. Nature Conservation	Nature Council of NSW Biennial Conference <i>Bushfire in a Heating World</i> 11 May 2007 St Leonards, Sydney

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07/167	Ahmed A; Neely A J; Shankar K	Review of the mechanical behaviour of micrometric & nanometric particulate reinforced metal matrix composites	MS&T '07 Conference Detroit USA 79-90 September 2007
07/167	Ahmed A; Neely A J; Shankar K	Tensile behaviour of nano-particulates reinforced aluminium matrix composites at elevated temperatures	Journal of Material Science Forum 561-565 761-764 2007
07/167	Ahmed A; Neely A J; Shankar K	Effect of ceramic reinforcements on the mechanical behaviour of 7xxx series aluminium matrix composites	5th ACAM 07 459-464 December 2007 Brisbane
PGRA	Sheppard L R; Bak T; Nowotny J	Electrical properties of niobium-doped titanium dioxide. 1. Defect disorder	J Phys Chem B 110 22447-22454 2006
PGRA	Sheppard L; Bak T; Nowotny J	Electrical properties of niobium-doped titanium dioxide. 2. Equilibration kinetics	J Phys Chem B 110 22455-22461 2006
PGRA	Nowotny J; Bak T; Nowotny M K; Sheppard L R	Application of defect chemistry for engineering of photosensitive oxide semiconductors	SPIE Conference, Optics & Photonics 63400E August 2006 San Diego 0277-786X
PGRA	Sheppard L R; Atanacio A; Bak T; Nowotny J; Prince K E	Effect of niobium segregation on the surface properties of titanium dioxide	SPIE Conference, Optics & Photonics 634015 August 2006 San Diego 0277-786X
PGRA	Sheppard L	Defect chemistry and charge transport in niobium-doped titanium dioxide	PhD Thesis 2007
PGRA	Sheppard L R; Nowotny J	Materials for photo-electrochemical energy conversion	Advances in Applied Ceramics 106 9-20 2007
PGRA	Sheppard L R; Bak T; Nowotny J	Reactivity of TiO ₂ with water and oxygen: surface science perspective	Advances in Applied Ceramics 106 49-56 2007
PGRA	Sheppard L R; Zhou M F; Atanacio A; Bak T; Nowotny J; Prince K E	The determination of niobium diffusion in titania and zirconia using secondary ion mass spectrometry	Advances in Applied Ceramics 106 89-94 2007
PGRA	Nakajima T; Sheppard L R; Atanacio A; Prince K E; <i>et al</i>	Nb segregation on TiO ₂	Advances in Applied Ceramics 106 82-88 2007
06/165	Saensunon B; Nishimura K; Stewart G A	The magnetic environment of the rare earth site in the intermetallic compounds RCr ₂ Si ₂ and RMn ₂ Si ₂ (R = rare earth), (R = La, Gd, Tm; A = Ca, Sr, Ba)	31st Annual Condensed Matter and Materials Meeting TP10 February 2007 Wagga Wagga

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00/146	Summerhayes G R; Allen J	Lapita writ small? Revisiting the Austronesian colonisation of the Papuan south coast	Terra Australis/Oceanic Explorations: Lapita and Western Pacific Settlement 26 97-122 2007 Canberra 9780975122914
00/146	Summerhayes G R	The rise and transformation of Lapita in the Bismarck Archipelago	In: <i>From southeast Asia to the Pacific. Archaeological perspectives on the Austronesian expansion and the Lapita Cultural Complex</i> , Chui, S and Sand, C (eds) 129-172 2007 Taipei
04/187	Summerhayes G R	Inter-regional studies: exchange systems	Encyclopedia of Archaeology 1339-1344 2007 Oxford 0-12-548030-X
00/146	Summerhayes G R	Melanesia, Kosipe, Lapita, Huon Peninsula, Kuk, North Solomons	Archaeologica: The World's Most Significant Sites and Cultural Treasures, A. Cremmin (ed.) 364-371 2007 London
04/187	Summerhayes G R	Le Monde Oceanien	In: <i>Historie Du Monde 500-1000-1500</i> , G. Jehel (ed) 463-481 2007 Nante

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
04/187	Summerhayes G R	Island Melanesian Pasts – a view from archaeology	Genes, Language and Culture History in the Southwest Pacific, Friedlaender, J (ed.) 10-35 2007 New York
04/187	Summerhayes G R; Specht J R	Archaeological studies of the Middle and Late Holocene, Papua New Guinea. Part II. The Boduna Island (FEA) Lapita site	Technical Reports of the Australian Museum 20 51-103 2007

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PGRA	Johnston-Hall G; Theis A; Stenzel M; Davis T; Monteiro M; Barner-Kowollik C	Assessing chain length dependent termination rate coefficients of methyl methacrylate (MMA) via the reversible addition fragmentation chain transfer (RAFT) process	Macromol Chem Phys 206 (20) 2047 2005
PGRA	Johnston-Hall G; Monteiro M	Tailoring molecular weight distribution and structure with difunctional RAFT agents	ACS Symposium Series 944: Controlled/Living Free Radical Polymerization 29 421 2006
PGRA	Johnston-Hall G; Stenzel M; Davis T; Barner-Kowollik C; Monteiro M	Chain length dependent termination rate coefficients of methyl methacrylate (MMA) in the gel regime: accessing $k_{t,i}$ using reversible addition-fragmentation chain transfer (RAFT) polymerization	Macromolecules 40 (8) 2730 2007
PGRA	Johnston-Hall G; Monteiro M	Kinetic modelling of 'living' and conventional free radical polymerization	Macromolecules 40 (20) 7171 2007
PGRA	Lonsdale D; Johnston-Hall G; Fawcett A; Bell C; Urbani C; Whittaker M; Monteiro M	Degradative chain transfer in vinyl acetate polymerizations using toluene as solvent	J Polym Sci Part A 45 (16) 3620 2007
07/104	Musumeci A W; Smith S V; Xu Z; Martin D J	Synthesis and characterisation of tailored nanoparticles for nanotoxicological investigations	2007 RACI Student Polymer Symposium 245-248 September 2007 Brisbane
07/104	Musumeci A W; Smith S V; Xu Z; Martin D J	Tailored labelling and fractionation of clay nanoparticles for biological studies	4th Annual ARC Centre of Excellence for Functional Nanomaterials Conference 126 November 2007 Gold Coast
PGRA	Marx S	Evidence of enhanced El Niño activity in the mid Holocene inferred from records of Australian dust deposition in New Zealand.	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 17 November 2007
05/115	Marx S K; Kamber B S; McGowan H A	Long term estimates of Australian dust flux into New Zealand: the use of modern analogues to assess the sensitivity of dust to environmental change using trace-element calibrated ^{210}Pb as a monitor	Geophysical Research Abstracts European Geosciences Union, General Assembly 7 00541 2005 Vienna, Austria 1029-7006
05/115	Marx S K; Kamber B S; McGowan H A	Atmospheric trace element calibrated ^{210}Pb as a monitor of Australian dust flux	14th AINSE Conference on Nuclear and Complementary Techniques of Analysis and 9th Vacuum Society of Australia Congress 22-24 November 2005 Wellington, New Zealand
05/115	Marx S K; McGowan H A; Kamber B S	Dust as a proxy for climate change: a record of Australian dust deposition in New Zealand during the Holocene	Geological Society of New Zealand 50th Anniversary Conference Programme and abstracts 52 2005 Kaikoura, New Zealand 0-908678-01-0
06/121	Webb N; Marx S; Gill T; McGowan H A	Continental scale climate controls on land erodability and aeolian dust production: linking source area processes to rates of long-range dust transport out of south-east Australia	International Conference on Aeolian Research IV, The University of Guelph 160 2006 Ontario, Canada

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
06/121	Marx S K; McGowan H A; Kamber B S	A Holocene record of long-range Australian dust deposition in New Zealand: dust as a proxy for inter-regional climate variability	Quatern Int 167-168 Supplement 273 July 2007 ISSN 1040-6182
03081; 04/113P	(Meredith P); Tavenner E	Ion implanted polymer	PhD Thesis 2007
06/129; 05/120	Moss P T; McTainsh G H; Dunbar G; Dickens G; Jacobsen G	AMS C14 dating using pollen concentrates with low organic content in the tropics of Australia	Quatern Int 167-168 Supplement 290 July 2007 ISSN 1040-6182
PGRA	Musumeci A; Smith S; Xu G; Martin D	Application of radioisotopes for nanotoxicological studies	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 245 November 2007 0 9758434 2 7
PGRA	Musumeci A W; Smith S V; Xu Z; Martin D J	Tailored labelling and fractionation of clay nanoparticles for biological studies	4th Annual ARC centre of excellence for Functional Nanomaterials Conference 126 November 2007 Gold Coast
PGRA	Musumeci A W; Smith S V; Xu Z; Martin D J	Tailored labelling and fractionation of clay nanoparticles for biological studies	15th AINSE conference on Nuclear and Complimentary Techniques of Analysis 245-248 November 2007 Melbourne
06/181	Ulm S; Barham A J; David B; Jacobsen G; McNiven I J; Petchey F; Rowland M	Marine carbon reservoir variability in Torres Strait: preliminary results of AMS dating of live-collected shell specimens	Quatern Int 167-168 Supplement 426 July 2007 ISSN 1040-6182
06/190	Weisler M; Hua Q; Zhao J-X	Late Holocene C-14 marine reservoir ages in Hawaii from U-series dated corals	Quatern Int 167-168 Supplement 444 July 2007 ISSN 1040-6182
05/179P	Hodge E; Feng Y; Wu J; Fink D, Hua Q; Zhao J	Large and rapid fluctuations of radiocarbon concentrations in a speleothem from southern China between 26-29 cal ka BP: implications for radiocarbon calibration and ocean circulation	Quatern Int 167-168 Supplement 170-171 July 2007 ISSN 1040-6182
04/178	Yu K F; Zhao J X; Hodge E; Hua Q; Barbetti M; Fink D	Paired U-series and radiocarbon dating of Holocene corals from the South China Sea: evidence for large temporal variability in ¹⁴ C marine reservoir ages	Quaternary International 167-168 Supplement 468 July 2007 ISSN 1040-6182

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07/051P	Morgan D L; Waclawik E R; Frost R L	Synthesis and characterisation of titania nanotubes: effect of phase and crystallite size on nanotube formation	Advanced Materials Research 29-30 211-214 2007 ISSN 1022-6680
PGRA	Oberman G J	Drying of a sol gel droplet suspended in a flowing atmosphere	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 258 November 2007 0 9758434 2 7
06/172	Tesfamichael T; Motta N; Bostrom T; Bell J M	Development of porous metal oxide thin films by co-evaporation	Applied Surface Sci 253 4853-4859 2007
06/172	Tesfamichael T; Bell J	Nitrogen ion implantation and characterization of tungsten oxide films	SPIE, Device and Process Technologies for Microelectronics, MEMS, and Photonics IV 6037 60371L December 2005 Brisbane,
02/013; 03/123	Webb G E; Price G J; Nothdurft L D; Deer L; Rintoul L	Cryptic meteoric diagenesis in freshwater bivalves: implications for radiocarbon dating	Geology 35(9) 803-806 September 2007

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
RMIT University			
05/021; 06/024; PGRA	Lenné T; Kent B; Bryant G; Garvey C J; Cookson D	Inhibition of dehydration induced phase changes in lipid membranes by sugars: structural and kinetic SAXS studies	International Soft Matter Conference 69 October 2007 Aachen, Germany
07/070P	Bhaskaran M; Sriram S; Short K T; Mitchell D R G; Holland A S; Reeves G K	Characterization of C54 titanium silicide thin films by spectroscopy, microscopy and diffraction	Phys D: Applied Physics 40 5213–5219 2007
06/233; 07/071P	Bhaskaran M; Sriram S; Mitchell D R G; Short K T; Holland A S	Investigation of surface crystallites on C54 titanium silicide thin films using transmission electron microscopy	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 140 November 2007 0 9758434 2 7
06/234; 07/070P	Sriram S; Bhaskaran M; Mitchell D R G; Short K T; Holland A S	Modified unit cell of preferentially oriented strontium-doped lead zirconate titanate thin films on Pt/TiO ₂ /Si	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 310 November 2007 0 9758434 2 7
PGRA	Kent B; Garvey C J; Cookson D; Haramus V; <i>et al</i>	The effects of sugars on desiccation tolerance in model biological membrane systems	AINSE/ANBUG Neutron Scattering Symposium 32 2007
PGRA	Kent B; Bryant G; Garvey C J; Cookson D	Inhibition of the inverse ribbon phase by sugars in DOPC:DOPE mixtures: a synchrotron SAXS study	European Biophysics Journal 36 S74 2007
01/098	Petersen T; Yarovsky I; Snook I; McCulloch D G; Opletal G	Microstructure of an industrial char by diffraction techniques and reverse Monte Carlo modelling	Carbon 42 (12-13) 2457-2469 2004
01/098	Petersen T; Yarovsky I; Snook I; McCulloch D G; Opletal G	Structural analysis of carbonaceous solids using an adapted reverse Monte Carlo algorithm	Carbon 41 (12) 2403-2411 2003
01/098	Petersen T C; McBride W; McCulloch D G; Snook I K; Yarovskiy I	Refinements in the collection of energy filtered diffraction patterns from disordered materials	Ultramicroscopy 103 (4) 275-283 2005
05/125	Nugegoda D; Blackney R; Fuchs A; Smith S	Investigating rates of Zn and Cd uptake by the Australian freshwater crayfish <i>Cherax destructor</i> using ⁶⁵ Zn and ¹⁰⁹ Cd	Radiation 2006 Conference 49 April 2006 Sydney
06/164P	Sabri Y M; Sood D K; Bhargava S K ; Ippolito S J	Gold nano-structures electroplated on Au electrodes of quartz crystal microbalance (QCM) for enhanced mercury vapour sensitivity	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 287 November 2007 0 9758434 2 7
06/164P	Venkatachalam D K; Sood D K; Elliman R G; Bhargava S K	Surface fraction statistics of gold nanoclusters of dissimilar sizes determined by RBS	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 77 November 2007 0 9758434 2 7
00/159	Purushotham K P; Ward L P; Brack N; Pigram P J; Evans P; Noorman H; Manory R R;	Corrosion behaviour of Zr modified CrN coatings using metal vapor vacuum arc ion implantation	J Vac Sci Technol A 25 110-116 2007
06/184	Gideon B; Ward L P; Carr D; Ripley M; Short K; Law M	Residual stress determination within the weld regions of duplex stainless steels and their susceptibility to intergranular corrosion.	International Conference and Expo, Grado and Aquileia 49 June 2007 Italy

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Southern Cross University			
01/012	Boyd W E; Habberfield-Short J	Geoarchaeological landscape model of the Iron Age settlements of the upper Mun River floodplain	In: C.F.W. Higham <i>et al</i> (eds) <i>The Origins of the Civilisation of Angkor Volume 2: The Excavation of Noen U-Loke and Non Muang Khao</i> . The Fine Arts Department of Thailand, Bangkok 1-27 2007
01/012	Boyd W E	The geoarchaeology of the archaeological sites of Non Muang Khao and Noen U-Loke, Mun River valley, northeast Thailand	In: C.F.W. Higham <i>et al</i> (eds) <i>The Origins of the Civilisation of Angkor Volume 2: The Excavation of Noen U-Loke and Non Muang Khao</i> . The Fine Arts Department of Thailand, Bangkok 29-53 2007
01/012	Habberfield- Short J; Boyd W E	The geoarchaeological development of the mounded Iron Age sites of Non Muang Khao and Noen U-Loke	In: C.F.W. Higham <i>et al</i> (eds) <i>The Origins of the Civilisation of Angkor Volume 2: The Excavation of Noen U-Loke and Non Muang Khao</i> . The Fine Arts Department of Thailand, Bangkok 55-73 2007
07/022	Burton E; Bush R T; Sullivan L A; Mitchell D R G	Reductive transformation of iron and sulfur in schwertmannite-rich accumulations associated with acidified coastal lowlands	Geochimica et Cosmochimica Acta 71 4456 - 4473 2007
07/022	Burton E D; Bush R T; Sullivan L A	Schwertmannite reduction and iron(II)-monosulfide formation in acidified coastal lowlands: iron-sulfur geochemistry and implications for water quality	Geochimica et Cosmochimica Acta 71 (1) A135 August 2007
05/087	Bush R T; Keene A F; Erskine W D	Connectivity of stream water and alluvial groundwater around restoration works in an incised sand-bed stream	5th Australian Stream Management Conference, Australian rivers: making a difference 187-192 May 2007 Thurgoona. Charles Sturt University 978-0-646-47479-3
06/092P	Keene A F; Bush R T; Erskine W D; Cheetham M D	Soil morphology and chemistry in an alluvial depositional sequence	ASSSI-ASPAC-ACMS National Soils Conference: Soil Science Solving Problems 53 December 2006
PGRA	Sullivan L A; Parr J F	Green geosequestration: secure carbon sequestration via plant silica biomineralisation	Goldschmidt Conference A985 2007
PGRA	Taffs K H; Parr J F; Bolton K G E	Using palaeobotanical techniques to guide peatland restoration. A case study from Byron Bay, Australia	Ecological Management and Restoration 7(2) 132-135 2007
06/170	Taffs K H	Differentiating records of recent climate change from anthropogenic impact in the coastal margin: an example from eastern Australia	Quatern Int 167-168 Supplement 410 July 2007 ISSN 1040-6182

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03/002	Allon M; Salomon R; Jacobsen G; Zoppi U	Radiocarbon dating of Kharosthi fragments from the Schøyen and Senior manuscript collections	In: Jens Braarvig (ed) <i>Buddhist manuscripts III Manuscripts in the Schøyen Collection</i> 4 279-291 2006 Oslo
03/006	Hua Q; Barbetti M	Influence of atmospheric circulation on regional ¹⁴ CO ₂ differences	Geophysical Research 112 D19102 2007
01/176	Hatje V; Payne T; McOrist G; Birch G F; Szymczak R	Kinetics of trace element uptake and release by particles in estuarine waters	Environmental Pollution 29 619-629 2003
95/R145	Matthai C; Birch G F, Jenkins, A., Heijnis, H	Kinetics of trace element uptake and release by particles in estuarine waters	J Environmental Radioactivity 52 67-89 2000
04/002; 04/012P	Bourke S	The neolithic/chalcolithic transition at Teleilat Ghassul: context, chronology and culture	Paleorient 33 (2) 15-32 2007

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04/002; 04/012P	Bourke S	Excavating Pella's Bronze Age temple precinct: the 1999 and 2001 field seasons	Medit Arch 18 109-118 2007
04/002; 04/012P	Bourke S	Pella in its Jordanian Middle and Late Bronze Age context	In: Fischer P (ed) <i>The Jordan Valley in the Middle and Late Bronze Ages XII</i> 233-246 2006 Vienna SCIE M
PGRA	Chaiwong C; McKenzie D R; Bilek M M M	Study of adhesion of TiN grown on a polymer substrate	Surf Coat Technol 201 6742-6744 April 2007 Netherland
PGRA	Chaiwong C; McKenzie D R; Bilek M M M	Cracking of titanium nitride films grown on polycarbonate	Surf Coat Technol 201 5596-5600 February 2007 Netherland
06/214	Blazek J; Copeland L	Structural parameters of wheat starch granules differing in amylose content and functional characteristics studied by small-angle x-ray scattering	15th AINSE Conference on Nuclear and Complementary Techniques of Analysis 143-146 November 2007 Melbourne
05/040	Kluyev N A; Sleptsov I Y; (Doelman T)	Late pleistocene and early holocene uses of basaltic glass in Primorye, far east Russia: a new perspective based on sites near the sources	Bulletin of the Indo-Pacific Prehistory Association 27 129-134 2007
05/040	Pantuykhina I; (Doelman T)	The role of raw material in microblade technology at three late Palaeolithic sites, Russian Far East	Bulletin of the Indo-Pacific Prehistory Association 27 144-153 2007
05/040	Doelman T; Kononenko N; Popov A; Summerhayes G; Torrence R; Bonetti A <i>et al</i>	Acquisition and movement of volcanic glass in the Primorye Region of Far Eastern Russia	Russia and the Pacific 46 112-125 2006
03/179	Williams A-M M; Siegele R; (Donlon D)	Iron deposition in archaeological teeth	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 348 November 2007 0 9758434 2 7
PGRA	Evans D; Hua Q; Penny D; Fink D; Pottier C; Fletcher R; Mifsud C	Radiocarbon dating of rice husk material from temple bricks at Angkor, Cambodia	Quatern Int 167-168 Supplement 110 July 2007 ISSN 1040-6182
PGRA	Evans D	Putting Angkor on the map: a new survey of a Khmer 'hydraulic city' in historical and theoretical context	PhD Thesis 2007
05/064	Thickett S C; (Gilbert R G)	Rate determining events for radical exit in electrosterically stabilised emulsion polymerisation systems	28th Australasian Polymer Symposium C1/1 February 2006 Rotorua, New Zealand
06/067	Thickett S C; Gilbert R G	Emulsion polymerization: state of the art in kinetics and mechanisms	Polymer 48 (24) 6965-91 November 2007
06/067	Thickett S C; Gaborieau M; Gilbert R G	Extended mechanistic description of particle growth in electrosterically stabilized emulsion polymerization systems	Macromolecules 40 (13) 4710-20 May 2007
06/067	Thickett S C; Gilbert R G	Polymerically stabilized emulsion systems: a new kinetic model	29th Australasian Polymer Symposium 179-180 February 2007 Hobart
05/200	Overgaard J; Waller M P; Piltz R; Platts J A; Emseis P; Hibbs D E; <i>et al</i>	Experimental and theoretical charge density distribution in two ternary cobalt(III) complexes of aromatic amino acids	Journal of Physical Chemistry A 111(40) 10123-10133 2007
06/081	Hudson B	Iron in Myanmar	Enchanting Myanmar 5 6-9 2006
PGRA	Whitten A E; Jacques D A; Hammouda B; Hanley T; King G F; Trehwella J; <i>et al</i>	The structure of the KinA-Sda complex suggests an allosteric mechanism of histidine kinase inhibition	J Mol Biol 368 (2) 407-420 2007
04/202	Saines P J.; Elcombe M M; Kennedy B J	Lanthanide distribution in some doped alkaline earth aluminates and gallates	J Solid State Chem 179 613-622 2006

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05/090	Zhou Q; Kennedy B J; Wallwork K S; Elcombe M M; Lee Y; Vogt T	Temperature and pressure dependent structural studies of the ordered double perovskites $\text{Sr}_2\text{TbRu}_{1-x}\text{Ir}_x\text{O}_6$	J Solid State Chem 178 2282-2291 2005
05/092	Zhou Q; Kennedy B J; Elcombe M M	Composition and temperature dependent phase transitions in Co-W double perovskites, a synchrotron x-ray and neutron powder diffraction study	J Solid State Chem 181 541-548 2007
06/095P	Zhou Q; Kennedy B J	A variable temperature structural study of the Jahn-Teller distortion in Ba_2CuUO_6	J Phys Chem Solids 68 1643-1647 2007
06/095P	Zhou Q; Kennedy B J; Elcombe E E; Withers R L	Composition and temperature dependent phase transitions in 1:3 ordered perovskites $\text{Ba}_{4-x}\text{Sr}_x\text{NaSb}_3\text{O}_{12}$	J Solid State Chem 180 3082-3092 2007
PGRA	Ma W J; Ruys A J; Mason R S; Martin P J; Bendavid A; Liu Z; Ionescu M; Zreiqat H	DLC coatings: effects of physical and chemical properties on biological response	Biomaterials 28(9) 1620-1628 2007
05/134	Penny D; Hua Q; Pottier C; Fletcher R; Barbetti M	The use of AMS ^{14}C dating to explore issues of occupation and demise at the medieval city of Angkor, Cambodia.	Nucl Instr Meth in Phys Res B 259 388-394 2007
PGRA	Rosen J; Ryves L; Persson P O A; Bilek M M M	Deposition of epitaxial Ti_2AlC thin films by pulsed cathodic arc	J Appl Phys 101(5) 056101 2007
PGRA	Saines P J; Spencer J R; Kennedy B J; Avdeev M	Structures and crystal chemistry of the double perovskites $\text{Ba}_2\text{LnB}'\text{O}_6$ (Ln = lanthanide B' = Nb^{5+} and Ta^{5+}). Part I. Investigation of $\text{Ba}_2\text{LnTaO}_6$ using synchrotron x-ray and neutron powder diffraction	J Solid State Chem 180(11) 2991-3000 2007
PGRA	Kennedy B J; Saines P J; Kubota Y; Minakata C; Hano H; Takata M	Crystal structures and phase transitions in $\text{Ba}_2\text{HoTaO}_6$	Materials Research Bulletin 42(11) 1875-1880 2007
PGRA	Saines P J; Spencer J R; Kennedy B J; Kubota Y; Minakata C; Hano H; Kato K; Takata M	Structures and crystal chemistry of the double perovskites Ba_2LnBO_6 (Ln = lanthanide B = Nb, Ta). Part II. Temperature dependence of the structures of $\text{Ba}_2\text{LnB}'\text{O}_6$	J Solid State Chem 180(11) 3001-3007 2007
PGRA	Saines P J; Kennedy B J; Elcombe M M	Structural phase transitions and crystal chemistry of the series $\text{Ba}_2\text{LnB}'\text{O}_6$ (Ln = lanthanide and B' = Nb^{5+} or Sb^{5+})	J Solid State Chem 180 401-409 2007
PGRA	Sharma N; Kennedy B J; Elcombe M M; Liu Y; Ling C D	Coexistence of ferroelectricity and magnetism in transition metal-doped n = 3 Aurivillius phases	Physics: Condensed Matter 20 025215 February 2007 978-0-9598064-9-6
PGRA	Sharma N; Kennedy B J; Elcombe M M; Avdeev M; Ling C D	Neutron diffraction results for three-layer Aurivillius phases containing magnetic transition metal cations: Ru(IV), Ir(IV) and Mn(IV)	31st Annual Condensed Matter and Materials Meeting February 2007 Wagga Wagga, Australia 978-0-9598064-9-6
PGRA; 06/246P	Sharma N; Wrighter G E; Chen P Y; Kennedy B J; Lee P L; Ling C D	Three-layer Aurivillius phases containing magnetic transition metal cations: $\text{Bi}_{(2-x)}\text{Sr}_{(2+x)}(\text{Nb}, \text{Ta})_{(2+x)}\text{M}_{(1-x)}\text{O}_{12}$, M = Ru^{4+} , Ir^{4+} , Mn^{4+} , $x \approx 0.5$	J Solid State Chem 180(1) 370-376 2007
06/160	Siegele R; Kachenko A G; Wang Y D; Ionescu M; Bhatia N P; Cohen D D; (Singh B)	Localisation of trace metals in hyper-accumulating plants using $\mu\text{-PIXE}$	15th AINSE Conference on Nuclear and Complementary Techniques of Analysis & 10th Vacuum Society of Australia Congress 292 November 2007 Melbourne; Australia
06/160	Kachenko A; Singh B; Bhatia N; Siegele R	Arsenic hyperaccumulation and localization in the pinnule and stipe tissues of the gold-dust fern (<i>Pityrogramma calomelanos</i> (L.) Link var. <i>austroamericana</i> (Domin) Farw.) using quantitative micro-PIXE spectroscopy	Plant and Soil 300 207-219 2007

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
06/160	Kachenko A G; Singh B; Siegele R; Bhatia N	Nuclear microprobe studies of metal(loid)s distribution in hyperaccumulating plants	15th Australian Conference on Nuclear and Complementary Techniques of Analysis Congress 211 November 2007 0 9758434 2 7
06/257	Chan J; Whitten A E; Jeffries C M; Bosanac I; Mal T K; Ito J; Porumb H; Trewthella J; <i>et al</i>	Ligand-induced conformational changes via flexible linkers in the amino-terminal region of the inositol 1,4,5-triphosphate receptor	J Mol Biol 373 1269-1280 2007
05/171	Blom A; Warr G G; Nelson A	Structure of mixed DTAB/DDAB adsorbed layers on quartz. A neutron reflectometry and atomic force microscopy study	Coll Surf A 310 1-8 2007
05/216	Atkin R; Warr G G	Phase behaviour and microstructure of microemulsions with a room-temperature ionic liquid as the polar phase	J Phys Chem B 111 9309 -9316 2007

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04/057, 05/063	Cromer L; Gibson J A E; McInnes S J; Agius J T	Tardigrade remains from lake sediments	Paleolimnology 39 143-150 January 2008 10.1007/s10933-007-9102-5
PGRA	Saunders K M; McMinn A; Roberts D; Hodgson D A; Hejnis H	Recent human-induced salinity changes in Ramsar-listed Orielton lagoon, Southeast Tasmania, Australia: a new approach for coastal lagoon conservation and management	Aquatic Conserv: Mar Freshw Ecosyst 17 51-70 2007
PGRA	Saunders K M	Reconstructing past environments: a case study from the Gippsland Lakes, Victoria, Australia	Marine Science Association 100 July 2007 Melbourne, Australia
PGRA	Saunders K M; Hodgson D A; McMinn A	Recent environmental changes on Subantarctic Macquarie Island: evidence of human arrival, feral animals and climate variability	Quatern Int 167-168 Supplement 365 July 2007 ISSN 1040-6182
PGRA	Saunders K M; McMinn A; Roberts D; Hejnis H; Hodgson D;	Recent human-induced salinity changes in Ramsar-listed Orielton Lagoon, southeast Tasmania, Australia	Australian Marine Science Association Annual Conference 112 July 2004 Hobart
06/203; 07/162	Kamvong T; Zaw K; Siegele R	PIXE/PIGE microanalysis of trace elements in hydrothermal magnetite and exploration significance: a pilot study	15th Australian Conference on Nuclear and Complementary Techniques of Analysis Congress 216-219 November 2007 0 9758434 2 7

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01/028	Och D J; (Caprarelli G)	Evolution of the Palaeozoic convergent margin of Australia as determined by the structural, chemical and mineralogical study of high grade orto-metamorphic rocks of mafic and ultramafic compositions in the Port Macquarie tectonic melange (NSW, Australia)	PhD Thesis June 2007
04/139P; 05/151	Fink D; Skilbeck C G; Gagan M K	Multidecadal and century-scale ENSO variability in 20,000-year sediment records from the Peru continental margin	10th International Conference on Accelerator Mass Spectrometry 1 (5) September 2005 Berkley California
04/139P; 05/151	Skilbeck G; Fink D; Gagan M K	Patterns of decadal and centennial ENSO variability over the Holocene-deglaciation period	Quatern Int 167-168 Supplement 389 July 2007 ISSN 1040-6182

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The University of Western Australia			
02/011; 04/016	Bradshaw S D; Bradshaw F J	Isotopic measurements of field metabolic rate (FMR) in the marsupial Honey possum, <i>Tarsipes rostratus</i>	J Mammalogy 88(2) 401-407 2007
04/015	Bradshaw S D; Phillips R D; Tomlinson S; Holley R; Jennings S; Bradshaw F J	Ecology of the Honey possum, <i>Tarsipes rostratus</i> , in Scott National Park, Western Australia	Australian Mammalogy 29 25-38 2007
04/016	Oates J; Bradshaw F J; Bradshaw S D; Stead-Richardson E J; <i>et al</i>	Reproduction and embryonic diapause in a marsupial: Insights from captive female honey possums, <i>Tarsipes rostratus</i> , (Tarsipedidae)	Gen Comp Endocrinol 150 445-461 2007
06/022	Bradshaw S D	Environmental endocrinology	General and Comparative Endocrinology 152 125-141 2007
06/135P	Park B; Musca C; Antoszewski J; Dell J; Faraone L	High-density plasma processing of p-Hg _{0.7} Cd _{0.3} Te	IEEE Conference on Optoelectronic and Microelectronic Materials and Devices 260-263 / TP-18 December 2006 Perth
PGRA	Tsen G K O; Sewell R, Atanacio A J; Prince K E; Musca C A; Dell J M; <i>et al</i>	Characterisation of arsenic doped HgCdTe grown by molecular beam epitaxy	IEEE Conference on Optoelectronic and Microelectronic Materials and Devices (COMMAD) 55-58 Perth 2006
PGRA	Tsen G K O; Musca C A; Dell J M; Antoszewski J; Faraone L	Magneto-transport characterization of p-type HgCdTe	J Electronic Materials 36 826-831 2007
PGRA	Webster N; Ling C; Raston C; Lincoln F J	The structure and conductivity of new fluorite-type Bi ₂ O ₃ – Er ₂ O ₃ – PbO materials	Solid State Ionics 178 1451 2007
05/217	Woodward R C; Heeris J; St. Pierre T G; Saunders M; Gilbert E P; <i>et al</i>	A comparison of methods for the measurement of particle size distribution of magnetic nanoparticles	J Appl Cryst 40 s495–s500 April 2007 0021-8898

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03/024	Grevenitz P; (Chivas A)	Statistical methods for determining geochemical residence in mineral phases: Evaluation of pedogenic calcrete trace element data	In: Roach I C (ed) <i>Regolith 2005 - Ten years of CRC LEME</i> . CRC LEME 120-124 2005
05/027	Reeves J M; Chivas A R; Garcia A; De Deckker P	Palaeoenvironmental change in the Gulf of Carpentaria (Australia) since the last interglacial based on Ostracoda	Palaeogeogr Palaeoclimat Palaeoecol 246 163-187 2007
05/027	Playa E; Gendon D; Trave A; Chivas A; Garcia A	Non-marine evaporites with both inherited marine and continental signatures: The Gulf of Carpentaria, Australia, at ~ 70 ka	Sedimentary Geology 201 267-285 2007
06/045	Deng C; Eftimovska J; Zavitsanou K; Huang X	Phencyclidine induces apoptosis in the brain of neonatal but not adolescent and adult rats	7th IBRO World Congress of Neuroscience 364 July 2007 Melbourne, Australia
PGRA	Homes T P; Mattner F; Keller P- A; Katsifis A	Synthesis and <i>in vivo</i> evaluation of a novel [123I] indolglyoxylamide for the peripheral benzodiazepine binding sites	Labelled Compounds and Radiopharmaceuticals 50 S307 April 2007 0362-4803
06/089	(Jolley D); Tarin P	Distribution, speciation and geochemistry of selenium in contaminated marine sediments – Port Kembla Harbour, NSW, Australia	PhD Thesis 2007

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
06/240	Baloglow A; Lerch M; Reinhard M; Siegele R; Rosenfeld A B; <i>et al</i>	Characterization of silicon detectors utilized in an on-line dosimetry system for microbeam radiation therapy	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 90 November 2007 0 9758434 2 7
05/102P	Zhao Y; Ionescu M; Dou S X; Liu H K	Study of oxygen incorporation in PLD MgB ₂ films by Rutherford backscattering spectroscopy	IEEE Transactions on Applied Superconductivity 17(2) 2875 - 2878 2007 1051-8223
04/115	Cann J H; Murray-Wallace C V; Riggs N J; Belperio A P	Successive foraminiferal faunas and inferred palaeoenvironments associated with the postglacial (Holocene) marine transgression, Gulf St Vincent, South Australia	Holocene 16 224-234 2006
06/137P	St John A M; Kolev S D; Cattrall R W; Perera J M; Nghiem L D; Soldenhoff K H	Separation of uranium using polymer inclusion membranes	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 314 November 2007 0 9758434 2 7
05/129	Pysarenko S; Pan A V; Dou S X	Influence of thickness and deposition rate on superconducting properties of YBa ₂ Cu ₃ O ₇ films	30th Annual A&NZIP Condensed Matter and Materials Meeting, Ed. M. Avdeev, Aust. Inst. Phys. TP10 2007 1-920791-09-4
05/129	Roussel M; Pan A V; Pysarenko S; Dou S X	Microstructure and surface roughness influence on magnetic flux penetration behavior in mono and multilayer YBCO thin films	30th Annual A&NZIP Condensed Matter and Materials Meeting, Ed. M. Avdeev, Aust. Inst. Phys. TP3 2007 1-920791-09-4.
05/129	Nigam R; Pan A V; Dou S X	Impact of sintering temperature on the physical properties of the superconducting ferromagnet: RuSr ₂ Eu _{1.5} Ce _{0.05} Cu ₂ O ₁₀	Journal of Applied Physics 101 09G109 2007
PGRA	Sloss C R; Jones B G; Murray-Wallace C V	A revised Holocene sea-level curve and geomorphological evolution of wave-dominated barrier estuaries on the southeast coast of Australia	Quatern Int 167-168 Supplement 390 July 2007 ISSN 1040-6182
PGRA; 03/085	Sloss C R; Murray-Wallace C V; Jones B G	Holocene sea-level change on the southeast coast of Australia: a review	Holocene 17(7) 999 - 1014 2007 London ISSN 0959-6836
06/191	(West R); Miles N G;	Biology and ecology of diadromous fishes in south eastern Australia	PhD Thesis 2007
03/129	(Woodroffe C); Samosom B	Morphological changes of a small reef island on a platform reef	PhD Thesis 2006
03/129; 04/174; 05/177; 06/198P	Woodroffe C D; Samosom B; Hua Q; Hart D E	Incremental accretion of a sandy reef island over the past 3000 years indicated by component-specific radiocarbon dating	Geophys Res Lett 34 L03602 2007
06/198P	Panayotou K; Woodroffe C D; Jones B G; Chenhall B; McLean E; Heijnis H	Patterns and rates of sedimentary infill in the Minnamurra River Estuary, southeastern Australia	J Coastal Research, Special Issue 50 688-692 2007
PGRA	Reinhard M I; Cornelius I M; Prokopovich D A; Wroe A J; Rosenfeld A B; Pisacane V	Response of SOI microdosimeter to a ²³⁸ Pu-Be neutron source	IEEE Nuclear Science Symposium Conference Record 1 (23-29) 68 - 72 October 2005
PGRA	Pisacane V L; Dolecek Q E; Maas F; Nelson M E; Rosenfeld A B; Wroe A J <i>et al</i>	MIDN A MicroDosimeter iNstrument (MIDN) for space explorations	SAE Transactions Journal of Aerospace 115-1 345-354 2007
PGRA	Bashkurov V; Schulte R; Breskin A; Chechik R; Schemelinin S; Garty G; Wroe A <i>et al</i>	Ion-counting nanodosimeter with particle tracking capabilities	Rad Prot Dosim 122(1) 415-419 2006

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
PGRA	Wroe A J; Schulte R; Bashkurov V; Grosswendt B; Rosenfeld A B;	Nanodosimetric cluster size distributions of therapeutic proton beams	IEEE, Trans Nucl Sci NS-53 3 532-538 2006
PGRA	Cornelius I; Rosenfeld A; Reinhard M; Fazzi A; Prokopovich D; Wroe A; <i>et al</i>	Charge collection imaging of a monolithic E-E telescope for radiation protection applications	Rad Prot Dosim 122 387-389 2006
PGRA	Wroe A J; Rosenfeld A B; Schulte R W	Out-of-field dose equivalents delivered by proton therapy of prostate cancer	Medical Physics 34(9) 3449-3456 2007
PGRA	Siegele R; Reinhard M; Prokopovich D; Ionescu M; Cohen D; Rosenfeld A; Wroe A J; <i>et al</i>	Characterisation of a DE-E particle telescope using the ANSTO heavy ion microprobe	Nucl Instr Meth in Phys Res B 260 270-275 2007
PGRA	Wroe A; Rosenfeld A; Reinhard M; Pisacane V; Ziegler J; <i>et al</i>	Solid state microdosimetry with heavy ions for space applications	IEEE Transactions on Nuclear Science 54(6) 2264-2271 December 2007
PGRA	Wroe A (Rosenfeld A)	Developments in microdosimetry and nanodosimetry for space and therapeutic applications	PhD Thesis 2007
PGRA	Rosenfeld A B; Wroe A; Ziebell A L; Prokopovich D; Reinhard M; Cornelius I; <i>et al</i>	Investigation of monolithic Si ΔE -E telescope using IBIC and application for radiobiological efficiency estimation in proton therapy	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 283 November 2007 0 9758434 2 7
PGRA	Wroe A J; Rosenfeld A B; Cornelius I M; Prokopovich D; Reinhard M; Schulte R <i>et al</i>	Silicon microdosimetry in heterogeneous materials: simulation & experiment	IEEE Transactions on Nuclear Science 53(6) 3738 - 3744 2006
05/102P; 07/163P	Zhao Y; Ionescu M; Dou S X; Liu H K	Study of oxygen incorporation in PLD MgB ₂ films by Rutherford backscattering spectroscopy	IEEE Transactions of Applied Superconductivity 17(2) 2875-2878 August 2007 ISSN 1051-8223
07/163P	Ionescu M; Zhao Y; Siegele R; Cohen D D; Stelcer E; Prior M	Heavy ion ToF analysis of oxygen incorporation in MgB ₂ thin films	18th International Conference on Ion Beam Analysis Poster 197 September 2007 Hyderabad, India
07/163P	Ionescu M; Zhao Y; Siegele R; Cohen D D; Lynch D; Garton D; Stelcer E; Prior M	ANSTO heavy ion ToF for analysis of light elements in thin films	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 196 November 2007 0 9758434 2 7
PGRA	Ziebell A; Rosenfeld A; Reinhard M; <i>et al</i>	Cylindrical silicon-on-insulator microdosimeter: charge collection characteristics	15th Australian Conference on Nuclear and Complementary Techniques of Analysis & 9th Vacuum Society of Australia Congress 65 November 2007 0 9758434 2 7

University Codes

CODE	UNIVERSITY	CODE	UNIVERSITY
ACU	Australian Catholic University	MUR	Murdoch University
ADE	The University of Adelaide	NCT	The University of Newcastle
AKL	The University of Auckland	NSW	The University of New South Wales
ANS	ANSTO	NTU	Charles Darwin University
ANU	The Australian National University	OTA	University of Otago
BAL	University of Ballarat	QLD	The University of Queensland
CAN	University of Canterbury	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	The University of Sydney
ECU	Edith Cowan University	TAS	University of Tasmania
FLI	Flinders University	UNE	The University of New England
GNS	GNS Science	USA	University of South Australia
GRI	Griffith University	UTS	University of Technology Sydney
JAM	James Cook University	UWA	The University of Western Australia
LAT	La Trobe University	UWS	University of Western Sydney
MAC	Macquarie University	VIC	Victoria University of Technology
MEL	The University of Melbourne	WOL	University of Wollongong
MON	Monash University		

Specialist Committees

A	Archaeology and Geosciences
B	Biomedical Science and Biotechnology
E	Environmental Science
M	Materials – Properties and Engineering
N	Materials – Structures and Dynamics
T	Nuclear Technology